```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - BOOTSTRAP PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BOOTSTRAP					
102	1	020		CTL	661 11					
103	1	030		ORG	100			0100		
104	1	040	X1	EQU	89			0089		
105	1	050		SW	087,092		7	0100	, 087 092	4
106	1	060		SW	097,100		7	0107	, 097 100	4
107	1	070		SBR	X1,3999		7	0114	H 089 I99	4
108	1	080	BOOTST	CS	0&X1		4	0121	/ 0|0	4
109	1	090		SBR	X1		4	0125	H 089	4
110	1	100		BW	22,100		8	0129	V 022 100 1	4
111	1	110		RTW	1,2000		8	0137	L %U1 !00 R	5
112	1	120		B	2000		4	0145	B !00	5
113	1	130		DCW	#1		1	0149		5
114	1	140		LTORG	*			0150		
115	1	150		DCW	@}@		1	0150		5
116	1	160		END					/ 000 080	6

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
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1401 COBOL - CONTROL FOR DETERMINING PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - CONTROL FOR DETERMINING
 102  1 020          CTL   661 11
 103  1 030          ORG   2000                                                  2000
 104  1 040  X1      EQU   89                                                   0089
 105  1 050  X2      EQU   094                                                  0094
 106  1 060  X3      EQU   099                                                  0099
 107  1 070  SW1     EQU   81                                                   0081
 108  1 080  GENSW   EQU   82                                                   0082
 109  1 090  R6      EQU   83                                                   0083
 110  1 100  R5      EQU   84                                                   0084
 111  1 110  CONTRL  CS    099                                          4  2000  / 099                4
 112  1 120          SW    087,092                                      7  2004  , 087 092            4
 113  1 130          SW    097                                          4  2011  , 097                4
 114  1 140  CONT03  R                                                  1  2015  1                    4
 115  1 150          BIN   READER,?                                     5  2016  B J13 ?              4
 116  1 160          SS    1                                            2  2021  K 1                  4
 117  1 170          C     012,@SYSTEMS@                                7  2023  C 012 C28            4
 118  1 180          BE    CONTSY                                       5  2030  B L88 S              5
 119  1 190          C     020,@RUN  @                                  7  2035  C 020 C33            5
 120  1 200          BE    CONTCB                                       5  2042  B !70 S              5
 121  1 210          MLC   NCTLMS,285                                   7  2047  M C01 285            5
 122  1 220  CONT02  W                                                  1  2054  2                    5
 123  1 230          BIN   CONT02,|                                     5  2055  B !54 |              5
 124  1 240          CC    1                                            2  2060  F 1                  5
 125  1 250          H     CONT03                                       4  2062  . !15                6
 126  2 010          B     CONT03                                       4  2066  B !15                6
 127  2 020  CONTCB  MLC   @4@,REDCNT                                   7  2070  M C34 C21            6
 128  2 030  CONT04  S     @1@,REDCNT                                   7  2077  S C35 C21            6
 129  2 040          RTW   1,335                                        8  2084  L %U1 335 R          6
 130  2 050          SBR   X3                                           4  2092  H 099                6
 131  2 060  CONT05  BER   TERR                                         5  2096  B J21 L              6
 132  2 070          BCE   HER,REDCNT,?                                 8  2101  B J93 C21 ?          7
 133  2 080          B     CONT04                                       4  2109  B !77                7
 134  2 090  READER  H     CONT03                                       4  2113  . !15                7
 135  2 100          B     CONT03                                       4  2117  B !15                7
 136  2 110  TERR    MLC   &TERR1,CONT05&3                             7  2121  M C38 !99            7
 137  2 120          ZA    @0@,X2                                       7  2128  ? C39 094            7
 138  2 130  TERR1   BSP   1                                            5  2135  U %U1 B              7
 139  2 140          A     @1@,REDCNT                                   7  2140  A C35 C21            8
 140  2 150          BCE   *&5,X2,I                                     8  2147  B J59 094 I          8
 141  2 160          B     CONT04                                       4  2155  B !77                8
 142  2 170          CS    299                                          4  2159  / 299                8
 143  2 180          MLC   CNTRED,275                                   7  2163  M C20 275            8
 144  2 190  CONT06  W                                                  1  2170  2                    8
 145  2 200          BIN   CONT06,|                                     5  2171  B J70 |              8
 146  2 210          MLC   &TERR,CONT05&3                               7  2176  M C42 !99            9
 147  2 220          CC    1                                            2  2183  F 1                  9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         H     CONTCB                                         4  2185  . !70                9
149  2 240         B     CONTCB                                         4  2189  B !70                9
150  2 250  HER    SW    1300,1                                         7  2193  , T00 001            9
151  3 010         RWD   5                                              5  2200  U %U5 R              9
152  3 020         RWD   6                                              5  2205  U %U6 R              9
153  3 030         RWD   4                                              5  2210  U %U4 R             10
154  3 040         BSS   *&5,C                                          5  2215  B K24 C             10
155  3 050         B     RCR                                            4  2220  B K29               10
156  3 060         RWD   3                                              5  2224  U %U3 R             10
157  3 070  RCR    SW    HEADER&15                                      4  2229  , /50               10
158  3 080         MLC   @T00@,X2                                       7  2233  M C45 094           10
159  3 090         C     010,@COBOL@                                    7  2240  C 010 C50           10
160  3 100         BE    REST1                                          5  2247  B K85 S             11
161  3 110         C     010,@XTRAN@                                    7  2252  C 010 C55           11
162  3 120         MLC   @X10@,PHASID                                   7  2259  M C58 /12           11
163  3 130         BE    REST1                                          5  2266  B K85 S             11
164  3 140         MLC   023,PHASID                                     7  2271  M 023 /12           11
165  3 150         MLC   @N@,TMSW                                       7  2278  M C59 /31           11
166  3 160  REST1  WTM   4                                              5  2285  U %U4 M             12
167  3 170         BSP   4                                              5  2290  U %U4 B             12
168  3 180  REATAR MLC   FLIP1,PUTXWT&3                                 7  2295  M 574 445           12
169  3 190         MLC   FLIP1,PUT2B&3                                  7  2302  M 574 475           12
170  3 200         MLC   FLIP1,PUT2C&3                                  7  2309  M 574 480           12
171  3 210         MLC   FLIP2,GETXRD&3                                 7  2316  M 575 662           12
172  3 220         MLC   FLIP2,GET7&3                                   7  2323  M 575 701           13
173  3 230         MLC   FLIP2,GET4A&3                                  7  2330  M 575 692           13
174  3 240         MLC   FLIP2,FLIP3                                    7  2337  M 575 576           13
175  3 250         MLC   FLIP1                                          4  2344  M 574               13
176  4 010         MLC   FLIP3                                          4  2348  M 576               13
177  4 020         CS    0                                              4  2352  / 000               13
178  4 030         SBR   HOLDER                                         4  2356  H R03               13
179  4 040         BCE   A1,HOLDER,I                                    8  2360  B P72 R03 I         14
180  4 050         BCE   A2,HOLDER,R                                    8  2368  B R06 R03 R         14
181  4 060         BCE   A3,HOLDER,Z                                    8  2376  B ?35 R03 Z         14
182  4 070         B     A4                                             4  2384  B A92               14
183  4 080  CONTSY MLC   @2@,REDCNT                                     7  2388  M C60 C21           14
184  4 090  CONN1  S     @1@,REDCNT                                     7  2395  S C35 C21           15
185  4 100         RTW   1,100                                          8  2402  L %U1 100 R         15
186  4 110         SBR   X3                                             4  2410  H 099               15
187  4 120         BER   TERR                                           5  2414  B J21 L             15
188  4 130         BCE   GO,REDCNT,?                                    8  2419  B M31 C21 ?         15
189  4 140         B     CONN1                                          4  2427  B L95               15
190  4 150  GO     CW    R1,R6                                          7  2431  ) 265 083           16
191  4 160         CW    SW1,R1                                         7  2438  ) 081 265           16
192  4 170         CW    R3,R5                                          7  2445  ) 299 084           16
193  4 180         CW    RR1                                            4  2452  ) 570               16
194  4 190         MLCWA @0@,GENSW                                      7  2456  L C39 082           16
195  4 200         SW    HDR1&15,072                                    7  2463  , 804 072           16
196  4 210         SW    001,040                                        7  2470  , 001 040           17
197  4 220         SW    47,54                                          7  2477  , 047 054           17
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          SW    61,68                                         7  2484  , 061 068           17
199  4 240          RWD   1                                             5  2491  U %U1 R             17
200  4 250          RWD   2                                             5  2496  U %U2 R             17
201  5 010          B     IORWD                                         4  2501  B N94               17
202  5 020          RTW   1,1000                                        8  2505  L %U1 |00 R         18
203  5 030          DCW   UPDT03                                       3  2515  N27                 18
204  5 040          MLC   IOSBRD,*&4                                   7  2516  M P71 N26           18
205  5 050          SW    *                                             4  2523  , N26               18
206  5 060  UPDT03  B     IORWD                                         4  2527  B N94               18
207  5 070          WTW   2,1000                                        8  2531  L %U2 |00 W         18
208  5 080          DCW   *                                             3  2541  N41                 18
209  5 090          MLC   IOSBRD,*&7                                   7  2542  M P71 N55           19
210  5 100          MLC   @ @,*                                        7  2549  M C61 N55           19
211  5 110          SW    STOPER                                        4  2556  , D65               19
212  5 120          B     IORWD                                         4  2560  B N94               19
213  5 130          WTW   2,2000                                        8  2564  L %U2 !00 W         19
214  5 140          DCW   *                                             3  2574  N74                 19
215  5 150          B     IORWD                                         4  2575  B N94               19
216  5 160          RT    1,RDD1                                        8  2579  M %U1 D45 R         20
217  5 170          DCW   *                                             3  2589  N89                 20
218  5 180          B     100                                           4  2590  B 100               20
219  5 190  IORWD   SBR   X1                                            4  2594  H 089               20
220  5 200          MLC   7&X1,IOINTD&7       MOVE IN I/O INSTRUCTION.  7  2598  M 0|7 O40           20
221  5 210          MLC   @012@,IOCHND&6      LOAD CHECK FOR NOISE RECORD.  7  2605  M C64 O72       20
222  5 220          MA    6&X1,IOCHND&6                                 7  2612  # 0|6 O72           21
223  5 230          MLC   10&X1,GENRFD&3      MOVE IN EOF ADDRESS.      7  2619  M 0/0 P67           21
224  5 240  RBKD    MLC   @9@,IOCERD                                    7  2626  M C65 P68           21
225  5 250  IOINTD  RT    0,0                 SKELETON I/O INSTRUCTION.  8  2633  M %U0 000 R         21
226  6 010          SBR   *&4                                           4  2641  H O48               21
227  6 020          MLNS  0                                             4  2645  D 000               21
228  6 030          SAR   IOSBRD              GT POSITION OF GP-WM.     4  2649  Q P71               22
229  6 040          BCE   IOWRTD,IOINTD&7,W   IF WRITE I/O BRANCH.     8  2653  B O86 O40 W         22
230  6 050          BEF   GENRFD                                        5  2661  B P64 K             22
231  6 060  IOCHND  BCE   IOINTD,0,}                                   8  2666  B O33 000 }         22
232  6 070          BCE                                                 1  2674  B                   22
233  6 080          BCE                                                 1  2675  B                   22
234  6 090          BCE                                                 1  2676  B                   22
235  6 100          BCE                                                 1  2677  B                   23
236  6 110          BCE                                                 1  2678  B                   23
237  6 120          BCE                                                 1  2679  B                   23
238  6 130          BCE                                                 1  2680  B                   23
239  6 140          BCE                                                 1  2681  B                   23
240  6 150          BCE                                                 1  2682  B                   23
241  6 160          BCE                                                 1  2683  B                   23
242  6 170          BCE                                                 1  2684  B                   24
243  6 180          BCE                                                 1  2685  B                   24
244  6 190  IOWRTD  BER   IOERRD             IF ERROR BRANCH.          5  2686  B P00 L             24
245  6 200          BEF   GENRFD              IF EOF BRANCH.            5  2691  B P64 K             24
246  6 210          B     11&X1                                         4  2696  B 0/1               24
247  6 220  IOERRD  MLNS  IOINTD&3,*&4        CONDITION BACKSPACE INSTRUCTION.  7  2700  D O36 P10     24
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         BSP   0                  BACKSPACE TAPE IF EROR.             5  2707  U %U0 B             24
249  6 240         BM    IO9CKD,IOCERD      IF ERROR 9 TIMES THEN BRANCH.       8  2712  V P31 P68 K         25
250  6 250         S     @1@,IOCERD         DECREMENT COUNTER.                  7  2720  S C35 P68           25
251  7 010         B     IOINTD             BRANCH TO EXECUTE I/O AGAIN.        4  2727  B O33               25
252  7 020  IO9CKD BCE   SKPIND,IOINTD&7,W  IF WRITE THEN BRANCH.               8  2731  B P43 O40 W         25
253  7 030  HRRD   H     RBKD                                                   4  2739  . O26               25
254  7 040  SKPIND MLNS  IOINTD&3,*&4                                           7  2743  D O36 P53           25
255  7 050         SKP   0                  SKIP FOR WRITE                      5  2750  U %U0 E             26
256  7 060         BEF   HRRD                                                   5  2755  B P39 K             26
257  7 070         B     IOINTD                                                 4  2760  B O33               26
258  7 080  GENRFD B     0                                                      4  2764  B 000               26
259  7 090  IOCERD DCW   @0@                                                    1  2768                      26
260  7 100  IOSBRD DCW   @000@                                                  3  2771                      26
261  7 110  A1     SW    14000                                                  4  2772  , !0?               26
262  7 120  A11    CS    15999                                                  4  2776  / I9I               27
263  7 130         SBR   A11&3                                                  4  2780  H P79               27
264  7 140         BW    A11,14000                                              8  2784  V P76 !0? 1         27
265  7 150         MLC   GPMRK,15998                                            7  2792  M R05 I9H           27
266  7 160         MLC   GPMRK,15697                                            7  2799  M R05 F9G           27
267  7 170         SW    15998,15697                                            7  2806  , I9H F9G           27
268  7 180         MLC   @G0?@,PUT7&6                                           7  2813  M C68 394           28
269  7 190         MLC   @I9G@,PUTMX                                            7  2820  M C71 564           28
270  7 200         MLC   @F9H@,PUTXWT&6                                         7  2827  M C74 448           28
271  7 210         MLC   @I9G@,PUTT&6                                           7  2834  M C71 466           28
272  7 220         MLC   @G0?@,PUTA1                                            7  2841  M C68 567           28
273  7 230         MLC   @F9F@,GETMX                                            7  2848  M C77 570           29
274  7 240         MLC   @F9F@,GET1A&3                                          7  2855  M C77 628           29
275  7 250         MLC   @C9G@,GETXRD&6                                         7  2862  M C80 665           29
276  8 010         MLC   @C9I@,GETA1                                            7  2869  M C83 573           29
277  8 020         SW    15698,15397                                            7  2876  , F9H C9G           29
278  8 030         MLC   @C5?@,X1                                               7  2883  M C86 089           30
279  8 040         MLCWA @I0?@,188                                              7  2890  L C89 188           30
280  8 050         B     UP1                                                    4  2897  B A60               30
281  8 060  HOLDER DCW   #3                                                     3  2903                      30
282  8 070  GPMRK  DCW   @ }@                                                   2  2905                      30
283  8 080  A2     SW    10000                                                  4  2906  , !0!               30
284  8 090  A22    CS    12999                                                  4  2910  / 99I               30
285  8 100         SBR   A22&3                                                  4  2914  H R13               31
286  8 110         BW    A22,10000                                              8  2918  V R10 !0! 1         31
287  8 120         MLC   GPMRK,11998                                            7  2926  M R05 I9Q           31
288  8 130         MLC   GPMRK,11697                                            7  2933  M R05 F9P           31
289  8 140         SW    11998,11697                                            7  2940  , I9Q F9P           31
290  8 150         MLC   @G0!@,PUT7&6                                           7  2947  M C92 394           32
291  8 160         MLC   @I9P@,PUTMX                                            7  2954  M C95 564           32
292  8 170         MLC   @F9Q@,PUTXWT&6                                         7  2961  M C98 448           32
293  8 180         MLC   @I9P@,PUTT&6                                           7  2968  M C95 466           32
294  8 190         MLC   @G0!@,PUTA1                                            7  2975  M C92 567           32
295  8 200         MLC   @F9O@,GETMX                                            7  2982  M D01 570           33
296  8 210         MLC   @F9O@,GET1A&3                                          7  2989  M D01 628           33
297  8 220         MLC   @C9P@,GETXRD&6                                         7  2996  M D04 665           33
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 298  8 230         MLC   @C9R@,GETA1                                         7  3003  M D07 573           33
 299  8 240         SW    11698,11397                                         7  3010  , F9Q C9P           33
 300  8 250         MLC   @C5!@,X1                                            7  3017  M D10 089           34
 301  9 010         MLCWA @I0!@,188                                           7  3024  L D13 188           34
 302  9 020         B     UP1                                                 4  3031  B A60               34
 303  9 030  A3     SW    6000                                                4  3035  , !0|               34
 304  9 040  A33    CS    7999                                                4  3039  / I9Z               34
 305  9 050         SBR   A33&3                                               4  3043  H ?42               34
 306  9 060         BW    A33,6000                                            8  3047  V ?39 !0| 1         34
 307  9 070         MLC   GPMRK,7817                                          7  3055  M R05 H1X           35
 308  9 080         MLC   GPMRK,7998                                          7  3062  M R05 I9Y           35
 309  9 090         SW    7998,7817                                           7  3069  , I9Y H1X           35
 310  9 100         MLC   @H2|@,PUT7&6                                       7  3076  M D16 394           35
 311  9 110         MLC   @I9X@,PUTMX                                        7  3083  M D19 564           35
 312  9 120         MLC   @H1Y@,PUTXWT&6                                     7  3090  M D22 448           36
 313  9 130         MLC   @I9X@,PUTT&6                                       7  3097  M D19 466           36
 314  9 140         MLC   @H2|@,PUTA1                                        7  3104  M D16 567           36
 315  9 150         MLC   @H1W@,GETMX                                        7  3111  M D25 570           36
 316  9 160         MLC   @H1W@,GET1A&3                                      7  3118  M D25 628           36
 317  9 170         MLC   @F3X@,GETXRD&6                                     7  3125  M D28 665           37
 318  9 180         MLC   @F3Z@,GETA1                                        7  3132  M D31 573           37
 319  9 190         SW    7818,7637                                           7  3139  , H1Y F3X           37
 320  9 200         MLC   @F0|@,X1                                            7  3146  M D34 089           37
 321  9 210         MLCWA @I0|@,188                                           7  3153  L D37 188           37
 322  9 220  UP1    MLC   @#@,PRT                                             7  3160  M D38 423           38
 323  9 230         MLC   @#@,RTP                                             7  3167  M D38 614           38
 324  9 240         MLC   @#@,RTP1                                            7  3174  M D38 735           38
 325  9 250         MLC   @#@,PBB                                             7  3181  M D38 |18           38
 326 10 010         B     SWINST                                              4  3188  B |32               38
 327 10 020  A4     SW    3800                                                4  3192  , H00               38
 328 10 030  A44    CS    3999                                                4  3196  / I99               39
 329 10 040         SBR   A44&3                                               4  3200  H A99               39
 330 10 050         BW    A44,3800                                            8  3204  V A96 H00 1         39
 331 10 060         MLC   GPMRK,3898                                          7  3212  M R05 H98           39
 332 10 070         MLC   GPMRK,3998                                          7  3219  M R05 I98           39
 333 10 080         SW    3998,3898                                           7  3226  , I98 H98           39
 334 10 090         SW    3799,3899                                           7  3233  , G99 H99           40
 335 10 100         MLC   @G90@,X1                                            7  3240  M D41 089           40
 336 10 110         MLCWA @I00@,188                                           7  3247  L D44 188           40
 337 10 120         B     SWINST                                              4  3254  B |32               40
 338 10 130  NCTLMS DCW   @NO CONTROL CARD RELOAD CARDS AND PRESS START@     44  3301                      42
 339 10 140  CNTRED DCW   @CAN NOT READ UNIT 1@                             19  3320                      42
 340 10 150  REDCNT DCW   @0@                                                1  3321                      42
 341 10 160         LTORG *                                                        3322
       117          DCW   @SYSTEMS@                                           7  3328              LIT     42
       119                @RUN  @                                             5  3333              LIT     42
                          @4@                                                 1  3334              LIT     43
                          @1@                                                 1  3335              LIT     43
       136                &TERR1                                              3  3338  J35         ADCON   43
                          @0@                                                 1  3339              LIT     43
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
		146			&TERR	3	3342	J21	ADCON	43
					@T00@	3	3345		LIT	43
		159			@COBOL@	5	3350		LIT	43
		161			@XTRAN@	5	3355		LIT	44
					@X10@	3	3358		LIT	44
					@N@	1	3359		LIT	44
					@2@	1	3360		LIT	44
					@ @	1	3361		LIT	44
					@012@	3	3364		LIT	44
					@9@	1	3365		LIT	44
					@G0?@	3	3368		LIT	45
					@I9G@	3	3371		LIT	45
					@F9H@	3	3374		LIT	45
					@F9F@	3	3377		LIT	45
					@C9G@	3	3380		LIT	45
					@C9I@	3	3383		LIT	45
					@C5?@	3	3386		LIT	45
					@I0?@	3	3389		LIT	46
					@G0!@	3	3392		LIT	46
					@I9P@	3	3395		LIT	46
					@F9Q@	3	3398		LIT	46
					@F9O@	3	3401		LIT	46
					@C9P@	3	3404		LIT	46
					@C9R@	3	3407		LIT	46
					@C5!@	3	3410		LIT	47
					@I0!@	3	3413		LIT	47
					@H2|@	3	3416		LIT	47
					@I9X@	3	3419		LIT	47
					@H1Y@	3	3422		LIT	47
					@H1W@	3	3425		LIT	47
					@F3X@	3	3428		LIT	47
					@F3Z@	3	3431		LIT	48
					@F0|@	3	3434		LIT	48
					@I0|@	3	3437		LIT	48
					@#@	1	3438		LIT	48
					@G90@	3	3441		LIT	48
					@I00@	3	3444		LIT	48
342	10	170	RDD1	EQU	*&1		3445			
343	10	180		DCW	#20	20	3464			48
344	10	190	STOPER	DCW	@}@	1	3465			49

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

345 10 200         JOB   1401 COBOL - UPDATE SYSTEM
346 10 210         ORG   100                                                     0100
347 10 220  UPDTL1 R                                                    1  0100  1                   50
348 10 230  UPDTL2 SS    1                                              2  0101  K 1                 50
349 10 240         C     20,@UPDAT@                                     7  0103  C 020 850           50
350 10 250         BE    CHECK                                          5  0110  B 138 S             50
351 11 010         C     20,@END  @                                     7  0115  C 020 855           50
352 11 020         BE    END01                                          5  0122  B 524 S             50
353 11 030         MLC   &UPDTL2,071                                    7  0127  M 858 071           50
354 11 040         B     040                                            4  0134  B 040               51
355 11 050  CHECK  BWZ   DONE,SW1,1                                     8  0138  V 520 081 1         51
356 11 060  CHECK1 CW    RR1                                            4  0146  ) 570               51
357 11 070         SW    SW1                                            4  0150  , 081               51
358 11 080         MLC   21,GENSW                                       7  0154  M 021 082           51
359 11 090         C     8,HEADID                                       7  0161  C 008 794           51
360 11 100         BE    FOUND                                          5  0168  B 342 S             51
361 11 110         BW    BON,R5                                         8  0173  V 238 084 1         52
362 11 120         CW    R6,R3                                          7  0181  ) 083 299           52
363 11 130  BACK   B     IORWU                                          4  0188  B 611               52
364 11 140         RTW   1,HDR1                                         8  0192  L %U1 789 R         52
365 11 150         DCW   *-1                                            3  0202  201                 52
366 11 160         SW    HDR1&15                                        4  0203  , 804               52
367 11 170         C     8,HEADID                                       7  0207  C 008 794           53
368 11 180         BE    FOUND                                          5  0214  B 342 S             53
369 11 190  HERE   B     IORWU                                          4  0219  B 611               53
370 11 200         WTW   2,HDR1                                         8  0223  L %U2 789 W         53
371 11 210         DCW   *-1                                            3  0233  232                 53
372 11 220         B     CLEAR                                          4  0234  B 307               53
373 11 230  BON    B     IORWU                                          4  0238  B 611               53
374 11 240  RTTP   RTW   1,1000                                         8  0242  L %U1 |00 R         54
375 11 250         DCW   FINSH                                          3  0252  829                 54
376 12 010         MLC   IOSBRU,*&4                                     7  0253  M 788 263           54
377 12 020         SW    *                                              4  0260  , 263               54
378 12 030         NOP                                                  1  0264  N                   54
379 12 040  R1     B     HX                                             4  0265  B 426               54
380 12 050         B     IORWU                                          4  0269  B 611               54
381 12 060         WTW   2,1000                                         8  0273  L %U2 |00 W         55
382 12 070         DCW   *-1                                            3  0283  282                 55
383 12 080         MLC   IOSBRU,*&7                                     7  0284  M 788 297           55
384 12 090         MLC   DCBLNK,*                                       7  0291  M 805 297           55
385 12 100         NOP                                                  1  0298  N                   55
386 12 110  R3     B     HXX                                            4  0299  B 476               55
387 12 120         B     BACK                                           4  0303  B 188               55
388 12 130  CLEAR  SBR   RETURN&3                                       4  0307  H 341               56
389 12 140         SW    1000                                           4  0311  , |00               56
390 12 150         SBR   X1,3999                                        7  0315  H 089 I99           56
391 12 160  CLEAR1 CS    0&X1                                           4  0322  / 0|0               56
392 12 170         SBR   X1                                             4  0326  H 089               56
393 12 180         BW    CLEAR1,1000                                    8  0330  V 322 |00 1         56
394 12 190  RETURN B     *                                              4  0338  B 341               56
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

395 12 200  FOUND  BCE   P,GENSW,A                                    8  0342  B 393 082 A         57
396 12 210         BCE   I,GENSW,I                                    8  0350  B 456 082 I         57
397 12 220         BCE   H,GENSW,H                                    8  0358  B 375 082 H         57
398 12 230         BCE   P,GENSW,P                                    8  0366  B 393 082 P         57
399 12 240         H                                                  1  0374  .                   57
400 12 250  H      R                                                  1  0375  1                   57
401 13 010         SS    1                                            2  0376  K 1                 57
402 13 020         MLC   15,HDR1&14                                   7  0378  M 015 803           58
403 13 030         MLC                                                1  0385  M                   58
404 13 040         MLC                                                1  0386  M                   58
405 13 050         MLC                                                1  0387  M                   58
406 13 060         MLC                                                1  0388  M                   58
407 13 070         B     UPDTL1                                       4  0389  B 100               58
408 13 080  P      SW    R1,R6                                        7  0393  , 265 083           58
409 13 090         MLC   PHASOR,RTTP&6                               7  0400  M 797 248           59
410 13 100         MLC   PHASOR,START&6                              7  0407  M 797 550           59
411 13 110         BW    BON,R5                                       8  0414  V 238 084 1         59
412 13 120         B     HERE                                         4  0422  B 219               59
413 13 130  HX     BCE   K,GENSW,P                                    8  0426  B 438 082 P         59
414 13 140         B     CLEAR                                        4  0434  B 307               59
415 13 150  K      MLC   @|00@,RTTP&6                                7  0438  M 861 248           60
416 13 160         CW    R1,R5                                        7  0445  ) 265 084           60
417 13 170         B     UPDTL1                                       4  0452  B 100               60
418 13 180  I      SW    R3                                           4  0456  , 299               60
419 13 190         BW    HXX,R6                                       8  0460  V 476 083 1         60
420 13 200         SW    R6                                           4  0468  , 083               60
421 13 210         B     HERE                                         4  0472  B 219               60
422 13 220  HXX    R                                                  1  0476  1                   61
423 13 230         SS    1                                            2  0477  K 1                 61
424 13 240         MLC   15,HDR1&14                                   7  0479  M 015 803           61
425 13 250         MLC                                                1  0486  M                   61
426 14 010         MLC                                                1  0487  M                   61
427 14 020         MLC                                                1  0488  M                   61
428 14 030         MLC                                                1  0489  M                   61
429 14 040         MLC   PHASOR,START&6                              7  0490  M 797 550           62
430 14 050         B     CLEAR                                        4  0497  B 307               62
431 14 060         B     IORWU                                        4  0501  B 611               62
432 14 070         WTW   2,HDR1                                      8  0505  L %U2 789 W         62
433 14 080         DCW   *-1                                         3  0515  514                 62
434 14 090         B     UPDTL1                                       4  0516  B 100               62
435 14 100  DONE   SW    RR1                                          4  0520  , 570               62
436 14 110  END01  BCE   ENDD,GENSW,H                                8  0524  B 806 082 H         63
437 14 120         BCE   END02,GENSW,0                               8  0532  B 569 082 0         63
438 14 130  CONT   B     IORWU                                        4  0540  B 611               63
439 14 140  START  WTW   2,*                                        8  0544  L %U2 551 W         63
440 14 150         DCW   *-1                                         3  0554  553                 63
441 14 160         MLC   IOSBRU,*&7                                 7  0555  M 788 568           63
442 14 170         MLC   DCBLNK,*                                   7  0562  M 805 568           64
443 14 180  END02  NOP                                              1  0569  N                   64
444 14 190  RR1    B     CHECK1                                       4  0570  B 146               64
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
445 14 200          B     IORWU                                        4  0574  B 611               64
446 14 210          RTW   1,1000                                       8  0578  L %U1 |00 R         64
447 14 220          DCW   END                                          3  0588  830                 64
448 14 230          MLC   IOSBRU,*&4                                   7  0589  M 788 599           64
449 14 240          SW    *                                            4  0596  , 599               65
450 14 250          MLC   @|00@,START&6                                7  0600  M 861 550           65
451 15 010          B     CONT                                         4  0607  B 540               65
452 15 020  IORWU   SBR   X1                                           4  0611  H 089               65
453 15 030          MLC   7&X1,IOINTU&7       MOVE IN I/O INSTRUCTION.  7  0615  M 0|7 657          65
454 15 040          MLC   @012@,IOCHNU&6      LOAD CHECK FOR NOISE RECORD.  7  0622  M 864 689      65
455 15 050          MA    6&X1,IOCHNU&6                                7  0629  # 0|6 689          66
456 15 060          MLC   10&X1,GENRFU&3      MOVE IN EOF ADDRESS.      7  0636  M 0/0 784          66
457 15 070  RBKU    MLC   @9@,IOCERU                                   7  0643  M 865 785          66
458 15 080  IOINTU  RT    0,0                 SKELETON I/O INSTRUCTION.  8  0650  M %U0 000 R        66
459 15 090          SBR   *&4                                          4  0658  H 665               66
460 15 100          MLNS  0                                            4  0662  D 000               66
461 15 110          SAR   IOSBRU              GT POSITION OF GP-WM.     4  0666  Q 788               67
462 15 120          BCE   IOWRTU,IOINTU&7,W   IF WRITE I/O BRANCH.     8  0670  B 703 657 W         67
463 15 130          BEF   GENRFU                                       5  0678  B 781 K             67
464 15 140  IOCHNU  BCE   IOINTU,0,}                                   8  0683  B 650 000 }         67
465 15 150          BCE                                                1  0691  B                   67
466 15 160          BCE                                                1  0692  B                   67
467 15 170          BCE                                                1  0693  B                   67
468 15 180          BCE                                                1  0694  B                   68
469 15 190          BCE                                                1  0695  B                   68
470 15 200          BCE                                                1  0696  B                   68
471 15 210          BCE                                                1  0697  B                   68
472 15 220          BCE                                                1  0698  B                   68
473 15 230          BCE                                                1  0699  B                   68
474 15 240          BCE                                                1  0700  B                   68
475 15 250          BCE                                                1  0701  B                   69
476 16 010          BCE                                                1  0702  B                   69
477 16 020  IOWRTU  BER   IOERRU              IF ERROR BRANCH.          5  0703  B 717 L             69
478 16 030          BEF   GENRFU              IF EOF BRANCH.            5  0708  B 781 K             69
479 16 040          B     11&X1                                        4  0713  B 0/1               69
480 16 050  IOERRU  MLNS  IOINTU&3,*&4        CONDITION BACKSPACE INSTRUCTION.  7  0717  D 653 727   69
481 16 060          BSP   0                   BACKSPACE TAPE IF EROR.   5  0724  U %U0 B             69
482 16 070          BM    IO9CKU,IOCERU       IF ERROR 9 TIMES THEN BRANCH.  8  0729  V 748 785 K   70
483 16 080          S     @1@,IOCERU          DECREMENT COUNTER.        7  0737  S 866 785           70
484 16 090          B     IOINTU              BRANCH TO EXECUTE I/O AGAIN.  4  0744  B 650           70
485 16 100  IO9CKU  BCE   SKPINU,IOINTU&7,W   IF WRITE THEN BRANCH.     8  0748  B 760 657 W         70
486 16 110  HRRU    H     RBKU                                         4  0756  . 643               70
487 16 120  SKPINU  MLNS  IOINTU&3,*&4                                 7  0760  D 653 770           70
488 16 130          SKP   0                   SKIP FOR WRITE            5  0767  U %U0 E             71
489 16 140          BEF   HRRU                                        5  0772  B 756 K             71
490 16 150          B     IOINTU                                       4  0777  B 650               71
491 16 160  GENRFU  B     0                                            4  0781  B 000               71
492 16 170  IOCERU  DCW   @0@                                          1  0785                      71
493 16 180  IOSBRU  DCW   @000@                                        3  0788                      71
494 16 190  HDR1    DA    1X15                                            0789   0803              71
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

495 16 200                1,3                                             0791              FIELD   72
496 16 210  HEADID        4,6                                             0794              FIELD   72
497 16 220  PHASOR        7,9                                             0797              FIELD   72
498 16 230                10,12                                           0800              FIELD   72
499 16 240                13,15                                           0803              FIELD   72
500 16 250          DC    @}@                                       1     0804                      73
501 17 010  DCBLNK  DCW   #1                                        1     0805                      73
502 17 020  ENDD    B     IORWU                                     4     0806  B 611               73
503 17 030          WTW   2,HDR1                                    8     0810  L %U2 789 W         73
504 17 040          DCW   *-1                                      3     0820  819                 73
505 17 050          SW    R5                                        4     0821  , 084               74
506 17 060          B     END02                                     4     0825  B 569               74
507 17 070  FINSH   H                                               1     0829  .                   74
508 17 080  END     WTM   2                                         5     0830  U %U2 M             74
509 17 090          RWD   2                                         5     0835  U %U2 R             74
510 17 100          RWD   1                                         5     0840  U %U1 R             74
511 17 110          H                                               1     0845  .                   74
512 17 120          LTORG *                                                    0846
       349          DCW   @UPDAT@                                   5     0850              LIT     75
       351                @END  @                                   5     0855              LIT     75
       353                &UPDTL2                                   3     0858  101         ADCON   75
                          @|00@                                     3     0861              LIT     75
                          @012@                                     3     0864              LIT     75
                          @9@                                       1     0865              LIT     75
                          @1@                                       1     0866              LIT     75
513 17 130          DCW   @}@                                       1     0867                      76
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
514 17 140          JOB   1401 COBOL - SYSTEMS CONTROL PROGRAM
515 17 150          ORG   335                                                   0335
516 17 160  PUTA    EQU   3901                                          3901
517 17 170  PUTMAX  EQU   3997                                          3997
518 17 180  GETA    EQU   3801                                          3801
519 17 190  GETMAX  EQU   3897                                          3897
520 17 200  GETX    SBR   X1                                       4    0335  H 089               77
521 17 210          B     Z2                                       4    0339  B 577               77
522 17 220  IORW    SBR   X1                                       4    0343  H 089               77
523 17 230          B     Z3                                       4    0347  B 717               77
524 17 240  SUPER   SBR   X1                                       4    0351  H 089               77
525 17 250          B     Z4                                       4    0355  B 959               77
526 18 010  DUMP    B     Z5                                       4    0359  B |82               77
527 18 020  PUTX    SBR   X1                                       4    0363  H 089               78
528 18 030          SBR   PUT2&3,3&X1                              7    0367  H 437 0|3           78
529 18 040          MLC   2&X1,*&4                                 7    0374  M 0|2 384           78
530 18 050          MLC   *,IOSBR                                  7    0381  M 387 940           78
531 18 060  PUT7    MLC   IOSBR,PUTA                               7    0388  M 940 I01           78
532 18 070  PUTX1   C     IOSBR,VEP                                7    0395  C 940 561           78
533 18 080          BE    PUT6                                     5    0402  B 547 S             79
534 18 090          C     PUT7&6,PUTMX                             7    0407  C 394 564           79
535 18 100  PUT1A   BE    WRITE                                    5    0414  B 438 S             79
536 18 110          SW    PUT7&4                                   4    0419  , 392               79
537 18 120  PRT     A     THREE,PUT7&6                             7    0423  A 558 394           79
538 18 130          CW    PUT7&4                                   4    0430  ) 392               79
539 18 140  PUT2    B     0                                        4    0434  B 000               79
540 18 150  WRITE   B     IORW                                     4    0438  B 343               80
541 18 160  PUTXWT  WT    1,PUTA-2                                 8    0442  M %U1 H99 W         80
542 18 170          DCW   PUT4                                     3    0452  893                 80
543 18 180  PUT2D   MLC   PUTA1,PUT7&6                            7    0453  M 567 394           80
544 18 190  PUTT    ZA    SZRO,PUTMAX                              7    0460  ? 555 I97           80
545 18 200          NOP                                            1    0467  N                   80
546 18 210  PUT2A   B     PUT2                BRANCH TO EXIT IF NO EOP   4    0468  B 434               80
547 18 220  PUT2B   WTM   1                   END TAPE                   5    0472  U %U1 M             81
548 18 230  PUT2C   RWD   1                    AND REWIND                5    0477  U %U1 R             81
549 18 240          SW    PUT2A                                    4    0482  , 468               81
550 18 250          MLC   FLIP1,PUTXWT&3                          7    0486  M 574 445           81
551 19 010          MLC   FLIP1,PUT2B&3                          7    0493  M 574 475           81
552 19 020          MLC   FLIP1,PUT2C&3                          7    0500  M 574 480           81
553 19 030          MLC   FLIP2,GETXRD&3                         7    0507  M 575 662           82
554 19 040          MLC   FLIP2,GET7&3                           7    0514  M 575 701           82
555 19 050          MLC   FLIP2,GET4A&3                          7    0521  M 575 692           82
556 19 060          MLC   FLIP2,FLIP3                            7    0528  M 575 576           82
557 19 070          MLC   FLIP1                                  4    0535  M 574               82
558 19 080          MLC   FLIP3                                  4    0539  M 576               82
559 19 090          B     PUT2                                     4    0543  B 434               83
560 19 100  PUT6    CW    PUT2A                                    4    0547  ) 468               83
561 19 110          B     WRITE                                    4    0551  B 438               83
562 19 120  SZRO    DCW   @0@                                      1    0555                      83
563 19 130  THREE   DCW   @003@                                    3    0558                      83
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
564 19 140  VEP     DCW   @.EP@                                        3  0561                      83
565 19 150  PUTMX   DCW   @I97@                                       3  0564                      83
566 19 160  PUTA1   DCW   @I01@                                       3  0567                      84
567 19 170  GETMX   DCW   @H97@                                       3  0570                      84
568 19 180  GETA1   DCW   @H01@                                       3  0573                      84
569 19 190  FLIP1   DCW   @6@                                         1  0574                      84
570 19 200  FLIP2   DCW   @5@                                         1  0575                      84
571 19 210  FLIP3   DCW   @0@                                         1  0576                      84
572 19 220  Z2      SBR   GET2&3,6&X1                                 7  0577  H 654 0|6           84
573 19 230          MLC   2&X1,GET1A1&6                              7  0584  M 0|2 638           85
574 19 240          MLC   5&X1,GET7A&3        LABEL                  7  0591  M 0|5 713           85
575 19 250          C     GET1A&3,GETMX                             7  0598  C 628 570           85
576 20 010          BE    READ               DOES AREA NEED FILLING 5  0605  B 655 S             85
577 20 020          SW    GET1A&1                                   4  0610  , 626               85
578 20 030  RTP     A     THREE,GET1A&3                             7  0614  A 558 628           85
579 20 040          CW    GET1A&1                                   4  0621  ) 626               86
580 20 050  GET1A   MLC   GETMAX,IOSBR                             7  0625  M H97 940           86
581 20 060  GET1A1  MLC   IOSBR,*                                   7  0632  M 940 638           86
582 20 070  GETX1   C     IOSBR,VEP                                 7  0639  C 940 561           86
583 20 080          BE    GET7                                      5  0646  B 698 S             86
584 20 090  GET2    B     0                                         4  0651  B 000               86
585 20 100  READ    B     IORW                                      4  0655  B 343               86
586 20 110  GETXRD  RT    1,GETA-2                                  8  0659  M %U1 G99 R         87
587 20 120          DCW   GET4                                      3  0669  681                 87
588 20 130          MLC   GETA1,GET1A&3                            7  0670  M 573 628           87
589 20 140          B     GET1A                                     4  0677  B 625               87
590 20 150  GET4    MLC   EDMG,303                                  7  0681  M 952 303           87
591 20 160          W                         NO EOP                1  0688  2                   87
592 20 170  GET4A   RWU   1                                         5  0689  U %U1 U             87
593 20 180          H     READ                                      4  0694  . 655               88
594 20 190  GET7    RWD   1                  REWIND TAPE            5  0698  U %U1 R             88
595 20 200          MLC   GETMX,GET1A&3                             7  0703  M 570 628           88
596 20 210  GET7A   B     *                  BRANCH TO LABEL        4  0710  B 713               88
597 20 220  GET6    DCW   @   @              TEMPORARY BOX          3  0716                      88
598 20 230  Z3      MLC   7&X1,IOINST&7                             7  0717  M 0|7 767           88
599 20 240          MLC   TWELVE,IOCHNS&6                          7  0724  M 943 799           88
600 20 250          SW    IOCHNS&4                                  4  0731  , 797               89
601 21 010  RTP1    A     6&X1,IOCHNS&6                             7  0735  A 0|6 799           89
602 21 020          CW    IOCHNS&4                                  4  0742  ) 797               89
603 21 030          MLC   10&X1,GENREF&3      MOVE IN EOF ADDRESS.   7  0746  M 0/0 936           89
604 21 040  REINIT  MLC   NINE,IOCERR                               7  0753  M 944 937           89
605 21 050  IOINST  RT    0,0                SKELETON I/O INSTRUCTION. 8  0760  M %U0 000 R         89
606 21 060          SBR   *&4                                       4  0768  H 775               90
607 21 070          MLNS  0                                         4  0772  D 000               90
608 21 080          SAR   IOSBR              GT POSITION OF GM-WM.  4  0776  Q 940               90
609 21 090          BCE   IOWRIT,IOINST&7,W   IF WRITE I/O BRANCH.  8  0780  B 813 767 W         90
610 21 100          BEF   GENREF                                    5  0788  B 933 K             90
611 21 110  IOCHNS  BCE   IOINST,0,}                                8  0793  B 760 000 }         90
612 21 120          BCE                                             1  0801  B                   90
613 21 130          BCE                                             1  0802  B                   91
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
614 21 140          BCE                                              1  0803  B                   91
615 21 150          BCE                                              1  0804  B                   91
616 21 160          BCE                                              1  0805  B                   91
617 21 170          BCE                                              1  0806  B                   91
618 21 180          BCE                                              1  0807  B                   91
619 21 190          BCE                                              1  0808  B                   91
620 21 200          BCE                                              1  0809  B                   92
621 21 210          BCE                                              1  0810  B                   92
622 21 220          BCE                                              1  0811  B                   92
623 21 230          BCE                                              1  0812  B                   92
624 21 240  IOWRIT  BER   IOERR               IF ERROR BARNCH.        5  0813  B 827 L             92
625 21 250          BEF   GENREF              IF EOF BRANCH.          5  0818  B 933 K             92
626 22 010          B     11&X1                                       4  0823  B 0/1               92
627 22 020  IOERR   MLNS  IOINST&3,*&4        CONDITION BACKSPACE INSTRUCTION.  7  0827  D 763 837         93
628 22 030          BSP   0                    BACKSPACE TAPE IF EROR.  5  0834  U %U0 B             93
629 22 040          BM    IO9CHK,IOCERR       IF ERROR 9 TIMES THEN BRANCH.  8  0839  V 858 937 K       93
630 22 050          S     ONE,IOCERR                                  7  0847  S 945 937           93
631 22 060          B     IOINST              BRANCH TO EXECUTE I/O AGAIN.  4  0854  B 760             93
632 22 070  IO9CHK  BCE   SKPINS,IOINST&7,W   IF WRITE THEN BRANCH.   8  0858  B 901 767 W       93
633 22 080          CS    332                 IF REIED READ 9 TIMES AND  4  0866  / 332              94
634 22 090          CS                        ERROR THEN PRINT MESSAGE  1  0870  /                   94
635 22 100  MESSGE  MLC   CNTRDM,275          "CANT READ UNIT N" AND  7  0871  M 949 275           94
636 22 110          MLN   IOINST&3,275        PROVIDE LINKAGE BACK TO  7  0878  D 763 275           94
637 22 120  IO9CH1  W                         REXECUTE COMMAND.       1  0885  2                   94
638 22 130          BIN   IO9CH1,|                                    5  0886  B 885 |             94
639 22 140          CC    1                                           2  0891  F 1                 94
640 22 150  PUT4    H     REINIT                                      4  0893  . 753               95
641 22 160          B     REINIT                                      4  0897  B 753               95
642 22 170  SKPINS  MLNS  IOINST&3,*&4                                7  0901  D 763 911           95
643 22 180          SKP   0                   SKIP FOR WRITE          5  0908  U %U0 E             95
644 22 190          BEF   IOWREF              IF EOF ON WRITE BRANCH  5  0913  B 922 K             95
645 22 200          B     IOINST                                      4  0918  B 760               95
646 22 210  IOWREF  MLC   &CNTWT,MESSGE&3                           7  0922  M S76 874           95
647 22 220          B     IO9CHK&8                                    4  0929  B 866               96
648 22 230  GENREF  B     0                                           4  0933  B 000               96
649 22 240  IOCERR  DCW   @0@                                        1  0937                      96
650 22 250  IOSBR   DCW   @000@                                      3  0940                      96
651 23 010  TWELVE  DCW   @012@                                      3  0943                      96
652 23 020  NINE    DCW   @9@                                       1  0944                      96
653 23 030  ONE     DCW   @1@                                       1  0945                      96
654 23 040  CNTRDM  DCW   @TE 0@                                    4  0949                      97
655 23 050  EDMG    DCW   @EOR@                                     3  0952                      97
656 23 060  CNTWT   DCW   @EOF T0@                                  6  0958                      97
657 23 070  Z4      MLC   2&X1,PHASID                               7  0959  M 0|2 /12           97
658 23 080  CBOL05  MLC   @N@,XYZ                                   7  0966  M S77 |52           97
659 23 090          B     IORW                                      4  0973  B 343               97
660 23 100          RTW   1,HEADER             IN                  8  0977  L %U1 /35 R         97
661 23 110          DCW   SYSEOF                                    3  0987  /51                 98
662 23 120          SW    HEADER&15                                 4  0988  , /50               98
663 23 130          B     REAS                                      4  0992  B S43               98
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
664 23 140          DCW   #3                                            3  0998                      98
665 23 150          DCW   #5                                            5  1003                      98
666 23 160  PHFUND  MLC   HEADER&8,INPHAS&6   CONDITION BUCKETS FOR CLEARING  7  1004  M /43 |66           98
667 23 170          MLC   HEADER&8,X2                                   7  1011  M /43 094           98
668 23 180  PBB     A     @100@,X2                                      7  1018  A S80 094           99
669 23 190          MLC   HEADER&14,X1       DELETING GROUP MARK-WORD MARK  7  1025  M /49 089           99
670 23 200  SWINST  SW    0&X2                                          4  1032  , 0!0               99
671 23 210  SWTCH1  CS    0&X1                                          4  1036  / 0|0               99
672 23 220          SBR   X1                                            4  1040  H 089               99
673 23 230          BW    SWTCH1,0&X2                                   8  1044  V |36 0!0 1         99
674 23 240  XYZ     B     CBOL05                                        4  1052  B 966               99
675 23 250          B     IORW                READ PHASE IN             4  1056  B 343              100
676 24 010  INPHAS  RTW   1,*                                           8  1060  L %U1 |67 R        100
677 24 020          DCW   SYSEOF                                        3  1070  /51                100
678 24 030          MLC   HEADER&11,*&4                                 7  1071  M /46 |81          100
679 24 040  UNCONB  B     *                                             4  1078  B |81               100
680 24 050  Z5      MLC   PHASID,331                                    7  1082  M /12 331          100
681 24 060          MLC   DUMPID,PHASID                                 7  1089  M /29 /12          101
682 24 070          MLC   X3,XRGSV                                      7  1096  M 099 /25          101
683 24 080          MLC                                                 1  1103  M                  101
684 24 090          MLC                                                 1  1104  M                  101
685 24 100          B     CBOL05                                        4  1105  B 966              101
686 24 110  GTSTOV  DCW   @0@                                           1  1109                     101
687 24 120  PHASID  DCW   @A01@                                         3  1112                     101
688 24 130          DCW   @00000@                                       5  1117                     102
689 24 140          DCW   @00000@                                       5  1122                     102
690 24 150  XRGSV   DCW   @000@                                         3  1125                     102
691 24 160  SCRBKT  DCW   @2@                                           1  1126                     102
692 24 170  DUMPID  DCW   @DMP@                                         3  1129                     102
693 24 180  PH10SW  DCW   @0@                                           1  1130                     102
694 24 190  TMSW    DCW   @Y@                                           1  1131                     102
695 24 200  SAVE    DCW   @000@                                         3  1134                     103
696 24 210  HEADER  DA    1X15                                             1135   1149              103
697 24 220                1,3                                              1137              FIELD  103
698 24 230                4,6                                              1140              FIELD  103
699 24 240                7,9                                              1143              FIELD  103
700 24 250                10,12                                            1146              FIELD  103
701 25 010                13,15                                            1149              FIELD  103
702 25 020          DC    @}@                                           1  1150                     104
703 25 030  SYSEOF  RWD   1                                             5  1151  U %U1 R            104
704 25 040          B     CBOL05                                        4  1156  B 966              104
705 25 050          DCW   @A@                                           1  1160                     104
706 25 060          DCW   @B@                                           1  1161                     104
707 25 070          DCW   @C@                                           1  1162                     105
708 25 080          DCW   @D@                                           1  1163                     105
709 25 090          DCW   @E@                                           1  1164                     105
710 25 100          DCW   @F@                                           1  1165                     105
711 25 110          DCW   @G@                                           1  1166                     105
712 25 120          DCW   @H@                                           1  1167                     105
713 25 130          DCW   @I@                                           1  1168                     105
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
714	25	140		DCW	@J@	1	1169		106
715	25	150		DCW	@K@	1	1170		106
716	25	160		DCW	@L@	1	1171		106
717	25	170		DCW	@M@	1	1172		106
718	25	180		DCW	@N@	1	1173		106
719	25	190		DCW	@O@	1	1174		106
720	25	200		DCW	@P@	1	1175		106
721	25	210		DCW	@Q@	1	1176		107
722	25	220		DCW	@R@	1	1177		107
723	25	230		DCW	@S@	1	1178		107
724	25	240		DCW	@T@	1	1179		107
725	25	250		DCW	@U@	1	1180		107
726	26	010		DCW	@V@	1	1181		107
727	26	020		DCW	@W@	1	1182		107
728	26	030		DCW	@X@	1	1183		108
729	26	040		DCW	@Y@	1	1184		108
730	26	050	CBLBLK	DCW	@Z@	1	1185		108
731	26	060		DCW	@ @	1	1186		108
732	26	070		DCW	@?@	1	1187		108
733	26	080		DCW	@!@	1	1188		108
734	26	090		DCW	@.@	1	1189		108
735	26	100		DCW	@)@	1	1190		109
736	26	110		DCW	@$@	1	1191		109
737	26	120		DCW	@*@	1	1192		109
738	26	130		DCW	@-@	1	1193		109
739	26	140		DCW	@/@	1	1194		109
740	26	150		DCW	@,@	1	1195		109
741	26	160		DCW	@%@	1	1196		109
742	26	170		DCW	@#@	1	1197		110
743	26	180		DCW	@@@	1	1198		110
744	26	190		DCW	@&@	1	1199		110
745	26	200		DCW	@0@	1	1200		110
746	26	210		DCW	@1@	1	1201		110
747	26	220		DCW	@2@	1	1202		110
748	26	230		DCW	@3@	1	1203		110
749	26	240		DCW	@4@	1	1204		111
750	26	250		DCW	@5@	1	1205		111
751	27	010		DCW	@6@	1	1206		111
752	27	020		DCW	@7@	1	1207		111
753	27	030		DCW	@8@	1	1208		111
754	27	040	CBLRM	DCW	@9@	1	1209		111
755	27	050		DCW	@|@	1	1210		111
756	27	060		DCW	CBLRM	3	1213	S09	112
757	27	070		DC	#2	2	1215		112
758	27	080		DCW	CBLRM	3	1218	S09	112
759	27	090		DC	#2	2	1220		112
760	27	100	GNPTRS	DCW	CBLRM	3	1223	S09	112
761	27	110		DCW	CBLBLK	3	1226	/85	112
762	27	120		DC	#2	2	1228		112
763	27	130		DCW	CBLBLK	3	1231	/85	112

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

764 27 140         DC    #2                                        2  1233                      112
765 27 150  GNLPTR DCW   CBLRM                                     3  1236  S09                 112
766 27 160         DCW   @V@                                       1  1237                      112
767 27 170         DCW   @01@                                      2  1239                      113
768 27 180         DCW   @M@                                       1  1240                      113
769 27 190         DCW   @01@                                      2  1242                      113
770 27 200  REAS   C     PHASID,HEADER&5                           7  1243  C /12 /40           113
771 27 210         BE    PHFUND                                    5  1250  B |04 S             113
772 27 220         B     IORW                                      4  1255  B 343               113
773 27 230         RT    1,HEADER                                  8  1259  M %U1 /35 R         113
774 27 240         DCW   SYSEOF                                    3  1269  /51                 114
775 27 250         B     CBOL05                                    4  1270  B 966               114
776 28 010         LTORG *                                                  1274
       646         DCW   &CNTWT                                    3  1276  958         ADCON   114
                         @N@                                       1  1277              LIT     114
                         @100@                                     3  1280              LIT     114
777 28 020         DCW   @}@                                       1  1281                      114
778 28 030         END                                                      / 000 080           115
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
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1401 COBOL - FIRST PART OF DUMP PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - FIRST PART OF DUMP
 102  1 020         CTL   661 11
 103  1 030         ORG   363                                                  0363
 104  1 040  X1     EQU   089                                            0089
 105  1 050  X2     EQU   094                                            0094
 106  1 060  X3     EQU   099                                            0099
 107  1 070  SUPER  EQU   351                                            0351
 108  1 080  XRGSV  EQU   1125                                           1125
 109  1 090  DUMP   W                    PRINT THE PRINT BUFFER      1  0363  2                    4
 110  1 100         WM                                                2  0364  2 )                  4
 111  1 110         CS    332                                         4  0366  / 332                4
 112  1 120         CS                                                1  0370  /                    4
 113  1 130         SW    213                                         4  0371  , 213                4
 114  1 140         MLC   @.@,329                                     7  0375  M 456 329            4
 115  1 150         MLC   329,328                                     7  0382  M 329 328            4
 116  1 160  L1     MLC   ZERO,212                                    7  0389  M 455 212            5
 117  1 170         MLC                                               1  0396  M                    5
 118  1 180         SW    L1&4                                        4  0397  , 393                5
 119  1 190         A     @012@,L1&6                                  7  0401  A 459 395            5
 120  1 200         CW    L1&4                                        4  0408  ) 393                5
 121  1 210         A     @001@,ZERO-1                                7  0412  A 462 454            5
 122  1 220         BAV   *&5                                         5  0419  B 428 Z              5
 123  1 230         B     L1                                          4  0424  B 389                6
 124  1 240         W                                                 1  0428  2                    6
 125  1 250         CS    332                                         4  0429  / 332                6
 126  2 010         CS                                                1  0433  /                    6
 127  2 020         MLCWA XRGSV,329                                   7  0434  L /25 329            6
 128  2 030         MLCWA                                             1  0441  L                    6
 129  2 040         MLCWA                                             1  0442  L                    6
 130  2 050         W                                                 1  0443  2                    7
 131  2 060         WM                                                2  0444  2 )                  7
 132  2 070         B     SUPER                                       4  0446  B 351                7
 133  2 080         DCW   @DM2@                                       3  0452                       7
 134  2 090         DCW   @ @                                         1  0453                       7
 135  2 100  ZERO   DCW   @00@                                       2  0455                       7
 136  2 110         LTORG                                                    0456
                    DCW   @.@                                         1  0456             LIT      7
                          @012@                                       3  0459             LIT      8
                          @001@                                       3  0462             LIT      8
 137  2 120         DCW   @}@                                         1  0463                       8
 138  2 130         END                                                      / 000 080            9
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
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1401 COBOL - SECOND PART OF DUMP PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - SECOND PART OF DUMP
 102  1 020         CTL   661 11
 103  1 030         ORG   363                                                   0363
 104  1 040  X1     EQU   89                                                  0089
 105  1 050  X2     EQU   94                                                  0094
 106  1 060  X3     EQU   99                                                  0099
 107  1 070  SUPER  EQU   351                                                 0351
 108  1 080         CS    0                                             4     0363  / 000                4
 109  1 090         SBR   CONST#3                                       4     0367  H 641                4
 110  1 100         MN    @00@,CONST                                    7     0371  D 643 641            4
 111  1 110         MN                                                  1     0378  D                    4
 112  1 120         BCE   DDD,CONST,0                                   8     0379  B 401 641 0          4
 113  1 130         MLC   @#@,RZZ                                      7     0387  M 644 594            4
 114  1 140         MLC   @#@,MOD1                                     7     0394  M 644 493            4
 115  1 150  DDD    SBR   X1,213                                        7     0401  H 089 213            5
 116  1 160         MLC   @001@,X2                                      7     0408  M 647 094            5
 117  1 170         B     *&8                                           4     0415  B 426                5
 118  1 180  MOVE1  SBR   X1,212                                        7     0419  H 089 212            5
 119  1 190         CS    332               CLEAR PRINT BUFFER          4     0426  / 332                5
 120  1 200         CS                                                  1     0430  /                    5
 121  1 210         MLC   ADDRS,205         MOVE IN 5 CHARACTER ADDRESS AND     7     0431  M 633 205            5
 122  1 220         MLC   AD1401,209        3 CHARACTER ADDRESS INTO BUFFER     7     0438  M 636 209            6
 123  1 230  MOVE   BW    LOAD,0&X2         BRANCH IF W-M WITH CHARACTER        8     0445  V 471 0!0 1          6
 124  1 240         MLNS  0&X2,0&X1         ELSE MOVE SINGLE CHARACTER INTO     7     0453  D 0!0 0|0            6
 125  1 250         MLZS  0&X2,0&X1         PRINT BUFFER.                       7     0460  Y 0!0 0|0            6
 126  2 010         B     *&8                                           4     0467  B 478                6
 127  2 020  LOAD   MLCWA 0&X2,0&X1         MOVE CHARACTER AND WORD MARK        7     0471  L 0!0 0|0            7
 128  2 030         BCE   L2,0&X2,}                                     8     0478  B 618 0!0 }          7
 129  2 040  L3     A     @001@,TENCNT      ADD 1 TO TENS COUNTER               7     0486  A 647 637            7
 130  2 050  MOD1   A     @001@,X2                                      7     0493  A 647 094            7
 131  2 060  MODIFY A     @001@,X1                                      7     0500  A 647 089            7
 132  2 070         BAV   LTEN              IF MOVED 10 DIGITS BRANCH           5     0507  B 516 Z              8
 133  2 080         B     MOVE              ELSE GOTO MOVE                      4     0512  B 445                8
 134  2 090  LTEN   A     @001@,HUNCNT      BUMP COUNTER AND IF HAVE 100        7     0516  A 647 638            8
 135  2 100         BAV   LHUN              CHARACTERS IN BUFFER BRANCH         5     0523  B 539 Z              8
 136  2 110         A     @001@,X1                                      7     0528  A 647 089            8
 137  2 120         B     MODIFY            ELSE BRANCH                         4     0535  B 500                8
 138  2 130  LHUN   W                       PRINT BUFFER                        1     0539  2                    8
 139  2 140         WM                                                  2     0540  2 )                  9
 140  2 150         CS    332                                           4     0542  / 332                9
 141  2 160         CS                                                  1     0546  /                    9
 142  2 170         SW    200                                           4     0547  , 200                9
 143  2 180         BCV   OVRFLO            BRANCH IF CHANNEL 12 ON 1403-CT     5     0551  B 612 @              9
 144  2 190  RTRN   C     AD1401,CONST                                   7     0556  C 636 641            9
 145  2 200         BE    HALT                                          5     0563  B 605 S              9
 146  2 210         A     @100@,ADDRS       ADD 100 TO ADDRESS COUNTERS         7     0568  A 650 633           10
 147  2 220         MLC   X2,AD1401                                     7     0575  M 094 636           10
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          C     99&X2,299                                7  0582  C 0R9 299           10
149  2 240          BU    MOVE1                                    5  0589  B 419 /             10
150  2 250  RZZ     A     @100@,X2                                 7  0594  A 650 094           10
151  3 010          B     RTRN                                     4  0601  B 556               10
152  3 020  HALT    B     SUPER                                    4  0605  B 351               11
153  3 030          DCW   @T/P@                                    3  0611                      11
154  3 040  OVRFLO  CC    1                                        2  0612  F 1                 11
155  3 050          B     RTRN                                     4  0614  B 556               11
156  3 060  L2      MLC   @)@,0&X1                                7  0618  M 651 0|0           11
157  3 070          B     L3                                       4  0625  B 486               11
158  3 080  ADDRS   DCW   @00000@                                 5  0633                      11
159  3 090  AD1401  DCW   @000@                                   3  0636                      12
160  3 100  TENCNT  DCW   @1@                                     1  0637                      12
161  3 110  HUNCNT  DCW   @0@                                     1  0638                      12
162  3 120          LTORG                                                  0639
       109  CONST   DCW   #03                                     3  0641              AREA    12
                           @00@                                  2  0643              LIT     12
                           @#@                                   1  0644              LIT     12
                           @001@                                 3  0647              LIT     12
                           @100@                                 3  0650              LIT     13
                           @)@                                   1  0651              LIT     13
163  3 130          ORG                                                    0652
164  3 140          DCW   @}@                                     1  0652                      13
165  3 150          END                                                    / 000 080           14
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
```

1401 COBOL - TAPE PRINT PAGE 1

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - TAPE PRINT
 102  1 020         CTL   661 11
 103  1 030         ORG   1400                                                  1400
 104  1 040  INPUT  EQU   2000                                          2000
 105  1 050  X1     EQU   089                                           0089
 106  1 060         RWD   5                                        5   1400  U %U5 R              4
 107  1 070         RWD   6                                        5   1405  U %U6 R              4
 108  1 080         RWD   4                                        5   1410  U %U4 R              4
 109  1 090         CS    332               CLEAR PRINT AREA       4   1415  / 332                4
 110  1 100         CS                                           1   1419  /                    4
 111  1 110         MLC   @5@,IOUNIT         FOR DO LOOP FOR SETTING UP   7   1420  M Y48 X30            4
 112  1 120         B     TPRINT             WHAT UNITS ARE TO BE PRINTED   4   1427  B U57                4
 113  1 130         MLC   @6@,IOUNIT                                   7   1431  M Y49 X30            5
 114  1 140         B     TPRINT                                       4   1438  B U57                5
 115  1 150         MLC   @4@,IOUNIT                                   7   1442  M Y50 X30            5
 116  1 160         B     TPRINT                                       4   1449  B U57                5
 117  1 170         B     TFINSH                                       4   1453  B W67                5
 118  1 180  TPRINT SBR   TPRTRN&3           SET UP EXIT FOR RETURN.      4   1457  H X29                5
 119  1 190         CC    1                                            2   1461  F 1                  5
 120  1 200         CS    300                                          4   1463  / 300                6
 121  1 210         MLC   FNSHMS,275                                   7   1467  M Y18 275            6
 122  1 220         MLC   IOUNIT,275                                   7   1474  M X30 275            6
 123  1 230         W                                                  1   1481  2                    6
 124  1 240         CC    J                                            2   1482  F J                  6
 125  1 250  REINIT SBR   X1,3999                                      7   1484  H 089 I99            6
 126  2 010         MLC   IOUNIT,READ&3       CONDITION READ INSTRUCTION.   7   1491  M X30 V37            6
 127  2 020         MLC   IOUNIT,BACSPC&3    CONDITION BACKSPACE INSTRUCTION.   7   1498  M X30 W32            7
 128  2 030  NXTRCD CC    J                                            2   1505  F J                  7
 129  2 040         MLC   @9@,ERRCNT         INITIALIZE ERROR COUNT FIELD.   7   1507  M Y51 X31            7
 130  2 050         SW    INPUT              CLEAR PREVIOUS RECORD READ   4   1514  , !00                7
 131  2 060  CLEAR  CS    0&X1               IN FROM STORAGE.             4   1518  / 0|0                7
 132  2 070         SBR   X1                                           4   1522  H 089                7
 133  2 080         BW    CLEAR,INPUT                                  8   1526  V V18 !00 1          7
 134  2 090  READ   RT    0,INPUT            READ IN RECORD.              8   1534  M %U0 !00 R          8
 135  2 100         SBR   ENDRCD                                       4   1542  H X34                8
 136  2 110         BER   TER                                          5   1546  B W14 L              8
 137  2 120         BEF   TPRTRN                                       5   1551  B X26 K              8
 138  2 130         MLNS  @99@,ENDRCD                                  7   1556  D Y53 X34            8
 139  2 140         MLNS                                             1   1563  D                    8
 140  2 150         A     @001@,ENDRCD                                 7   1564  A Y56 X34            8
 141  2 160         MLC   &INPUT,X1          HUNDREDTHS IN ENDRCD.        7   1571  M Y59 089            9
 142  2 170  PRTNXL MLC   99&X1,300          MOVE PART OF RECORD INTO PRINT   7   1578  M 0Z9 300            9
 143  2 180         W                        AREA PRINT.                  1   1585  2                    9
 144  2 190         BCV   CC1                                          5   1586  B Y42 @              9
 145  2 200  MODADD A     @100@,X1                                     7   1591  A Y62 089            9
 146  2 210         C     ENDRCD,X1          IF FINISHED PRINTING FO BACK   7   1598  C X34 089            9
 147  2 220         BE    NXTRCD             AND READ IN NEXT RECORD ELSE.   5   1605  B V05 S              9
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          B     PRTNXL              GET NEXT 100 POSITIONS.         4  1610  B V78               10
149  2 240  TER     S     ONE,ERRCNT          IF ERROR SUBTRACT ONE.          7  1614  S X35 X31           10
150  2 250          BM    TENERR,ERRCNT       IF TEN READ ERRORS BRANCH       8  1621  V W38 X31 K         10
151  3 010  BACSPC  BSP   0                   BACKSPACE TAPE AND REEXECUTE    5  1629  U %U0 B             10
152  3 020          B     READ                READ COMMAND.                   4  1634  B V34               10
153  3 030  TENERR  CS    300                                                 4  1638  / 300               10
154  3 040          MLC   REDERR,299                                          7  1642  M X98 299           10
155  3 050          W                                                         1  1649  2                   11
156  3 060          CC    1                                                   2  1650  F 1                 11
157  3 070          MLC   @9@,ERRCNT                                         7  1652  M Y51 X31           11
158  3 080          H     BACSPC              IF TRY AGAIN PUSH START ELSE    4  1659  . W29               11
159  3 090          B     REINIT                                            4  1663  B U84               11
160  3 100  TFINSH  CS    300                IF PRINTED ALL THREE TAPES       4  1667  / 300               11
161  3 110          MLC   TPRTFS,275          PRINT MESSAGE REWIND 1,2,3      7  1671  M Y41 275           11
162  3 120          W                        AND 4 AND HALT                   1  1678  2                   12
163  3 130          CC    1                                                   2  1679  F 1                 12
164  3 140          RWD   4                                                   5  1681  U %U4 R             12
165  3 150          RWD   6                                                   5  1686  U %U6 R             12
166  3 160          RWD   5                                                   5  1691  U %U5 R             12
167  3 170          RWD   1                                                   5  1696  U %U1 R             12
168  3 180          BSS   TFSH1,D                                             5  1701  B X10 D             12
169  3 190          B     LX1R                                                4  1706  B X21               13
170  3 200  TFSH1   MLC   153,1112                                           7  1710  M 153 /12           13
171  3 210          B     966                                                 4  1717  B 966               13
172  3 220  LX1R    H                                                         1  1721  .                   13
173  3 230          B     TFSH1                                               4  1722  B X10               13
174  3 240  TPRTRN  B     *                                                   4  1726  B X29               13
175  3 250  IOUNIT  DCW   @0@                                                 1  1730                      13
176  4 010  ERRCNT  DCW   @0@                                                 1  1731                      14
177  4 020  ENDRCD  DCW   @000@                                               3  1734                      14
178  4 030  ONE     DCW   @1@                                                 1  1735                      14
179  4 040          DCW   @READ ERROR - PRESS START TO REREAD OR RESET START@ 49  1784                      16
180  4 050  REDERR  DC    @TO SKIP RECORD@                                   14  1798                      16
181  4 060  FNSHMS  DCW   @ T/P FOR TAPE UNIT 0@                            20  1818                      17
182  4 070  TPRTFS  DCW   @TAPES 5,6 AND 4 PRINTED@                         23  1841                      18
183  4 080  CC1     CC    1                                                   2  1842  F 1                 18
184  4 090          B     MODADD                                              4  1844  B V91               18
185  4 100          LTORG                                                          1848
                    DCW   @5@                                                 1  1848            LIT   18
                          @6@                                                 1  1849            LIT   18
                          @4@                                                 1  1850            LIT   18
                          @9@                                                 1  1851            LIT   18
                          @99@                                                2  1853            LIT   19
                          @001@                                               3  1856            LIT   19
       141                &INPUT                                              3  1859  !00         ADCON 19
                          @100@                                               3  1862            LIT   19
186  4 110          DCW   @}@                                                 1  1863                      19
187  4 120          END   335                                                      / 335 080           20
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - A01 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - A01						
102	1	020		CTL	631 11						
103	1	030		ORG	1300				1300		
104	1	040	SUPER	EQU	351			0351			
105	1	050	IORW	EQU	343			0343			
106	1	060	START	SW	1,73		7	1300	, 001 073		4
107	1	070		SW	GM		4	1307	, Y15		4
108	1	080		CC	J		2	1311	F J		4
109	1	090		CC	1		2	1313	F 1		4
110	1	100		CS	332		4	1315	/ 332		4
111	1	110		CS			1	1319	/		4
112	1	120		MLC	HEADER,262		7	1320	M X82 262		4
113	1	130		C	80,@%)@		7	1327	C 080 Y32		5
114	1	131		BU	L0		5	1334	B T57 /		5
115	1	132		MLC	@B@,L7		7	1339	M Y33 V28		5
116	1	133		MLC	@B@,INIT1A		7	1346	M Y33 X21		5
117	1	134		B	L2		4	1353	B T72		5
118	1	140	L0	WR			1	1357	3		5
119	1	150		SS	1		2	1358	K 1		5
120	1	160		B	CCK1		4	1360	B U43		6
121	1	170	L1	W			1	1364	2		6
122	1	180		MLCWA	GM,3681		7	1365	L Y15 F81		6
123	1	190	L2	B	IORW		4	1372	B 343		6
124	1	200		RT	2,3601		8	1376	M %U2 F01 R		6
125	1	210		DCW	ERROR		3	1386	U03		6
126	1	220		C	3635,35		7	1387	C F35 035		6
127	1	230		BU	L2		5	1394	B T72 /		7
128	1	240		B	CCK1		4	1399	B U43		7
129	1	250	ERROR	NOP	ERR1		4	1403	N U23		7
130	2	010		MLC	@B@,ERROR		7	1407	M Y33 U03		7
131	2	020		RWD	2		5	1414	U %U2 R		7
132	2	030		B	L2		4	1419	B T72		7
133	2	040	ERR1	CS	332		4	1423	/ 332		7
134	2	050		CS			1	1427	/		8
135	2	060		MLC	@PROGRAM NOT ON TAPE 2@,230		7	1428	M Y54 230		8
136	2	070		W			1	1435	2		8
137	2	080		CC	1		2	1436	F 1		8
138	2	090	ERR2	H			1	1438	.		8
139	2	100		B	ERR2		4	1439	B U38		8
140	2	110	CCK1	CC	K		2	1443	F K		8
141	2	120		CS	262		4	1445	/ 262		9
142	2	130		BSS	INIT3,G		5	1449	B W91 G		9
143	2	140		B	NP1		4	1454	B U65		9
144	2	150	NEWPAG	CC	1		2	1458	F 1		9
145	2	160		CS	306		4	1460	/ 306		9
146	2	170		CS			1	1464	/		9
147	2	180	NP1	MLC	IDENT,306		7	1465	M X96 306		9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 190         MLC   CDIMAG,229                                7  1472  M Y06 229           10
149  2 200         MLC   SEQ,218                                   7  1479  M Y14 218           10
150  2 210         W                                               1  1486  2                   10
151  2 220         CC    J                                         2  1487  F J                 10
152  2 230         CS    306                                       4  1489  / 306               10
153  2 240         CS                                              1  1493  /                   10
154  2 250  NC1    B     INIT1                                     4  1494  B X14               10
155  3 010  NEWCRD BCV   NEWPAG                                    5  1498  B U58 @             11
156  3 020         MLC   80,300                                    7  1503  M 080 300           11
157  3 030         MLC   @*@,292                                   7  1510  M Y55 292           11
158  3 040         MLC   72                                        4  1517  M 072               11
159  3 050         MCS   INT2,216                                  7  1521  Z Y21 216           11
160  3 060  L7     NOP   L3                                        4  1528  N V61               11
161  3 070         BLC   EOJ                                       5  1532  B X29 A             11
162  3 080         WR                                              1  1537  3                   12
163  3 090         SS    1                                         2  1538  K 1                 12
164  3 100         C     013,@END OF SOURCE@                       7  1540  C 013 Y68           12
165  3 101         BU    L5                                        5  1547  B W05 /             12
166  3 102         CS    306                                       4  1552  / 306               12
167  3 103         CS                                              1  1556  /                   12
168  3 104         B     EOJ                                       4  1557  B X29               12
169  3 110  L3     W                                               1  1561  2                   13
170  3 120  L3A    MLCWA GM,81                                     7  1562  L Y15 081           13
171  3 130         B     IORW                                      4  1569  B 343               13
172  3 140         RT    2,001                                     8  1573  M %U2 001 R         13
173  3 150         DCW   L4                                        3  1583  V96                 13
174  3 160         C     013,@END OF SOURCE@                       7  1584  C 013 Y81           13
175  3 170         BU    L5                                        5  1591  B W05 /             13
176  3 180  L4     CS    332                                       4  1596  / 332               14
177  3 190         CS                                              1  1600  /                   14
178  3 200         B     EOJ                                       4  1601  B X29               14
179  3 210  L5     A     &1,INT2                                   7  1605  A Y82 Y21           14
180  3 220  NC2    MLCWA GM,81                                     7  1612  L Y15 081           14
181  3 230         B     IORW                                      4  1619  B 343               14
182  3 240         WT    5,1                                       8  1623  M %U5 001 W         14
183  3 250         DCW   *&1                                      3  1633  W34                 15
184  4 010  NC3    B     NEWCRD                                    4  1634  B U98               15
185  4 020  NC4    NOP   NC5                                       4  1638  N W65               15
186  4 030         C     16,VPROC                                  7  1642  C 016 Y30           15
187  4 040         BU    NEWCRD                                    5  1649  B U98 /             15
188  4 050         MLC   @B@,NC4                                   7  1654  M Y33 W38           15
189  4 060         B     NEWCRD                                    4  1661  B U98               15
190  4 070  NC5    MLCWA GM,81                                     7  1665  L Y15 081           16
191  4 080         B     IORW                                      4  1672  B 343               16
192  4 090         WT    3,1                                       8  1676  M %U3 001 W         16
193  4 100         DCW   *&1                                      3  1686  W87                 16
194  4 110         B     NEWCRD                                    4  1687  B U98               16
195  4 120  INIT3  RWD   3                                         5  1691  U %U3 R             16
196  4 130         MLC   @N@,NC3                                   7  1696  M Y83 W34           16
197  4 140         MLC   @N@,EOJ                                   7  1703  M Y83 X29           17
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 150         B     NP1                                  4  1710  B U65               17
199  4 160  INIT1  MLC   @N@,NC1                             7  1714  M Y83 U94           17
200  4 170  INIT1A NOP   L3A                                  4  1721  N V62               17
201  4 171         B     L5                                   4  1725  B W05               17
202  4 180  EOJ    B     EOJ1                                 4  1729  B X43               17
203  4 190         WTM   3                                    5  1733  U %U3 M             17
204  4 200         RWD   3                                    5  1738  U %U3 R             18
205  4 210  EOJ1   WTM   5                                    5  1743  U %U5 M             18
206  4 220         RWD   5                                    5  1748  U %U5 R             18
207  4 230         W                                        1  1753  2                   18
208  4 240         CW    73                                   4  1754  ) 073               18
209  5 010  L10    CCB   SUPER,1                             5  1758  F 351 1             18
210  5 020         DCW   @A02@                               3  1765                      18
211  5 100  HEADER DCW   @COBOL COMPILATION@                17  1782                      19
212  5 110  IDENT  DCW   @IDENTIFICATION@                    14  1796                      19
213  5 120  CDIMAG DCW   @CARD-IMAGE@                       10  1806                      20
214  5 130  SEQ    DCW   @SEQUENCE@                          8  1814                      20
215  5 140  GM     DC    @}@                                  1  1815                      20
216  5 150  INT2   DCW   @000000@                            6  1821                      20
217  5 160  VPROC  DCW   @PROCEDURE@                         9  1830                      20
218  5 170         LTORG                                          1831
                   DCW   @%)@                                 2  1832              LIT     20
                         @B@                                  1  1833              LIT     20
       135               @PROGRAM NOT ON TAPE 2@             21  1854              LIT     21
                         @*@                                  1  1855              LIT     21
       164               @END OF SOURCE@                     13  1868              LIT     21
       174               @END OF SOURCE@                     13  1881              LIT     22
                         &1                                   1  1882              LIT     22
                         @N@                                  1  1883              LIT     22
219  5 180         ORG   3798                                     3798
220  5 190         DCW   @}@                                  1  3798                      23
221  5 200         END   START                                    / T00 080           24
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                  1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                        2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                       3


                         1401 COBOL - A02                                                                PAGE    1


 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - A02
 102  1 020         CTL   631 11
 103  1 030         ORG   1300                                                            1300
 104  1 040  X2     EQU   94                                                        0094
 105  1 050  X3     EQU   99                                                        0099
 106  1 060  IORW   EQU   343                                                       0343
 107  1 070  SUPER  EQU   351                                                       0351
 108  1 080  PUTX   EQU   363                                                       0363
 109  1 090         DCW   #1                                                     1  1300                        4
 110  1 100  INT1   DCW   @000@                                                  3  1303                        4
 111  1 110  INT2   DC    @000@                                                  3  1306                        4
 112  1 120         C     151,0&X1                                               7  1307  C 151 0|0             4
 113  1 130         BE    959                                                    5  1314  B 959 S               4
 114  1 140         MLC   2&X1,153                                               7  1319  M 0|2 153             4
 115  1 150         BCE   959,152,M                                              8  1326  B 959 152 M           4
 116  1 160         BCE   959,151,T                                              8  1334  B 959 151 T           5
 117  1 170         BSS   150,B                                                  5  1342  B 150 B               5
 118  1 180         BSS   159,D                                                  5  1347  B 159 D               5
 119  1 190         B     959                                                    4  1352  B 959                 5
 120  1 200         NOP                                                          1  1356  N                     5
 121  1 210         DC    @A01@                                                  3  1359                        5
 122  1 220         H                                                            1  1360  .                     5
 123  1 230         B     141                                                    4  1361  B 141                 5
 124  1 240         MLC   172,1112                                               7  1365  M 172 /12             6
 125  1 250         B     966                                                    4  1372  B 966                 6
 126  2 010  PATCH  DCW   @T/P@                                                  3  1378                        6
 127  2 020  START  MLC   GM,81                                                  7  1379  M L40 081             6
 128  2 030         MLC   @101@,358          TEMPORARY PATCH                     7  1386  M L11 358             6
 129  2 040         MLCWA PATCH,172                                              7  1393  L T78 172             6
 130  2 050         MLCWA                                                        1  1400  L                     6
 131  2 060         MLCWA               *****                                    1  1401  L                     7
 132  2 070         MLCWA               *****                                    1  1402  L                     7
 133  2 080         MLCWA               *****                                    1  1403  L                     7
 134  2 090         MLCWA               *****                                    1  1404  L                     7
 135  2 100         MLCWA                    TEMPORARY PATCH                     1  1405  L                     7
 136  2 110         MLCWA                    TEMPORARY PATCH                     1  1406  L                     7
 137  2 120         MLCWA                    TEMPORARY PATCH                     1  1407  L                     7
 138  2 130         MLCWA                                                        1  1408  L                     8
 139  2 140         MLCWA                    TEMPORARY PATCH                     1  1409  L                     8
 140  2 150         MLCWA                    TEMPORARY PATCH                     1  1410  L                     8
 141  2 160         MLCWA                    TEMPORARY PATCH                     1  1411  L                     8
 142  2 170         MLCWA                    TEMPORARY PATCH                     1  1412  L                     8
 143  2 180         B     GETCRD                                                 4  1413  B !74                 8
 144  2 190         C     21,HID                                                 7  1417  C 021 X00             8
 145  2 200         BE    STRT1                                                  5  1424  B U40 S               9
 146  2 210         B     ERROR                                                  4  1429  B K47                 9
 147  2 220         DCW   NOID                                                   3  1435  X25                   9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         B     STRT1A                                       4  1436  B U44               9
149  2 240  STRT1  B     GETCRD                                       4  1440  B !74               9
150  2 250  STRT1A C     17,HPGID                                     7  1444  C 017 X10           9
151  3 010         BE    STRT2                                        5  1451  B U67 S             9
152  3 020         B     ERROR                                        4  1456  B K47              10
153  3 030         DCW   NOPGM                                      3  1462  X26                10
154  3 040         B     STRT6A                                       4  1463  B W21              10
155  3 050  STRT2  B     PUTX                                         4  1467  B 363              10
156  3 060         DCW   VPGM                                       3  1473  X13                10
157  3 070         MLC   @018@,CRDPTR                               7  1474  M L14 099          10
158  3 080         MLC   @000@,WRDPTR                               7  1481  M L17 094          10
159  3 090  STRT3  B     GETCH                                        4  1488  B Z01              11
160  3 100         BCE   STRT3,CH,.                                   8  1492  B U88 0?0 .        11
161  3 110         BCE   STRT3,CH,                                    8  1500  B U88 0?0          11
162  3 120         BCE   STRT5A,CH,@                                  8  1508  B V82 0?0 @        11
163  3 130  STRT3A C     CH,@A@                                       7  1516  C 0?0 L18          11
164  3 140         BH    STRT4                                        5  1523  B V59 U            12
165  3 150  STRT3B B     PUTCH                                        4  1528  B Y69              12
166  3 160         A     &1,WRDPTR                                    7  1532  A L19 094          12
167  3 170         C     WRDPTR,@120@                                 7  1539  C 094 L22          12
168  3 180         BE    STRT4                                        5  1546  B V59 S            12
169  3 190         B     GETCH                                        4  1551  B Z01              12
170  3 200         B     STRT3A                                       4  1555  B V16              12
171  3 210  STRT4  BCE   STRT3B,CH,-                                  8  1559  B V28 0?0 -        13
172  3 220         B     PUTX                                         4  1567  B 363              13
173  3 230         DCW   VPGM                                       3  1573  X13                13
174  3 240         B     STRT6                                        4  1574  B W17              13
175  3 250  STRT5  B     PUTCH                                        4  1578  B Y69              13
176  4 010  STRT5A B     GETCH                                        4  1582  B Z01              13
177  4 020         BCE   STRT4,CH,@                                  8  1586  B V59 0?0 @        13
178  4 030         A     &1,WRDPTR                                    7  1594  A L19 094          14
179  4 040         C     WRDPTR,@120@                                 7  1601  C 094 L22          14
180  4 050         BL    STRT4                                        5  1608  B V59 T            14
181  4 060         B     STRT5                                        4  1613  B V78              14
182  4 070  STRT6  B     GETCRD                                       4  1617  B !74              14
183  4 080  STRT6A C     18,HENV                                      7  1621  C 018 X24          14
184  4 090         BU    STRT6                                        5  1628  B W17 /            14
185  4 100         C     SEQ,NINZRO                                   7  1633  C X33 L05          15
186  4 110         BE    STRT6B                                       5  1640  B W73 S            15
187  4 120         B     PUTX                                         4  1645  B 363              15
188  4 130         DCW   &@.DG@                                     3  1651  L25                15
189  4 140         B     PUTX                                         4  1652  B 363              15
190  4 150         DCW   SY1                                        3  1658  X27                15
191  4 160         B     PUTX                                         4  1659  B 363              15
192  4 170         DCW   SY2                                        3  1665  X30                16
193  4 180         B     PUTX                                         4  1666  B 363              16
194  4 190         DCW   SEQ                                        3  1672  X33                16
195  4 200  STRT6B B     SUPER                                        4  1673  B 351              16
196  4 210         DCW   @A0B@                                      3  1679                     16
197  4 220  EOJ    B     SUPER                                        4  1680  B 351              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         DCW   @BD6@                                     3  1686                      16
199  4 240  HID    DCW   @IDENTIFICATION@                         14  1700                      17
200  4 250  HPGID  DCW   @PROGRAM-ID@                             10  1710                      17
201  5 010  VPGM   DCW   @.JB@                                     3  1713                      17
202  5 020  HENV   DCW   @ENVIRONMENT@                            11  1724                      17
203  5 030  NOID   DCW   @0@                                       1  1725                      17
204  5 040  NOPGM  DC    @0@                                       1  1726                      18
205  5 050  SY1    DC    @0@                                       1  1727                      18
206  5 060  SY2    DC    @000@                                     3  1730                      18
207  5 070         DC    @0@                                       1  1731                      18
208  5 080  ANERR1 DC    @0@                                       1  1732                      18
209  5 090  SEQ    DC    @0@                                       1  1733                      18
210  5 100  PTNOSW DCW   @0@                                       1  1734                      18
211  5 110  VAT    DCW   @  @@                                     3  1737                      18
212  5 120  VPRD   DCW   @.PD@                                     3  1740                      18
213  5 130  BLANK6 DCW   #6                                        6  1746                      18
214  5 140  WORDAR EQU   *                                           1746
215  5 150         DCW   #50                                      50  1796                      20
216  5 160         DC    #50                                      50  1846                      22
217  5 170         DC    #22                                      22  1868                      22
218  5 180  WORD   EQU   WORDAR&X2                                   1746 X
219  5 190  WRDPTR EQU   X2                                          0094
220  5 200  PUTCH  SBR   PCHEX&3                                    4  1869  H Y97               22
221  5 210         MLNS  CH,CHX                                     7  1873  D 0?0 Z00           23
222  5 220         MLZS  CH,CHX                                     7  1880  Y 0?0 Z00           23
223  5 230         B     PUTX                                       4  1887  B 363               23
224  5 240         DCW   CHX                                      3  1893  Z00                 23
225  5 250  PCHEX  B     *                                        4  1894  B Y97               23
226  6 010  CHX    DCW   #3                                       3  1900                      23
227  6 020  GETCH  SBR   GTCHEX&3                                  4  1901  H Z55               23
228  6 030         C     CRDPTR,CRDMAX                            7  1905  C 099 K17           24
229  6 040         BE    GTCH4                                    5  1912  B Z56 S             24
230  6 050  GTCH2  A     &1,CRDPTR                                7  1917  A L19 099           24
231  6 060         C     CRDPTR,CRDMAX                            7  1924  C 099 K17           24
232  6 070         BE    GTCH4                                    5  1931  B Z56 S             24
233  6 080         BCE   GTCHEX,ANMODE,1                         8  1936  B Z52 !73 1         24
234  6 090         BCE   GTCH6,CH,                                8  1944  B Z76 0?0           25
235  6 100  GTCHEX B     *                                        4  1952  B Z55               25
236  6 110  GTCH4  BCE   GTCH8,ANMODE,1                          8  1956  B !50 !73 1         25
237  6 120  GTCH5  B     GETCRD                                   4  1964  B !74               25
238  6 130         BCE   GTCH7,CH,-                               8  1968  B Z98 0?0 -         25
239  6 140  GTCH6  B     GTNBLK                                   4  1976  B K24               25
240  6 150         S     &1,CRDPTR                                7  1980  S L19 099           26
241  6 160         MLZS  @ @,CRDPTR                               7  1987  Y L26 099           26
242  6 170         B     GTCHEX                                   4  1994  B Z52               26
243  6 180  GTCH7  B     GTNBLK                                   4  1998  B K24               26
244  6 190         BCE   GTCHEX,ANMODE,0                         8  2002  B Z52 !73 0         26
245  6 200         BCE   GTCH2,CH,@                              8  2010  B Z17 0?0 @         26
246  6 210         B     ERROR                                    4  2018  B K47               27
247  6 220         DCW   ANERR1                                   3  2024  X32                 27
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          B     PUTX                                       4  2025  B 363               27
249  6 240          DCW   VAT                                        3  2031  X37                 27
250  6 250          B     PUTX                                       4  2032  B 363               27
251  7 010          DCW   VPRD                                       3  2038  X40                 27
252  7 020          MLC   @0@,ANMODE                                 7  2039  M L27 !73           27
253  7 030          B     GTCH6                                      4  2046  B Z76               28
254  7 040  GTCH8   C     CRDPTR,@073@                               7  2050  C 099 L30           28
255  7 050          BE    GTCH5                                      5  2057  B Z64 S             28
256  7 060          MLC   @073@,CRDMAX                               7  2062  M L30 K17           28
257  7 070          B     GTCHEX                                     4  2069  B Z52               28
258  7 080  ANMODE DCW   @0@                                        1  2073                      28
259  7 090  GETCRD SBR   GTCDEX&3                                   4  2074  H K14               28
260  7 100  GTCD1   SW    81                                         4  2078  , 081               29
261  7 110          B     IORW                                       4  2082  B 343               29
262  7 120          RT    5,COL1                                     8  2086  M %U5 001 R         29
263  7 130          DCW   EOJ                                        3  2096  W80                 29
264  7 140          C     COL6,LASTNO                                7  2097  C 006 K23           29
265  7 150          BL    CARD1                                      5  2104  B J28 T             29
266  7 160          C     LASTNO,BLANK6                              7  2109  C K23 X46           29
267  7 170          BE    CARD1                                      5  2116  B J28 S             30
268  7 180  CARD2   B     CARD1                                      4  2121  B J28               30
269  7 190          DCW   SEQ                                        3  2127  X33                 30
270  7 200  CARD1   A     &1,INT2                                    7  2128  A L19 T06           30
271  7 210          MLC   @B@,PTNOSW                                7  2135  M L31 X34           30
272  7 220          MLC   @073@,CRDPTR                              7  2142  M L30 099           30
273  7 230          MLC   COL6,LASTNO                               7  2149  M 006 K23           31
274  7 240  GTCD2   S     &1,CRDPTR                                  7  2156  S L19 099           31
275  7 250          MLZS  @ @,CRDPTR                                7  2163  Y L26 099           31
276  8 010          C     CRDPTR,@008@                               7  2170  C 099 L34           31
277  8 020          BH    GTCD1                                      5  2177  B !78 U             31
278  8 030          BCE   GTCD2,CH,                                  8  2182  B J56 0?0           32
279  8 040          A     &1,CRDPTR                                  7  2190  A L19 099           32
280  8 050          MLC   CRDPTR,CRDMAX                              7  2197  M 099 K17           32
281  8 060          MLC   @007@,CRDPTR                              7  2204  M L37 099           32
282  8 070  GTCDEX B     *                                          4  2211  B K14               32
283  8 080  COL1    EQU   1                                             0001
284  8 090  COL6    EQU   6                                             0006
285  8 100  CRDMAX DCW   #3                                         3  2217                      32
286  8 110  CRDPTR EQU   X3                                            0099
287  8 120  CH      EQU   0&X3                                          0000
288  8 130  LASTNO DCW   #6                                         6  2223                      33
289  8 140  GTNBLK SBR   GTNBEX&3                                   4  2224  H K46               33
290  8 150  GTNB1   A     &1,CRDPTR                                  7  2228  A L19 099           33
291  8 160          BCE   GTNB1,CH,                                  8  2235  B K28 0?0           33
292  8 170  GTNBEX B     *                                          4  2243  B K46               33
293  8 180  ERROR   SBR   ERRBKT                                    4  2247  H L08               33
294  8 190          A     &2,ERRBKT                                  7  2251  A L38 L08           34
295  8 200          MLC   ERRBKT,*&4                                7  2258  M L08 K68           34
296  8 210          MLC   *,*&7                                     7  2265  M K71 K78           34
297  8 220          MLC   @1@,*                                     7  2272  M L39 K78           34
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230         A     &1,ERRBKT                                7  2279  A L19 L08          34
299  8 240         MLC   ERRBKT,ERREX&3                           7  2286  M L08 K96          35
300  8 250  ERREX  B     *                                        4  2293  B K96              35
301  9 010  NINZRO DCW   @0000000000@                            9  2305                     35
302  9 020  ERRBKT DCW   #3                                       3  2308                     35
303  9 030         LTORG                                                  2309
                   DCW   @101@                                    3  2311              LIT  35
                         @018@                                    3  2314              LIT  35
                         @000@                                    3  2317              LIT  35
                         @A@                                      1  2318              LIT  36
                         &1                                       1  2319              LIT  36
                         @120@                                    3  2322              LIT  36
                         @.DG@                                    3  2325              LIT  36
                         @ @                                      1  2326              LIT  36
                         @0@                                      1  2327              LIT  36
                         @073@                                    3  2330              LIT  36
                         @B@                                      1  2331              LIT  37
                         @008@                                    3  2334              LIT  37
                         @007@                                    3  2337              LIT  37
                         &2                                       1  2338              LIT  37
                         @1@                                      1  2339              LIT  37
304  9 040  GM     DCW   @}@                                      1  2340                     37
305  9 050         END   START                                           / T79 080          38
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - A0B PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - A0B					
102	1	020		CTL	631 11					
103	1	030	HEADER	EQU	1135			1135		
104	1	040	IORW	EQU	343			0343		
105	1	050	BGNSUP	EQU	973			0973		
106	1	060	EOSUP	EQU	1300			1300		
107	1	070		ORG	3613				3613	
108	1	080	START	MLC	GM,EOSUP		7	3613	M G95 T00	4
109	1	090		SW	EOSUP		4	3620	, T00	4
110	1	100		CW	HEADER&15		4	3624	) /50	4
111	1	110		B	IORW		4	3628	B 343	4
112	1	120		WTW	4,BGNSUP		8	3632	L %U4 973 W	4
113	1	130		DCW	*&1		3	3642	F43	4
114	1	140		RWD	4		5	3643	U %U4 R	4
115	1	150		CW	EOSUP		4	3648	) T00	5
116	1	160		MLCWA	1306,978		7	3652	L T06 978	5
117	1	170		B	IORW		4	3659	B 343	5
118	1	180		RT	1,BGNSUP&6		8	3663	M %U1 979 R	5
119	1	190		DCW	*&1		3	3673	F74	5
120	1	200		SW	BGNSUP&100		4	3674	, |73	5
121	1	210	L	CS	3459		4	3678	/ D59	5
122	1	220		SBR	L&3		4	3682	H F81	6
123	1	230		BWZ	L,BGNSUP&100,1		8	3686	V F78 |73 1	6
124	1	240		CW	999		4	3694	) 999	6
125	1	250		B	3775		4	3698	B G75	6
126	2	010		LTORG	TEMPORARY PATCH				3702	
127	2	020		ORG	3775				3775	
128	2	030		B	IORW		4	3775	B 343	7
129	2	040		RTW	1,BGNSUP&6		8	3779	L %U1 979 R	7
130	2	050		DCW	*&1		3	3789	G90	7
131	2	060		B	BGNSUP&6		4	3790	B 979	7
132	2	070		DCW	#1		1	3794		7
133	2	080	GM	DCW	@}@		1	3795		7
134	2	090		END	START				/ F13 080	8

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - A03 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - A03
 102  1 020          CTL   631 11
 103  1 030  BGNSUP  EQU   973                                           0973
 104  1 040          ORG   979                                                 0979
 105  1 050  X2      EQU   94                                            0094
 106  1 060  X3      EQU   99                                            0099
 107  1 070  IORW    EQU   343                                           0343
 108  1 080  SUPER   EQU   351                                           0351
 109  1 090  PUTX    EQU   363                                           0363
 110  1 100  START   MLC   GM,81                                     7   0979  M E39 081            4
 111  1 110          BSP   5                                        5   0986  U %U5 B              4
 112  1 120          S     &1,INT2                                  7   0991  S F54 978            4
 113  1 130          MLZS  @ @,INT2                                 7   0998  Y F55 978            4
 114  1 140          B     GETCRD                                   4   1005  B ?37                4
 115  1 150  ENVD    B     GETWRD                                   4   1009  B X43                4
 116  1 160          C     WRDPTR,@006@                             7   1013  C 094 F58            5
 117  1 170          BU    ENVD                                     5   1020  B |09 /              5
 118  1 180          C     WORD,HDATA                               7   1025  C VP4 X15            5
 119  1 190          BU    ENVD                                     5   1032  B |09 /              5
 120  1 200  DATAD   B     GETWRD                                   4   1037  B X43                5
 121  1 210          C     WRDPTR,@009@                             7   1041  C 094 F61            5
 122  1 220          BU    DATAD                                    5   1048  B |37 /              6
 123  1 230          C     WORD,HPROC                               7   1053  C VP4 X09            6
 124  1 240          BE    PROCD                                    5   1060  B /16 S              6
 125  1 250          C     WORD,HPICT                               7   1065  C VP4 X24            6
 126  2 010          BU    DATAD                                    5   1072  B |37 /              6
 127  2 020          MLC   @B@,PICTSW                               7   1077  M F62 X78            6
 128  2 030  DAT2    B     GETCH                                    4   1084  B Q45                7
 129  2 040          BCE   DAT2,CH,                                 8   1088  B |84 0?0            7
 130  2 050          BCE   DAT2,CH,I                               8   1096  B |84 0?0 I          7
 131  2 060          BCE   DAT2,CH,S                               8   1104  B |84 0?0 S          7
 132  2 070          B     DATAD                                    4   1112  B |37                7
 133  2 080  PROCD   MLC   @0@,EOJPDS                               7   1116  M F63 E50            7
 134  2 090          B     GETWRD                                   4   1123  B X43                8
 135  2 100          C     WRDPTR,@006@                             7   1127  C 094 F58            8
 136  2 110          BU    PROCD                                    5   1134  B /16 /              8
 137  2 120          C     WORD,HNOTE                               7   1139  C VP4 V71            8
 138  2 130          BE    NOTE                                     5   1146  B U42 S              8
 139  2 140          C     WORD,HENTER                              7   1151  C VP4 X30            8
 140  2 150          BU    PROCD                                    5   1158  B /16 /              9
 141  2 160          B     GETWRD                                   4   1163  B X43                9
 142  2 170          C     WORD,HAUTOC                              7   1167  C VP4 X39            9
 143  2 180          BE    AUTOC                                    5   1174  B /86 S              9
 144  2 190          B     ERROR                                    4   1179  B B30                9
 145  2 200          DCW   ENTER1                                   3   1185  E42                  9
 146  2 210  AUTOC   B     PUTX                                     4   1186  B 363                9
 147  2 220          DCW   VAC                                      3   1192  X42                 10
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         MLC   @1@,ACSW                                   7  1193  M F64 W97           10
149  2 240         B     AUTO1A                                     4  1200  B S14               10
150  2 250  MACSP  DCW   @.MC@                                     3  1206                      10
151  3 010  AUTO1  B     PUTX                                       4  1207  B 363               10
152  3 020         DCW   MACSP                                     3  1213  S06                 10
153  3 030  AUTO1A B     IORW                                       4  1214  B 343               10
154  3 040         RT    5,COL1                                     8  1218  M %U5 001 R         11
155  3 050         DCW   EOJ                                       3  1228  E51                 11
156  3 060         A     &1,INT2                                    7  1229  A F54 978           11
157  3 070         MLC   @007@,X3                                   7  1236  M F67 099           11
158  3 080         B     GTNBLK                                     4  1243  B A87               11
159  3 090         C     4&X3,HENTER-1                              7  1247  C 0?4 X29           11
160  3 100         BE    AUTO2                                      5  1254  B T49 S             12
161  3 110  AUTO3  A     &1,X3                                      7  1259  A F54 099           12
162  3 120         C     X3,@073@                                   7  1266  C 099 F70           12
163  3 130         BE    HWTORF                                     5  1273  B U08 S             12
164  3 140         BCE   AUTO4,0&X3,E                               8  1278  B S90 0?0 E         12
165  3 150         B     AUTO3                                      4  1286  B S59               12
166  3 160  AUTO4  C     4&X3,HENTER-1                              7  1290  C 0?4 X29           13
167  3 170         BU    AUTO3                                      5  1297  B S59 /             13
168  3 180         BCE   *&5,15999&X3,                            8  1302  B T14 III           13
169  3 190         B     AUTO3                                      4  1310  B S59               13
170  3 200         MLNS  0&X3,0&X3                                  7  1314  D 0?0 0?0           13
171  3 210         SBR   X3                                         4  1321  H 099               13
172  3 220         C     0&X3,@?@                                   7  1325  C 0?0 F71           14
173  3 230         BL    AUTO3                                      5  1332  B S59 T             14
174  3 240         C     6&X3,@?@                                   7  1337  C 0?6 F71           14
175  3 250         BL    AUTO3                                      5  1344  B S59 T             14
176  4 010  AUTO2  B     PUTX                                       4  1349  B 363               14
177  4 020         DCW   VAC                                       3  1355  X42                 14
178  4 030         MLC   @0@,ACSW                                   7  1356  M F63 W97           14
179  4 040         BSP   5                                          5  1363  U %U5 B             15
180  4 050         S     &1,INT2                                    7  1368  S F54 978           15
181  4 060         MLZS  @ @,INT2                                   7  1375  Y F55 978           15
182  4 070         MLC   CRDMAX,CRDPTR                              7  1382  M A80 099           15
183  4 080         MLC   @N@,GTWDSK                                 7  1389  M F72 X47           15
184  4 090         B     GETWRD                                     4  1396  B X43               15
185  4 100         B     GETWRD                                     4  1400  B X43               16
186  4 110         B     PROCD                                      4  1404  B /16               16
187  4 120  HWTORF MLC   @005@,CRDPTR                              7  1408  M F75 099           16
188  4 130  HW1    A     &1,CRDPTR                                  7  1415  A F54 099           16
189  4 140         C     CRDPTR,@073@                               7  1422  C 099 F70           16
190  4 150         BE    AUTO1                                      5  1429  B S07 S             16
191  4 160         B     PUTCH                                      4  1434  B Q13               16
192  4 170         B     HW1                                        4  1438  B U15               17
193  4 180  NOTE   MLC   @1@,EOJPDS                                7  1442  M F64 E50           17
194  4 190         BCE   NOTE3,SECT,1                               8  1449  B V09 K98 1         17
195  4 200  NOTE1  B     GETCH                                      4  1457  B Q45               17
196  4 210         BCE   NOTE2,CH,.                                8  1461  B U84 0?0 .         17
197  4 220         B     PUTCH                                      4  1469  B Q13               17
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         B     NOTE1                                      4  1473  B U57               17
199  4 240  NOTE6  MLC   &EOJ1,NOTE3-1                             7  1477  M F78 V08           18
200  4 250  NOTE2  B     PUTX                                       4  1484  B 363               18
201  5 010         DCW   VNOTE                                     3  1490  V74                 18
202  5 020         MLC   &PUTX,EOJ3&3                            7  1491  M F81 E97           18
203  5 030         MLC   @N@,GTWDSK                               7  1498  M F72 X47           18
204  5 040         B     PROCD                                    4  1505  B /16               18
205  5 050  NOTE3  MLC   @0@,SECT                                7  1509  M F63 K98           18
206  5 060         MLC   &NOTE6,EOJ3&3                          7  1516  M F84 E97           19
207  5 070  NOTE4  B     GETCH                                    4  1523  B Q45               19
208  5 080         C     CRDPTR,@008@                             7  1527  C 099 F87           19
209  5 090         BE    NOTE5                                    5  1534  B V47 S             19
210  5 100         B     PUTCH                                    4  1539  B Q13               19
211  5 110         B     NOTE4                                    4  1543  B V23               19
212  5 120  NOTE5  BCE   NOTE4,CH,                                8  1547  B V23 0?0           19
213  5 130         MLC   @007@,CRDPTR                            7  1555  M F67 099           20
214  5 140         B     NOTE2                                    4  1562  B U84               20
215  5 150  HNOTE  DCW   @NOTE  @                                 6  1571                      20
216  5 160  VNOTE  DCW   @*24@                                    3  1574                      20
217  5 170  WORDAR EQU   *                                          1574
218  5 180         DCW   #50                                     50  1624                      22
219  5 190         DC    #50                                     50  1674                      24
220  5 200         DC    #22                                     22  1696                      24
221  5 210  WORD   EQU   WORDAR&X2                                  1574 X
222  5 220  WRDPTR EQU   X2                                         0094
223  5 230  ACSW   DCW   @0@                                       1  1697                      24
224  5 240  VEOP   DCW   @.EP@                                     3  1700                      24
225  5 250  HPROC  DCW   @PROCEDURE@                               9  1709                      25
226  6 010  HDATA  DCW   @DATA  @                                  6  1715                      25
227  6 020  HPICT  DCW   @PICTURE  @                               9  1724                      25
228  6 030  HENTER DCW   @ENTER @                                  6  1730                      25
229  6 040  HAUTOC DCW   @AUTOCODER@                               9  1739                      25
230  6 050  VAC    DCW   @#DC@                                     3  1742                      26
231  6 060  GETWRD SBR   GTWDEX&3                                  4  1743  H K56               26
232  6 070  GTWDSK NOP   GTW1A                                     4  1747  N K57               26
233  6 080         B     GETCH                                    4  1751  B Q45               26
234  6 090  GTW1   MLC   @001@,WRDPTR                            7  1755  M F90 094           26
235  6 100  PTNOSW NOP   PTCDNO                                   4  1762  N P20               26
236  6 110         C     CRDPTR,@008@                             7  1766  C 099 F87           26
237  6 120         BE    PTC8                                     5  1773  B M93 S             27
238  6 130  PICTSW NOP   PICTUR                                   4  1778  N N37               27
239  6 140         C     CH,@A@                                   7  1782  C 0?0 F91           27
240  6 150         BH    GTW2                                     5  1789  B Y10 U             27
241  6 160         C     CH,@Z@                                   7  1794  C 0?0 F92           27
242  6 170         BL    POSNUM                                   5  1801  B K99 T             27
243  6 180         B     WORDR                                    4  1806  B J35               27
244  6 190  GTW2   BCE   GTWDSK,CH,                               8  1810  B X47 0?0           28
245  6 200         BCE   GTWDAN,CH,@                              8  1818  B !31 0?0 @         28
246  6 210         BCE   LDPLMN,CH,&                              8  1826  B O51 0?0 &         28
247  6 220         BCE   LDPLMN,CH,-                              8  1834  B O51 0?0 -         28
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         BCE   OPER,CH,#                                8  1842  B !23 0?0 #         29
249  6 240         BCE   PRD,CH,.                                 8  1850  B Z09 0?0 .         29
250  6 250         BCE   OPER,CH,%                                8  1858  B !23 0?0 %         29
251  7 010         BCE   OPER,CH,)                                8  1866  B !23 0?0 )         29
252  7 020         BCE   OPER,CH,/                                8  1874  B !23 0?0 /         30
253  7 030         BCE   ASTSK,CH,*                               8  1882  B Z83 0?0 *         30
254  7 040         BCE   GTWDSK,CH,,                              8  1890  B X47 0?0 ,         30
255  7 050         B     ERROR                                    4  1898  B B30               30
256  7 060         DCW   INVLD                                    3  1904  E43                 30
257  7 070         B     GTWDSK                                   4  1905  B X47               30
258  7 080  PRD    MLC   @1@,PDSW                                7  1909  M F64 E49           31
259  7 090         B     GETCH                                    4  1916  B Q45               31
260  7 100         MLC   @0@,PDSW                                7  1920  M F63 E49           31
261  7 110         C     CH,@Z@                                   7  1927  C 0?0 F92           31
262  7 120         BL    PRD1                                     5  1934  B Z50 T             31
263  7 130         B     PUTX                                     4  1939  B 363               31
264  7 140         DCW   VPRD                                     3  1945  O50                 31
265  7 150         B     GTW1                                     4  1946  B X55               32
266  7 160  PRD1   MLNS  CH,CH                                    7  1950  D 0?0 0?0           32
267  7 170         SBR   CRDPTR                                   4  1957  H 099               32
268  7 180         MLC   @.@,WORD                                7  1961  M F93 VP4           32
269  7 190         B     PSNM2                                    4  1968  B M11               32
270  7 200  PRD2   B     PUTX                                     4  1972  B 363               32
271  7 210         DCW   VPRD                                     3  1978  O50                 32
272  7 220         B     EOJ0                                     4  1979  B E67               33
273  7 230  ASTSK  B     GETCH                                    4  1983  B Q45               33
274  7 240         BCE   AST1,CH,*                                8  1987  B !06 0?0 *         33
275  7 250         B     PUTX                                     4  1995  B 363               33
276  8 010         DCW   VASTK                                    3  2001  !19                 33
277  8 020         B     GTW1                                     4  2002  B X55               33
278  8 030  AST1   B     PUTX                                     4  2006  B 363               33
279  8 040         DCW   VEXP                                     3  2012  !22                 34
280  8 050         B     GTWDSK                                   4  2013  B X47               34
281  8 060  VASTK  DCW   @  *@                                    3  2019                      34
282  8 070  VEXP   DCW   @ **@                                    3  2022                      34
283  8 080  OPER   B     PUTCH                                    4  2023  B Q13               34
284  8 090         B     GTWDSK                                   4  2027  B X47               34
285  8 100  GTWDAN MLC   @1@,ANMODE                              7  2031  M F64 ?36           34
286  8 110         B     PUTX                                     4  2038  B 363               35
287  8 120         DCW   VAT                                      3  2044  J34                 35
288  8 130  AN1    B     GETCH                                    4  2045  B Q45               35
289  8 140         BCE   AN4,CH,@                                 8  2049  B J21 0?0 @         35
290  8 150         C     WRDPTR,@120@                             7  2057  C 094 F96           35
291  8 160         BL    AN2                                      5  2064  B !84 T             35
292  8 170         B     PUTCH                                    4  2069  B Q13               35
293  8 180         A     &1,WRDPTR                                7  2073  A F54 094           36
294  8 190         B     AN1                                      4  2080  B !45               36
295  8 200  AN2    B     ERROR                                    4  2084  B B30               36
296  8 210         DCW   ANSIZE                                   3  2090  E44                 36
297  8 220         B     PUTX                                     4  2091  B 363               36
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         DCW   VAT                                        3  2097  J34               36
299  8 240  AN3    B     GETCRD                                     4  2098  B ?37             36
300  8 250         BCE   AN3,008,                                   8  2102  B !98 008         37
301  9 010  AN5    MLC   @0@,ANMODE                                 7  2110  M F63 ?36         37
302  9 020         B     GTWDSK                                     4  2117  B X47             37
303  9 030  AN4    B     PUTX                                       4  2121  B 363             37
304  9 040         DCW   VAT                                        3  2127  J34               37
305  9 050         B     AN5                                        4  2128  B J10             37
306  9 060  VAT    DCW   @  @@                                     3  2134                    37
307  9 070  WORDR  C     WRDPTR,@120@                               7  2135  C 094 F96         38
308  9 080         BL    W2                                         5  2142  B J88 T           38
309  9 090         MLNS  CH,WORD                                    7  2147  D 0?0 VP4         38
310  9 100         MLZS  CH,WORD                                    7  2154  Y 0?0 VP4         38
311  9 110         B     GETCH                                      4  2161  B Q45             38
312  9 120         C     CH,@A@                                     7  2165  C 0?0 F91         38
313  9 130         BH    W4                                         5  2172  B K26 U           39
314  9 140  W1     A     &1,WRDPTR                                  7  2177  A F54 094         39
315  9 150         B     WORDR                                      4  2184  B J35             39
316  9 160  W2     B     ERROR                                      4  2188  B B30             39
317  9 170         DCW   WRD                                        3  2194  E45               39
318  9 180         MLC   @120@,WRDPTR                              7  2195  M F96 094         39
319  9 190  W3     B     GETCH                                      4  2202  B Q45             39
320  9 200         C     CH,@?@                                     7  2206  C 0?0 F71         40
321  9 210         BL    W3                                         5  2213  B K02 T           40
322  9 220         B     PTNAM                                      4  2218  B C59             40
323  9 230         B     GTW1                                       4  2222  B X55             40
324  9 240  W4     BCE   W1,CH,-                                   8  2226  B J77 0?0 -       40
325  9 250         MLC   @B@,GTWDSK                                7  2234  M F62 X47         40
326 10 010         B     PTNAM                                      4  2241  B C59             40
327 10 020  PNTSW1 NOP   NTEST2                                    4  2245  N K68             41
328 10 030  PSNTSW NOP   NTEST1                                    4  2249  N N15             41
329 10 040  GTWDEX B     *                                          4  2253  B K56             41
330 10 050  GTW1A  MLC   @N@,GTWDSK                                7  2257  M F72 X47         41
331 10 060         B     GTW1                                       4  2264  B X55             41
332 10 070  NTEST2 MLC   @N@,PNTSW1                                7  2268  M F72 K45         41
333 10 080         C     WORD,HNOTE                                 7  2275  C VP4 V71         41
334 10 090         BU    GTWDEX                                     5  2282  B K53 /           42
335 10 100         MLC   @1@,SECT                                   7  2287  M F64 K98         42
336 10 110         B     GTWDEX                                     4  2294  B K53             42
337 10 120  SECT   DCW   @0@                                       1  2298                    42
338 10 130  POSNUM C     WRDPTR,@120@                               7  2299  C 094 F96         42
339 10 140         BL    PSNM1                                      5  2306  B L77 T           42
340 10 150         MLNS  CH,WORD                                    7  2311  D 0?0 VP4         42
341 10 160         MLZS  CH,WORD                                    7  2318  Y 0?0 VP4         43
342 10 170         B     GETCH                                      4  2325  B Q45             43
343 10 180         C     CH,@Z@                                     7  2329  C 0?0 F92         43
344 10 190         BL    PSNM2                                      5  2336  B M11 T           43
345 10 200         BCE   PSNM3,CH,.                                8  2341  B M22 0?0 .       43
346 10 210         BCE   W1,CH,-                                    8  2349  B J77 0?0 -       43
347 10 220         C     CH,@?@                                     7  2357  C 0?0 F71         44
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          BL    W1                                          5  2364  B J77 T             44
349 10 240  PSNM0   B     PTNMLT                                      4  2369  B B92               44
350 10 250          B     GTW1                                        4  2373  B X55               44
351 11 010  PSNM1   B     ERROR                                       4  2377  B B30               44
352 11 020          DCW   NUMSIZ                                     3  2383  E46                 44
353 11 030  PSNM1A  B     GETCH                                       4  2384  B Q45               44
354 11 040          C     CH,@?@                                      7  2388  C 0?0 F71           45
355 11 050          BL    PSNM1A                                      5  2395  B L84 T             45
356 11 060          MLC   @120@,WRDPTR                               7  2400  M F96 094           45
357 11 070          B     PSNM0                                       4  2407  B L69               45
358 11 080  PSNM2   A     &1,WRDPTR                                   7  2411  A F54 094           45
359 11 090          B     POSNUM                                      4  2418  B K99               45
360 11 100  PSNM3   MLC   @1@,NLSW                                   7  2422  M F64 N11           46
361 11 110          B     GETCH                                       4  2429  B Q45               46
362 11 120          MLC   @0@,NLSW                                   7  2433  M F63 N11           46
363 11 130          C     CH,@Z@                                      7  2440  C 0?0 F92           46
364 11 140          BL    PSNM4                                       5  2447  B M75 T             46
365 11 150  PSNM3A  B     PTNMLT                                      4  2452  B B92               46
366 11 160          B     PUTX                                        4  2456  B 363               46
367 11 170          DCW   VPRD                                      3  2462  O50                 47
368 11 180          BCE   EOJ1,NLSW,1                               8  2463  B E79 N11 1         47
369 11 190          B     GTW1                                        4  2471  B X55               47
370 11 200  PSNM4   A     &1,WRDPTR                                   7  2475  A F54 094           47
371 11 210          MLC   @.@,WORD                                   7  2482  M F93 VP4           47
372 11 220          B     PSNM2                                       4  2489  B M11               47
373 11 230  PTC8    B     PUTX                                        4  2493  B 363               47
374 11 240          DCW   VCOL8                                     3  2499  N14                 48
375 11 250          MLC   @B@,PSNTSW                                7  2500  M F62 K49           48
376 12 010          B     PICTSW                                      4  2507  B X78               48
377 12 020  NLSW    DCW   @0@                                        1  2511                      48
378 12 030  VCOL8   DCW   @.C8@                                     3  2514                      48
379 12 040  NTEST1  SBR   NTEX&3                                     4  2515  H N36               48
380 12 050          MLC   @N@,PSNTSW                                7  2519  M F72 K49           48
381 12 060          MLC   @B@,PNTSW1                                7  2526  M F62 K45           49
382 12 070  NTEX    B     *                                           4  2533  B N36               49
383 12 080  PICTUR  B     PUTX                                        4  2537  B 363               49
384 12 090          DCW   VPC                                       3  2543  O47                 49
385 12 100  PIC1    BCE   PIC2,CH,.                                 8  2544  B N72 0?0 .         49
386 12 110          BCE   PIC3,CH,                                  8  2552  B N98 0?0           49
387 12 120          B     PUTCH                                       4  2560  B Q13               49
388 12 130          B     GETCH                                       4  2564  B Q45               50
389 12 140          B     PIC1                                        4  2568  B N44               50
390 12 150  PIC2    B     GETCH                                       4  2572  B Q45               50
391 12 160          BCE   PIC6,CH,                                  8  2576  B O34 0?0           50
392 12 170          B     PUTX                                        4  2584  B 363               50
393 12 180          DCW   VDEC                                      3  2590  N97                 50
394 12 190          B     PIC1                                        4  2591  B N44               50
395 12 200  VDEC    DCW   @  .@                                     3  2597                      51
396 12 210  PIC3    B     PUTX                                        4  2598  B 363               51
397 12 220          DCW   VPC                                       3  2604  O47                 51
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  PIC4   B     PIC5                                     4  2605  B O23              51
399 12 240         B     PUTX                                     4  2609  B 363              51
400 12 250         DCW   VPRD                                     3  2615  O50                51
401 13 010         MLC   @B@,PIC4                                 7  2616  M F62 O05          51
402 13 020  PIC5   MLC   @N@,PICTSW                               7  2623  M F72 X78          52
403 13 030         B     GTW1                                     4  2630  B X55              52
404 13 040  PIC6   MLC   @N@,PIC4                                 7  2634  M F72 O05          52
405 13 050         B     PIC3                                     4  2641  B N98              52
406 13 060  VPC    DCW   @.PC@                                   3  2647                     52
407 13 070  VPRD   DCW   @.PD@                                   3  2650                     52
408 13 080  LDPLMN MLC   CH,SIGN                                 7  2651  M 0?0 P19          52
409 13 090         B     GETCH                                    4  2658  B Q45              53
410 13 100         BCE   LDP01,CH,                               8  2662  B O90 0?0          53
411 13 110         C     CH,@Z@                                   7  2670  C 0?0 F92          53
412 13 120         BL    POSNUM                                   5  2677  B K99 T            53
413 13 130         BCE   POSNUM,CH,.                             8  2682  B K99 0?0 .        53
414 13 140  LDP01  MLNS  CH,CH                                   7  2690  D 0?0 0?0          53
415 13 150         SBR   CRDPTR                                  4  2697  H 099              54
416 13 160         MLC   SIGN,CH                                 7  2701  M P19 0?0          54
417 13 170         MLC   @ @,SIGN                               7  2708  M F55 P19          54
418 13 180         B     OPER                                     4  2715  B !23              54
419 13 190  SIGN   DCW   #1                                      1  2719                     54
420 13 200  PTCDNO SBR   PTCDEX&3                                4  2720  H Q06              54
421 13 210         C     SEQ,NINZRO                               7  2724  C E48 B88          54
422 13 220         BE    PTCN1                                    5  2731  B P75 S            55
423 13 230         B     PUTX                                     4  2736  B 363              55
424 13 240         DCW   VDG                                      3  2742  Q09                55
425 13 250         B     PUTX                                     4  2743  B 363              55
426 14 010         DCW   ENTER1                                   3  2749  E42                55
427 14 020         B     PUTX                                     4  2750  B 363              55
428 14 030         DCW   WRD                                      3  2756  E45                55
429 14 040         B     PUTX                                     4  2757  B 363              56
430 14 050         DCW   SEQ                                      3  2763  E48                56
431 14 060         S     SEQ                                      4  2764  S E48              56
432 14 070         MLZS  @ @,SEQ                                  7  2768  Y F55 E48          56
433 14 080  PTCN1  B     PUTX                                     4  2775  B 363              56
434 14 090         DCW   VCD                                      3  2781  Q12                56
435 14 100         B     PUTX                                     4  2782  B 363              56
436 14 110         DCW   INT1                                     3  2788  975                57
437 14 120         B     PUTX                                     4  2789  B 363              57
438 14 130         DCW   INT2                                     3  2795  978                57
439 14 140         MLC   @N@,PTNOSW                               7  2796  M F72 X62          57
440 14 150  PTCDEX B     *                                        4  2803  B Q06              57
441 14 160  VDG    DCW   @.DG@                                   3  2809                     57
442 14 170  VCD    DCW   @.CD@                                   3  2812                     57
443 14 180  PUTCH  SBR   PCHEX&3                                 4  2813  H Q41              58
444 14 190         MLNS  CH,CHX                                   7  2817  D 0?0 Q44          58
445 14 200         MLZS  CH,CHX                                   7  2824  Y 0?0 Q44          58
446 14 210         B     PUTX                                     4  2831  B 363              58
447 14 220         DCW   CHX                                      3  2837  Q44                58
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230  PCHEX   B     *                                          4  2838  B Q41              58
449 14 240  CHX     DCW   #3                                         3  2844                     58
450 14 250  GETCH   SBR   GTCHEX&3                                   4  2845  H Q99              59
451 15 010          C     CRDPTR,CRDMAX                              7  2849  C 099 A80          59
452 15 020          BE    GTCH4                                      5  2856  B R00 S            59
453 15 030  GTCH2   A     &1,CRDPTR                                  7  2861  A F54 099          59
454 15 040          C     CRDPTR,CRDMAX                              7  2868  C 099 A80          59
455 15 050          BE    GTCH4                                      5  2875  B R00 S            59
456 15 060          BCE   GTCHEX,ANMODE,1                           8  2880  B Q96 ?36 1        60
457 15 070          BCE   GTCH6,CH,                                  8  2888  B R20 0?0          60
458 15 080  GTCHEX B     *                                          4  2896  B Q99              60
459 15 090  GTCH4   BCE   GTCH8,ANMODE,1                           8  2900  B ?13 ?36 1        60
460 15 100  GTCH5   B     GETCRD                                     4  2908  B ?37              60
461 15 110          BCE   GTCH7,CH,-                                8  2912  B R42 0?0 -        61
462 15 120  GTCH6   B     GTNBLK                                     4  2920  B A87              61
463 15 130          S     &1,CRDPTR                                  7  2924  S F54 099          61
464 15 140          MLZS  @ @,CRDPTR                                 7  2931  Y F55 099          61
465 15 150          B     GTCHEX                                     4  2938  B Q96              61
466 15 160  GTCH7   B     GTNBLK                                     4  2942  B A87              61
467 15 170          C     CRDPTR,@008@                               7  2946  C 099 F87          62
468 15 180          BU    GTCH9                                      5  2953  B R65 /            62
469 15 190          MLZS  &1,SEQ                                     7  2958  Y F54 E48          62
470 15 200  GTCH9   BCE   GTCHEX,ANMODE,0                           8  2965  B Q96 ?36 0        62
471 15 210          BCE   GTCH2,CH,@                                 8  2973  B Q61 0?0 @        62
472 15 220          B     ERROR                                      4  2981  B B30              62
473 15 230          DCW   ANERR1                                     3  2987  E47                63
474 15 240          B     PUTX                                       4  2988  B 363              63
475 15 250          DCW   VAT                                        3  2994  J34                63
476 16 010          B     PUTX                                       4  2995  B 363              63
477 16 020          DCW   VPRD                                       3  3001  O50                63
478 16 030          MLC   @0@,ANMODE                                 7  3002  M F63 ?36          63
479 16 040          B     GTCH6                                      4  3009  B R20              63
480 16 050  GTCH8   C     CRDPTR,@073@                               7  3013  C 099 F70          64
481 16 060          BE    GTCH5                                      5  3020  B R08 S            64
482 16 070          MLC   @073@,CRDMAX                               7  3025  M F70 A80          64
483 16 080          B     GTCHEX                                     4  3032  B Q96              64
484 16 090  ANMODE DCW   @0@                                        1  3036                     64
485 16 100  GETCRD SBR   GTCDEX&3                                   4  3037  H A77              64
486 16 110  GTCD1   SW    81                                         4  3041  , 081              64
487 16 120          B     IORW                                       4  3045  B 343              65
488 16 130          RT    5,COL1                                     8  3049  M %U5 001 R        65
489 16 140          DCW   EOJ                                        3  3059  E51                65
490 16 150          C     COL6,LASTNO                                7  3060  C 006 A86          65
491 16 160          BL    CARD1                                      5  3067  B ?91 T            65
492 16 170          C     LASTNO,BLANK6                              7  3072  C A86 E38          65
493 16 180          BE    CARD1                                      5  3079  B ?91 S            65
494 16 190  CARD2   B     ERROR                                      4  3084  B B30              66
495 16 200          DCW   SEQ                                        3  3090  E48                66
496 16 210  CARD1   A     &1,INT2                                    7  3091  A F54 978          66
497 16 220          MLC   @B@,PTNOSW                                7  3098  M F62 X62          66
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230          MLC   @073@,CRDPTR                             7  3105  M F70 099           66
499 16 240          MLC   COL6,LASTNO                              7  3112  M 006 A86           66
500 16 250  GTCD2   S     &1,CRDPTR                               7  3119  S F54 099           67
501 17 010          MLZS  @ @,CRDPTR                              7  3126  Y F55 099           67
502 17 020          C     CRDPTR,@008@                            7  3133  C 099 F87           67
503 17 030          BH    GTCD1                                   5  3140  B ?41 U             67
504 17 040          BCE   GTCD2,CH,                               8  3145  B A19 0?0           67
505 17 050          A     &1,CRDPTR                               7  3153  A F54 099           68
506 17 060          MLC   CRDPTR,CRDMAX                           7  3160  M 099 A80           68
507 17 070          MLC   @007@,CRDPTR                           7  3167  M F67 099           68
508 17 080  GTCDEX  B     *                                       4  3174  B A77               68
509 17 090  INT1    EQU   975                                        0975
510 17 100  INT2    EQU   978                                        0978
511 17 110  COL1    EQU   1                                          0001
512 17 120  COL6    EQU   6                                          0006
513 17 130  CRDMAX  DCW   #3                                      3  3180                      68
514 17 140  CRDPTR  EQU   X3                                         0099
515 17 150  CH      EQU   0&X3                                       0000
516 17 160  LASTNO  DCW   #6                                      6  3186                      68
517 17 170  GTNBLK  SBR   GTNBEX&3                                 4  3187  H B29               68
518 17 180  GTNB1   A     &1,CRDPTR                               7  3191  A F54 099           69
519 17 190          BCE   GTNB2,ACSW,0                            8  3198  B B18 W97 0         69
520 17 200          C     CRDPTR,@073@                            7  3206  C 099 F70           69
521 17 210          BE    HWTORF                                  5  3213  B U08 S             69
522 17 220  GTNB2   BCE   GTNB1,CH,                               8  3218  B A91 0?0           69
523 17 230  GTNBEX  B     *                                       4  3226  B B29               69
524 17 240  ERROR   SBR   ERRBKT                                  4  3230  H B91               70
525 17 250          A     &2,ERRBKT                               7  3234  A F97 B91           70
526 18 010          MLC   ERRBKT,*&4                             7  3241  M B91 B51           70
527 18 020          MLC   *,*&7                                   7  3248  M B54 B61           70
528 18 030          MLC   @1@,*                                   7  3255  M F64 B61           70
529 18 040          A     &1,ERRBKT                               7  3262  A F54 B91           70
530 18 050          MLC   ERRBKT,ERREX&3                          7  3269  M B91 B79           71
531 18 060  ERREX   B     *                                       4  3276  B B79               71
532 18 070  NINZRO  DCW   @000000000@                            9  3288                      71
533 18 080  ERRBKT  DCW   #3                                      3  3291                      71
534 18 090  PTNMLT  SBR   PTNLEX&3                                4  3292  H C58               71
535 18 100          B     PUTX                                    4  3296  B 363               71
536 18 110          DCW   VNL                                     3  3302  C87                 71
537 18 120          BCE   PTNM01,SIGN,                            8  3303  B C32 P19           72
538 18 130          MLC   SIGN,CHX                               7  3311  M P19 Q44           72
539 18 140          B     PUTX                                    4  3318  B 363               72
540 18 150          DCW   CHX                                     3  3324  Q44                 72
541 18 160          MLC   @ @,SIGN                               7  3325  M F55 P19           72
542 18 170  PTNM01  B     PURGE                                   4  3332  B C91               72
543 18 180          B     PUTX                                    4  3336  B 363               72
544 18 190          DCW   VNL                                     3  3342  C87                 73
545 18 200          BCE   PTNLEX,PSNTSW,N                         8  3343  B C55 K49 N         73
546 18 210          B     NTEST1                                  4  3351  B N15               73
547 18 220  PTNLEX  B     *                                       4  3355  B C58               73
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
548 18 230  PTNAM  SBR   PTNMEX&3                            4  3359  H C84               73
549 18 240         B     PUTX                                4  3363  B 363               73
550 18 250         DCW   VNM                                 3  3369  C90                 73
551 19 010         B     PURGE                               4  3370  B C91               74
552 19 020         B     PUTX                                4  3374  B 363               74
553 19 030         DCW   VNM                                 3  3380  C90                 74
554 19 040  PTNMEX B     *                                   4  3381  B C84               74
555 19 050  VNL    DCW   @.NL@                               3  3387                      74
556 19 060  VNM    DCW   @.NM@                               3  3390                      74
557 19 070  PURGE  SBR   PRGEX&3                             4  3391  H D50               74
558 19 080         MLC   WRDPTR,PRGSAV                       7  3395  M 094 E26           75
559 19 090         MLC   @003@,WRDPTR                       7  3402  M G00 094           75
560 19 100  PRG1   C     WRDPTR,PRGSAV                       7  3409  C 094 E26           75
561 19 110         BL    PRG3                                5  3416  B D51 T             75
562 19 120  PRG2   MLC   WORD,PRGSX                          7  3421  M VP4 E29           75
563 19 130         B     PUTX                                4  3428  B 363               75
564 19 140         DCW   PRGSX                               3  3434  E29                 76
565 19 150         C     WRDPTR,PRGSAV                       7  3435  C 094 E26           76
566 19 160         BU    PRG6                                5  3442  B E13 /             76
567 19 170  PRGEX  B     *                                   4  3447  B D50               76
568 19 180  PRG3   MLC   WRDPTR,PRGMAX                       7  3451  M 094 E32           76
569 19 190         MLC   PRGSAV,WRDPTR                       7  3458  M E26 094           76
570 19 200  PRG4   A     &1,WRDPTR                           7  3465  A F54 094           77
571 19 210         C     WRDPTR,PRGMAX                       7  3472  C 094 E32           77
572 19 220         BL    PRG5                                5  3479  B D95 T             77
573 19 230         MLC   @ @,WORD                            7  3484  M F55 VP4           77
574 19 240         B     PRG4                                4  3491  B D65               77
575 19 250  PRG5   MLC   PRGMAX,WRDPTR                       7  3495  M E32 094           77
576 20 010         MLC   PRGMAX,PRGSAV                       7  3502  M E32 E26           78
577 20 020         B     PRG2                                4  3509  B D21               78
578 20 030  PRG6   A     &3,WRDPTR                           7  3513  A G01 094           78
579 20 040         B     PRG1                                4  3520  B D09               78
580 20 050  PRGSAV DCW   #3                                  3  3526                      78
581 20 060  PRGSX  DCW   #3                                  3  3529                      78
582 20 070  PRGMAX DCW   #3                                  3  3532                      78
583 20 080  BLANK6 DCW   #6                                  6  3538                      79
584 20 090  GM     DC    @}@                                 1  3539                      79
585 20 100  NOID   DCW   @0@                                 1  3540                      79
586 20 110  NOPGM  DC    @0@                                 1  3541                      79
587 20 120  ENTER1 DC    @0@                                 1  3542                      79
588 20 130  INVLD  DC    @0@                                 1  3543                      79
589 20 140  ANSIZE DC    @0@                                 1  3544                      79
590 20 150  WRD    DC    @0@                                 1  3545                      79
591 20 160  NUMSIZ DC    @0@                                 1  3546                      79
592 20 170  ANERR1 DC    @0@                                 1  3547                      79
593 20 180  SEQ    DC    @0@                                 1  3548                      79
594 20 190  PDSW   DCW   @0@                                 1  3549                      79
595 20 200  EOJPDS DCW   @0@                                 1  3550                      79
596 20 210  EOJ    BCE   PSNM3A,NLSW,1                       8  3551  B M52 N11 1         79
597 20 220         BCE   PRD2,PDSW,1                         8  3559  B Z72 E49 1         79
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
598 20 230  EOJ0   C     SEQ,NINZRO                                7  3567  C E48 B88           80
599 20 240         BU    EOJ2                                      5  3574  B F43 /             80
600 20 250  EOJ1   BCE   EOJ3,EOJPDS,0                           8  3579  B E94 E50 0         80
601 21 010         B     PUTX                                      4  3587  B 363               80
602 21 020         DCW   VPRD                                     3  3593  O50                 80
603 21 030  EOJ3   B     PUTX                                      4  3594  B 363               80
604 21 040         DCW   VEOP                                     3  3600  X00                 80
605 21 050         RWD   5                                        5  3601  U %U5 R             81
606 21 060         B     IORW                                      4  3606  B 343               81
607 21 070         RTW   4,BGNSUP                                 8  3610  L %U4 973 R         81
608 21 080         DCW   *&1                                      3  3620  F21                 81
609 21 090         RWD   4                                        5  3621  U %U4 R             81
610 21 100         WTM   4                                        5  3626  U %U4 M             81
611 21 110         BSP   4                                        5  3631  U %U4 B             81
612 21 120         B     SUPER                                    4  3636  B 351               82
613 21 130         DCW   @A04@                                   3  3642                      82
614 21 140  EOJ2   MLC   &EOJ1,PTCN1&3                           7  3643  M G04 P78           82
615 21 150         B     PTCDNO                                   4  3650  B P20               82
616 21 160         LTORG                                                   3654
                   DCW   &1                                       1  3654              LIT   82
                         @ @                                      1  3655              LIT   82
                         @0006@                                   3  3658              LIT   82
                         @0009@                                   3  3661              LIT   83
                         @B@                                      1  3662              LIT   83
                         @0@                                      1  3663              LIT   83
                         @1@                                      1  3664              LIT   83
                         @0007@                                   3  3667              LIT   83
                         @073@                                    3  3670              LIT   83
                         @?@                                      1  3671              LIT   83
                         @N@                                      1  3672              LIT   84
                         @0005@                                   3  3675              LIT   84
       199               &EOJ1                                    3  3678  E79         ADCON 84
       202               &PUTX                                    3  3681  363         ADCON 84
       206               &NOTE6                                   3  3684  U77         ADCON 84
                         @0008@                                   3  3687              LIT   84
                         @001@                                    3  3690              LIT   84
                         @A@                                      1  3691              LIT   85
                         @Z@                                      1  3692              LIT   85
                         @.@                                      1  3693              LIT   85
                         @120@                                    3  3696              LIT   85
                         &2                                       1  3697              LIT   85
                         @003@                                    3  3700              LIT   85
                         &3                                       1  3701              LIT   85
       614               &EOJ1                                    3  3704  E79         ADCON 86
617 21 170         DCW   @}@                                      1  3705                      86
618 21 180         END   START                                             / 979 080           87
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - A04 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - A04
 102  1 020          CTL   631 11
 103  1 030          ORG   1300                                                 1300
 104  1 040  SUPER   EQU   351                                          0351
 105  1 050  GETX    EQU   335                                          0335
 106  1 060  IORW    EQU   343                                          0343
 107  1 070  PUTX    EQU   363                                          0363
 108  1 080  X2      EQU   94                                           0094
 109  1 090  X3      EQU   99                                           0099
 110  1 100  TBLAR   EQU   2800                                         2800
 111  1 110  SMLTBL  EQU   2802                                         2802
 112  1 120  START   B     STRT1                                    4  1300  B T42               4
 113  1 130  GTTBL   SBR   GTTBEX&3                                 4  1304  H T41               4
 114  1 140          B     IORW                                     4  1308  B 343               4
 115  1 150          RT    1,TBLAR                                  8  1312  M %U1 Q00 R         4
 116  1 160          DCW   *&1                                      3  1322  T23                 4
 117  1 170          B     IORW                                     4  1323  B 343               4
 118  1 180          RTW   1,TBLAR                                  8  1327  L %U1 Q00 R         4
 119  1 190          DCW   *&1                                      3  1337  T38                 5
 120  1 200  GTTBEX  B     *                                        4  1338  B T41               5
 121  1 210  STRT1   MLCWA @0@,190                                  7  1342  L P71 190           5
 122  1 220          B     GTTBL                                    4  1349  B T04               5
 123  1 230  L1      B     GETX                                     4  1353  B 335               5
 124  1 240          DCW   SX                                       3  1359  Z51                 5
 125  1 250          DCW   EOJ                                      3  1362  Z19                 5
 126  2 010  L2      C     SX,VNM                                   7  1363  C Z51 Z54           6
 127  2 020          BE    NAMER                                    5  1370  B X19 S             6
 128  2 030          C     SX,VNL                                   7  1375  C Z51 Z57           6
 129  2 040          BE    LIT                                      5  1382  B W13 S             6
 130  2 050          C     SX,@.PC@                                 7  1387  C Z51 P74           6
 131  2 060          BE    LIT                                      5  1394  B W13 S             6
 132  2 061          BCE   LIT,SX,@                                 8  1399  B W13 Z51 @         7
 133  2 070          C     SX,VCD                                   7  1407  C Z51 Z63           7
 134  2 080          BE    CARDNO                                   5  1414  B V05 S             7
 135  2 090          C     SX,VDG                                   7  1419  C Z51 Z66           7
 136  2 100          BE    DIAGN                                    5  1426  B U61 S             7
 137  2 110          B     PUTX                                     4  1431  B 363               7
 138  2 120          DCW   SX                                       3  1437  Z51                 7
 139  2 130          C     SX,@#DC@                                 7  1438  C Z51 P77           8
 140  2 140          BU    L1                                       5  1445  B T53 /             8
 141  2 150          MLC   @1@,ACSW                                 7  1450  M P78 Z48           8
 142  2 160          B     L1                                       4  1457  B T53               8
 143  2 170  DIAGN   B     GETX                                     4  1461  B 335               8
 144  2 180          DCW   ENTER1                                   3  1467  K60                 8
 145  2 190          DCW   EOJ                                      3  1470  Z19                 8
 146  2 200          B     GETX                                     4  1471  B 335               9
 147  2 210          DCW   WRD                                      3  1477  K63                 9
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	220		DCW	EOJ	3	1480	Z19	9
149	2	230		B	GETX	4	1481	B 335	9
150	2	240		DCW	SEQ	3	1487	K66	9
151	2	250		DCW	EOJ	3	1490	Z19	9
152	3	010		B	ANALYZ	4	1491	B Z85	9
153	3	020		B	GETX	4	1495	B 335	10
154	3	030		DCW	SX	3	1501	Z51	10
155	3	040		DCW	EOJ	3	1504	Z19	10
156	3	050	CARDNO	B	PUTX	4	1505	B 363	10
157	3	060		DCW	SX	3	1511	Z51	10
158	3	070		B	GETX	4	1512	B 335	10
159	3	080		DCW	INT1	3	1518	W04	10
160	3	090		DCW	EOJ	3	1521	Z19	11
161	3	100		B	GETX	4	1522	B 335	11
162	3	110		DCW	INT2	3	1528	W07	11
163	3	120		DCW	EOJ	3	1531	Z19	11
164	3	130		B	PUTX	4	1532	B 363	11
165	3	140		DCW	INT1	3	1538	W04	11
166	3	150		B	PUTX	4	1539	B 363	11
167	3	160		DCW	INT2	3	1545	W07	12
168	3	170		B	GETX	4	1546	B 335	12
169	3	180		DCW	SX	3	1552	Z51	12
170	3	190		DCW	EOJ	3	1555	Z19	12
171	3	200		C	SX,VC8	7	1556	C Z51 W10	12
172	3	210		BU	CDN2	5	1563	B V91 /	12
173	3	220		BCE	CDN1,DIV,P	8	1568	B V80 W11 P	12
174	3	230		B	L1	4	1576	B T53	13
175	3	240	CDN1	MLC	@1@,C8SW	7	1580	M P78 W12	13
176	3	250		B	L1	4	1587	B T53	13
177	4	010	CDN2	MLC	@0@,C8SW	7	1591	M P71 W12	13
178	4	020		B	L2	4	1598	B T63	13
179	4	030	INT1	DCW	#3	3	1604		13
180	4	040	INT2	DCW	#3	3	1607		13
181	4	050	VC8	DCW	@.C8@	3	1610		14
182	4	060	DIV	DCW	@E@	1	1611		14
183	4	070	C8SW	DCW	@0@	1	1612		14
184	4	080	LIT	BCE	LIT5,C8SW,1	8	1613	B X05 W12 1	14
185	4	090		B	PUTX	4	1621	B 363	14
186	4	100		DCW	SX	3	1627	Z51	14
187	4	110	LIT1	MLC	SX,CTL	7	1628	M Z51 Z69	14
188	4	120	LIT2	B	GETX	4	1635	B 335	15
189	4	130		DCW	SX	3	1641	Z51	15
190	4	140		DCW	EOJ	3	1644	Z19	15
191	4	150		C	SX,CTL	7	1645	C Z51 Z69	15
192	4	160		BE	LIT3	5	1652	B W68 S	15
193	4	170		B	PUTX	4	1657	B 363	15
194	4	180		DCW	SX	3	1663	Z51	15
195	4	190		B	LIT2	4	1664	B W35	16
196	4	200	LIT3	BCE	LIT4,C8SW,0	8	1668	B W94 W12 0	16
197	4	210		MLC	@0@,C8SW	7	1676	M P71 W12	16

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
198	4	220		B	PUTX		4	1683	B 363	16
199	4	230		DCW	VLB		3	1689	X18	16
200	4	240		B	L1		4	1690	B T53	16
201	4	250	LIT4	B	PUTX		4	1694	B 363	16
202	5	010		DCW	CTL		3	1700	Z69	17
203	5	020		B	L1		4	1701	B T53	17
204	5	030	LIT5	B	PUTX		4	1705	B 363	17
205	5	040		DCW	VLB		3	1711	X18	17
206	5	050		B	LIT1		4	1712	B W28	17
207	5	060	VLB	DCW	@.LB@		3	1718		17
208	5	070	NAMER	B	GETNAM		4	1719	B K98	17
209	5	080		BCE	PROCD,DIV,P		8	1723	B Y13 W11 P	18
210	5	090		BCE	DATAD,DIV,D		8	1731	B X78 W11 D	18
211	5	100		C	NAME,@DATA@		7	1739	C LH5 P82	18
212	5	110		BU	PROCD		5	1746	B Y13 /	18
213	5	120		C	X3,@004@		7	1751	C 099 P85	18
214	5	130		BU	PROCD		5	1758	B Y13 /	19
215	5	140		MLC	@D@,DIV		7	1763	M P86 W11	19
216	5	150		B	GTTBL		4	1770	B T04	19
217	5	160		B	PROCD		4	1774	B Y13	19
218	5	170	DATAD	C	NAME,HPROC		7	1778	C LH5 Z78	19
219	5	180		BU	PROCD		5	1785	B Y13 /	19
220	5	190		C	X3,@009@		7	1790	C 099 P89	19
221	5	200		BU	PROCD		5	1797	B Y13 /	20
222	5	210		MLC	@P@,DIV		7	1802	M P90 W11	20
223	5	220		B	GTTBL		4	1809	B T04	20
224	5	230	PROCD	B	LOOKUP		4	1813	B O39	20
225	5	240	PROC1	C	ANS,VNF		7	1817	C P70 Z81	20
226	5	250		BE	NOTFND		5	1824	B Z11 S	20
227	6	010		BCE	PROC3,C8SW,0		8	1829	B Y88 W12 0	21
228	6	020		MLC	@0@,C8SW		7	1837	M P71 W12	21
229	6	030		C	ANS,@000@		7	1844	C P70 P93	21
230	6	040		BU	PROC2		5	1851	B Y63 /	21
231	6	050		MLC	VNF,ANS		7	1856	M Z81 P70	21
232	6	060	PROC2	B	PUTX		4	1863	B 363	21
233	6	070		DCW	VLB		3	1869	X18	22
234	6	080		B	PUTX		4	1870	B 363	22
235	6	090		DCW	ANS		3	1876	P70	22
236	6	100		B	PUTX		4	1877	B 363	22
237	6	110		DCW	VLB		3	1883	X18	22
238	6	120		B	L1		4	1884	B T53	22
239	6	130	PROC3	C	ANS,@000@		7	1888	C P70 P93	22
240	6	140		BE	L1		5	1895	B T53 S	23
241	6	150		B	PUTX		4	1900	B 363	23
242	6	160		DCW	ANS		3	1906	P70	23
243	6	170		B	L1		4	1907	B T53	23
244	6	180	NOTFND	B	PUTNAM		4	1911	B N08	23
245	6	190		B	L1		4	1915	B T53	23
246	6	200	EOJ	B	PUTX		4	1919	B 363	23
247	6	210		DCW	SX		3	1925	Z51	24

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 220         BCE   EOJ1,ACSW,1                                  8  1926  B Z41 Z48 1         24
249  6 230         B     SUPER                                        4  1934  B 351               24
250  6 240         DCW   @BD1@                                       3  1940                      24
251  6 250  EOJ1   B     SUPER                                        4  1941  B 351               24
252  7 010         DCW   @A20@                                      3  1947                      24
253  7 020  ACSW   DCW   @0@                                        1  1948                      24
254  7 030  SX     DCW   #3                                         3  1951                      25
255  7 040  VNM    DCW   @.NM@                                      3  1954                      25
256  7 050  VNL    DCW   @.NL@                                      3  1957                      25
257  7 060  VAT    DCW   @  @@                                      3  1960                      25
258  7 070  VCD    DCW   @.CD@                                      3  1963                      25
259  7 080  VDG    DCW   @.DG@                                      3  1966                      25
260  7 090  CTL    DCW   #3                                         3  1969                      25
261  7 100  HPROC  DCW   @PROCEDURE@                                9  1978                      26
262  7 110  VNF    DCW   @.NF@                                      3  1981                      26
263  7 120  SYM    DCW   #3                                         3  1984                      26
264  7 130  ANALYZ SBR   ANLZEX&3                                   4  1985  H !93               26
265  7 140         MLC   @1@,190                                    7  1989  M P78 190           26
266  7 150         MLZS  SEQ,CONT                                   7  1996  Y K66 K67           26
267  7 160         MLZS  @ @,SEQ                                    7  2003  Y P94 K66           27
268  7 170         BCE   CNTIN,CONT,&                               8  2010  B !94 K67 &         27
269  7 180         BCE   SQ,SEQ,1                                   8  2018  B J09 K66 1         27
270  7 190         BCE   ANE,ANERR1,1                              8  2026  B J24 K65 1         27
271  7 200         BCE   NMSZ,NUMSIZ,1                            8  2034  B J39 K64 1         27
272  7 210         BCE   WORDR,WRD,1                              8  2042  B J54 K63 1         28
273  7 220         BCE   ANSIZ,ANSIZE,1                           8  2050  B J69 K62 1         28
274  7 230         BCE   INVAL,INVLD,1                            8  2058  B J84 K61 1         28
275  7 240         BCE   ENT1,ENTER1,1                            8  2066  B J99 K60 1         28
276  7 250         BCE   NPG,NOPGM,1                              8  2074  B K14 K59 1         29
277  8 010         BCE   NID,NOID,1                               8  2082  B K29 K58 1         29
278  8 020  ANLZEX B     *                                        4  2090  B !93               29
279  8 030  CNTIN  SBR   ANLRT&3                                   4  2094  H K57               29
280  8 040         MLC   ERRA,SYM                                  7  2098  M K97 Z84           29
281  8 050         B     OUT                                      4  2105  B K40               29
282  8 060  SQ     SBR   ANLRT&3                                   4  2109  H K57               29
283  8 070         MLC   ERR1,SYM                                 7  2113  M K70 Z84           30
284  8 080         B     OUT                                      4  2120  B K40               30
285  8 090  ANE    SBR   ANLRT&3                                   4  2124  H K57               30
286  8 100         MLC   ERR2,SYM                                 7  2128  M K73 Z84           30
287  8 110         B     OUT                                      4  2135  B K40               30
288  8 120  NMSZ   SBR   ANLRT&3                                   4  2139  H K57               30
289  8 130         MLC   ERR3,SYM                                 7  2143  M K76 Z84           30
290  8 140         B     OUT                                      4  2150  B K40               31
291  8 150  WORDR  SBR   ANLRT&3                                   4  2154  H K57               31
292  8 160         MLC   ERR4,SYM                                 7  2158  M K79 Z84           31
293  8 170         B     OUT                                      4  2165  B K40               31
294  8 180  ANSIZ  SBR   ANLRT&3                                   4  2169  H K57               31
295  8 190         MLC   ERR5,SYM                                 7  2173  M K82 Z84           31
296  8 200         B     OUT                                      4  2180  B K40               31
297  8 210  INVAL  SBR   ANLRT&3                                   4  2184  H K57               32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 220          MLC   ERR6,SYM                                 7  2188  M K85 Z84           32
299  8 230          B     OUT                                      4  2195  B K40               32
300  8 240  ENT1    SBR   ANLRT&3                                  4  2199  H K57               32
301  8 250          MLC   ERR7,SYM                                 7  2203  M K88 Z84           32
302  9 010          B     OUT                                      4  2210  B K40               32
303  9 020  NPG     SBR   ANLRT&3                                  4  2214  H K57               32
304  9 030          MLC   ERR8,SYM                                 7  2218  M K91 Z84           33
305  9 040          B     OUT                                      4  2225  B K40               33
306  9 050  NID     SBR   ANLRT&3                                  4  2229  H K57               33
307  9 060          MLC   ERR9,SYM                                 7  2233  M K94 Z84           33
308  9 070  OUT     B     PUTX                                     4  2240  B 363               33
309  9 080          DCW   VDG                                      3  2246  Z66                 33
310  9 090          B     PUTX                                     4  2247  B 363               33
311  9 100          DCW   SYM                                      3  2253  Z84                 34
312  9 110  ANLRT   B     *                                        4  2254  B K57               34
313  9 120  NOID    DCW   #1                                       1  2258                      34
314  9 130  NOPGM   DC    #1                                       1  2259                      34
315  9 140  ENTER1  DC    #1                                       1  2260                      34
316  9 150  INVLD   DC    #1                                       1  2261                      34
317  9 160  ANSIZE  DC    #1                                       1  2262                      34
318  9 170  WRD     DC    #1                                       1  2263                      34
319  9 180  NUMSIZ  DC    #1                                       1  2264                      34
320  9 190  ANERR1  DC    #1                                       1  2265                      34
321  9 200  SEQ     DC    #1                                       1  2266                      34
322  9 210  CONT    DCW   #1                                       1  2267                      34
323  9 220  ERR1    DCW   @A01@                                    3  2270                      34
324  9 230  ERR2    DCW   @A0B@                                    3  2273                      34
325  9 240  ERR3    DCW   @A0C@                                    3  2276                      34
326  9 250  ERR4    DCW   @A0D@                                    3  2279                      35
327 10 010  ERR5    DCW   @A0E@                                    3  2282                      35
328 10 020  ERR6    DCW   @A0F@                                    3  2285                      35
329 10 030  ERR7    DCW   @A0G@                                    3  2288                      35
330 10 040  ERR8    DCW   @A0H@                                    3  2291                      35
331 10 050  ERR9    DCW   @A0I@                                    3  2294                      35
332 10 060  ERRA    DCW   @A1?@                                    3  2297                      35
333 10 070  GETNAM  SBR   GTNMEX&3                                 4  2298  H L67               36
334 10 080          MLC   @000@,X3                                7  2302  M P93 099           36
335 10 090  GTNM1   B     GETX                                     4  2309  B 335               36
336 10 100          DCW   SX                                       3  2315  Z51                 36
337 10 110          DCW   EOJ                                      3  2318  Z19                 36
338 10 120          C     SX,VNM                                   7  2319  C Z51 Z54           36
339 10 130          BE    GTNM2                                    5  2326  B L49 S             36
340 10 140          A     &3,X3                                    7  2331  A P95 099           37
341 10 150          MLC   SX,WORDAR&X3                            7  2338  M Z51 LH5           37
342 10 160          B     GTNM1                                    4  2345  B L09               37
343 10 170  GTNM2   MLC   X3,SAVE                                  7  2349  M 099 O35           37
344 10 180  GTNM2A  BCE   DECR,WORDAR&X3,                         8  2356  B L68 LH5           37
345 10 190  GTNMEX  B     *                                        4  2364  B L67               37
346 10 200  DECR    S     &1,X3                                    7  2368  S P96 099           38
347 10 210          MLZS  @ @,X3                                   7  2375  Y P94 099           38
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 220          B     GTNM2A                             4  2382  B L56               38
349 10 230  WORDAR  EQU   *                                     2385
350 10 240          DCW   #50                               50  2435                      40
351 10 250          DC    #50                               50  2485                      42
352 11 010          DC    #22                               22  2507                      42
353 11 020  NAME    EQU   WORDAR&X3                             2385 X
354 11 030  PUTNAM  SBR   PTNMEX&3                            4  2508  H O32               42
355 11 040          BCE   PTNM01,C8SW,1                      8  2512  B N31 W12 1         43
356 11 050          MLC   VNM,SYM                            7  2520  M Z54 Z84           43
357 11 060          B     PTNM02                             4  2527  B N45               43
358 11 070  PTNM01  MLC   VLB,SYM                            7  2531  M X18 Z84           43
359 11 080          MLC   @0@,C8SW                           7  2538  M P71 W12           43
360 11 090  PTNM02  B     PUTX                               4  2545  B 363               43
361 11 100          DCW   SYM                                3  2551  Z84                 44
362 11 110  PTNM03  C     X3,SAVE                            7  2552  C 099 O35           44
363 11 120          BE    PTNM04                             5  2559  B N82 S             44
364 11 130          A     &1,X3                              7  2564  A P96 099           44
365 11 140          MLC   @ @,NAME                           7  2571  M P94 LH5           44
366 11 150          B     PTNM03                             4  2578  B N52               44
367 11 160  PTNM04  MLC   @000@,X3                          7  2582  M P93 099           45
368 11 170  PTNM05  A     &3,X3                              7  2589  A P95 099           45
369 11 180          MLC   WORDAR&X3,SZ                       7  2596  M LH5 O38           45
370 11 190          B     PUTX                               4  2603  B 363               45
371 11 200          DCW   SZ                                 3  2609  O38                 45
372 11 210          C     X3,SAVE                            7  2610  C 099 O35           45
373 11 220          BU    PTNM05                             5  2617  B N89 /             46
374 11 230          B     PUTX                               4  2622  B 363               46
375 11 240          DCW   SYM                                3  2628  Z84                 46
376 11 250  PTNMEX  B     *                                  4  2629  B O32               46
377 12 010  SAVE    DCW   #3                                 3  2635                      46
378 12 020  SZ      DCW   #3                                 3  2638                      46
379 12 030  LOOKUP  C     X3,@001@                           7  2639  C 099 P99           46
380 12 040          BE    LKSLNF                             5  2646  B O95 S             47
381 12 050          MLC   SMLTBL,X2                          7  2651  M Q02 094           47
382 12 060  LKSLCT  C     X3,0&X2                            7  2658  C 099 0!0           47
383 12 070          SBR   LKSLFD&3                           4  2665  H P09               47
384 12 080          BL    LKSLNF                             5  2669  B O95 T             47
385 12 090          BE    LKSLFD                             5  2674  B P06 S             47
386 12 100          MLC   0&X2,0&X2                          7  2679  M 0!0 0!0           48
387 12 110          MLC                                      1  2686  M                   48
388 12 120          SBR   X2                                 4  2687  H 094               48
389 12 130          B     LKSLCT                             4  2691  B O58               48
390 12 140  LKSLNF  MLC   VNF,ANS                            7  2695  M Z81 P70           48
391 12 150          B     PROC1                              4  2702  B Y17               48
392 12 160  LKSLFD  MLC   *,X2                              7  2706  M P12 094           48
393 12 170  LKLK    C     NAME,0&X2                          7  2713  C LH5 0!0           49
394 12 180          BH    LKSLNF                             5  2720  B O95 U             49
395 12 190          BE    LKFND                              5  2725  B P46 S             49
396 12 200          MLC   0&X2,0&X2                          7  2730  M 0!0 0!0           49
397 12 210          MLC                                      1  2737  M                   49
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 220         SBR   X2                                        4  2738  H 094              49
399 12 230         B     LKLK                                      4  2742  B P13              49
400 12 240  LKFND  MLC   0&X2,0&X2                                 7  2746  M 0!0 0!0          50
401 12 250         SBR   *&4                                       4  2753  H P60              50
402 13 010         MLC   *,ANS                                     7  2757  M P63 P70          50
403 13 020         B     PROC1                                     4  2764  B Y17              50
404 13 030  ANS    DCW   @000@                                     3  2770                     50
405 13 040         LTORG                                                2771
                   DCW   @0@                                       1  2771            LIT    50
                         @.PC@                                     3  2774            LIT    50
                         @#DC@                                     3  2777            LIT    51
                         @1@                                       1  2778            LIT    51
                         @DATA@                                    4  2782            LIT    51
                         @004@                                     3  2785            LIT    51
                         @D@                                       1  2786            LIT    51
                         @009@                                     3  2789            LIT    51
                         @P@                                       1  2790            LIT    51
                         @000@                                     3  2793            LIT    52
                         @ @                                       1  2794            LIT    52
                         &3                                        1  2795            LIT    52
                         &1                                        1  2796            LIT    52
                         @001@                                     3  2799            LIT    52
406 13 050         DCW   @}@                                       1  2800                     52
407 13 060         END   START                                           / T00 080          53
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                          1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3


                         1401 COBOL - A05                                                   PAGE    1


 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - A05
 102  1 020         CTL   631 11
 103  1 030         ORG   2800                                                        2800
 104  1 040         DCW   LKTB1                                            3  2802  Q95                 4
 105  1 050               @001@                                            3  2805                      4
 106  1 060               &ETB02                                           3  2808  D26                 4
 107  1 070               @002@                                            3  2811                      4
 108  1 080               &ETB03                                           3  2814  D06                 4
 109  1 090               @003@                                            3  2817                      4
 110  1 100               &ETB04                                           3  2820  D00                 4
 111  1 110               @004@                                            3  2823                      5
 112  1 120               &ETB05                                           3  2826  C65                 5
 113  1 130               @005@                                            3  2829                      5
 114  1 140               &ETB06                                           3  2832  C49                 5
 115  1 150               @006@                                            3  2835                      5
 116  1 160               &ETB07                                           3  2838  B86                 5
 117  1 170               @007@                                            3  2841                      5
 118  1 180               &ETB08                                           3  2844  B26                 6
 119  1 190               @008@                                            3  2847                      6
 120  1 200               &ETB09                                           3  2850  A71                 6
 121  1 210               @009@                                            3  2853                      6
 122  1 220               &ETB10                                           3  2856  ?99                 6
 123  1 230               @010@                                            3  2859                      6
 124  1 240               &ETB11                                           3  2862  ?60                 6
 125  1 250               @011@                                            3  2865                      7
 126  2 010               &ETB12                                           3  2868  ?46                 7
 127  2 020               @012@                                            3  2871                      7
 128  2 030               &ETB13                                           3  2874  ?16                 7
 129  2 040               @013@                                            3  2877                      7
 130  2 050               &ETB14                                           3  2880  R84                 7
 131  2 060               @014@                                            3  2883                      7
 132  2 070               &ETB15                                           3  2886  R67                 8
 133  2 080               @015@                                            3  2889                      8
 134  2 090               &ETB16                                           3  2892  R31                 8
 135  2 100  LKTB1        @016@                                            3  2895                      8
 136  2 110  *         ENVIRONMENT DIVISION TABLES
 137  2 120         DCW   #17                                             17  2912                      8
 138  2 130               @*99@                                            3  2915                      8
 139  2 140  ETB16        @NO-PRINT-STORAGE@                              16  2931                      9
 140  2 150               @*98@                                            3  2934                      9
 141  2 160               @SOURCE-COMPUTER@                               15  2949                      9
 142  2 170               @*97@                                            3  2952                      9
 143  2 180  ETB15        @OBJECT-COMPUTER@                               15  2967                     10
 144  2 190               @*92@                                            3  2970                     10
 145  2 200  ETB14        @OBJECT-PROGRAM@                                14  2984                     10
 146  2 210               @*95@                                            3  2987                     10
 147  2 220               @SPECIAL-NAMES@                                 13  3000                     11
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230              @*94@                                      3  3003                      11
149  2 240  ETB13       @CONFIGURATION@                           13  3016                      11
150  2 250              @*93@                                      3  3019                      11
151  3 010              @INPUT-OUTPUT@                            12  3031                      12
152  3 020              @*96@                                      3  3034                      12
153  3 030  ETB12       @FILE-CONTROL@                            12  3046                      12
154  3 040              @*91@                                      3  3049                      12
155  3 050  ETB11       @ENVIRONMENT@                             11  3060                      13
156  3 060              @*90@                                      3  3063                      13
157  3 070              @NO-RELEASE@                              10  3073                      13
158  3 080              @*72@                                      3  3076                      13
159  3 090              @NO-OVERLAP@                              10  3086                      13
160  3 100              @000@                                      3  3089                      14
161  3 110  ETB10       @CHARACTERS@                              10  3099                      14
162  3 120              @*85@                                      3  3102                      14
163  3 130              @1403-P-C9@                                9  3111                      14
164  3 140              @*87@                                      3  3114                      14
165  3 150              @1403-P-CV@                                9  3123                      14
166  3 160              @*86@                                      3  3126                      15
167  3 170              @1403-P-CB@                                9  3135                      15
168  3 180              @000@                                      3  3138                      15
169  3 190              @CHARACTER@                                9  3147                      15
170  3 200              @000@                                      3  3150                      15
171  3 210              @ALTERNATE@                                9  3159                      15
172  3 220              @*74@                                      3  3162                      15
173  3 230  ETB09       @ADDRESSES@                                9  3171                      16
174  3 240              @*79@                                      3  3174                      16
175  3 250              @PRIORITY@                                 8  3182                      16
176  4 010              @000@                                      3  3185                      16
177  4 020              @OPTIONAL@                                 8  3193                      16
178  4 030              @000@                                      3  3196                      16
179  4 040              @MULTIPLE@                                 8  3204                      17
180  4 050              @*84@                                      3  3207                      17
181  4 060              @IBM-1401@                                 8  3215                      17
182  4 070              @*06@                                      3  3218                      17
183  4 080  ETB08       @DIVISION@                                 8  3226                      17
184  4 090              @*82@                                      3  3229                      17
185  4 100              @1403-CT@                                  7  3236                      18
186  4 110              @*81@                                      3  3239                      18
187  4 120              @1401-SS@                                  7  3246                      18
188  4 130              @*08@                                      3  3249                      18
189  4 140              @THROUGH@                                  7  3256                      18
190  4 150              @*09@                                      3  3259                      18
191  4 160              @SECTION@                                  7  3266                      18
192  4 170              @*70@                                      3  3269                      19
193  4 180              @RESERVE@                                  7  3276                      19
194  4 190              @*74@                                      3  3279                      19
195  4 200  ETB07       @ADDRESS@                                  7  3286                      19
196  4 210              @*83@                                      3  3289                      19
197  4 220              @1403-P@                                   6  3295                      19
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230              @*80@                                        3  3298                      19
199  4 240              @1402-R@                                     6  3304                      20
200  4 250              @*88@                                        3  3307                      20
201  5 010              @1402-P@                                     6  3313                      20
202  5 020              @000@                                        3  3316                      20
203  5 030              @STATUS@                                     6  3322                      20
204  5 040              @*77@                                        3  3325                      20
205  5 050              @SELECT@                                     6  3331                      20
206  5 060              @*76@                                        3  3334                      21
207  5 070              @MEMORY@                                     6  3340                      21
208  5 080              @*75@                                        3  3343                      21
209  5 090  ETB06       @ASSIGN@                                     6  3349                      21
210  5 100              @*89@                                        3  3352                      21
211  5 110              @TAPES@                                      5  3357                      21
212  5 120              @000@                                        3  3360                      21
213  5 130  ETB05       @AREAS@                                      5  3365                      22
214  5 140              @*08@                                        3  3368                      22
215  5 150              @THRU@                                       4  3372                      22
216  5 160              @*89@                                        3  3375                      22
217  5 170              @TAPE@                                       4  3379                      22
218  5 180              @000@                                        3  3382                      22
219  5 190              @SIZE@                                       4  3386                      22
220  5 200              @000@                                        3  3389                      23
221  5 210              @FILE@                                       4  3393                      23
222  5 220              @000@                                        3  3396                      23
223  5 230  ETB04       @AREA@                                       4  3400                      23
224  5 240              @*71@                                        3  3403                      23
225  5 250  ETB03       @OFF@                                        3  3406                      23
226  6 010              @000@                                        3  3409                      23
227  6 020              @TO@                                         2  3411                      24
228  6 030              @*31@                                        3  3414                      24
229  6 040              @ON@                                         2  3416                      24
230  6 050              @*33@                                        3  3419                      24
231  6 060              @NO@                                         2  3421                      24
232  6 070              @000@                                        3  3424                      24
233  6 080  ETB02       @IS@                                         2  3426                      24
234  6 090         DCW  @}@                                          1  3427                      25
235  6 100         END                                                        / 000 080            26
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - A06 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - A06					
102	1	020		CTL	631 11					
103	1	030		ORG	2800				2800	
104	1	040		DCW	LKTB2		3	2802	R01	4
105	1	050			@001@		3	2805		4
106	1	060			&DTB02		3	2808	G45	4
107	1	070			@002@		3	2811		4
108	1	080			&DTB03		3	2814	G05	4
109	1	090			@003@		3	2817		4
110	1	100			&DTB04		3	2820	F81	4
111	1	110			@004@		3	2823		5
112	1	120			&DTB05		3	2826	F04	5
113	1	130			@005@		3	2829		5
114	1	140			&DTB06		3	2832	D68	5
115	1	150			@006@		3	2835		5
116	1	160			&DTB07		3	2838	C60	5
117	1	170			@007@		3	2841		5
118	1	180			&DTB08		3	2844	B70	6
119	1	190			@008@		3	2847		6
120	1	200			&DTB09		3	2850	B04	6
121	1	210			@009@		3	2853		6
122	1	220			&DTB10		3	2856	A32	6
123	1	230			@010@		3	2859		6
124	1	240			&DTB11		3	2862	?80	6
125	1	250			@011@		3	2865		7
126	2	010			&DTB12		3	2868	?66	7
127	2	020			@012@		3	2871		7
128	2	030			&DTB13		3	2874	?51	7
129	2	040			@013@		3	2877		7
130	2	050			&DTB14		3	2880	?19	7
131	2	060			@014@		3	2883		7
132	2	070			&DTB15		3	2886	?02	8
133	2	080			@015@		3	2889		8
134	2	090			&DTB18		3	2892	R66	8
135	2	100			@018@		3	2895		8
136	2	110			&DTB20		3	2898	R45	8
137	2	120	LKTB2		@020@		3	2901		8
138	2	130	*		DATA DIVISION TABLES					
139	2	140		DCW	#21		21	2922		8
140	2	150			@/30@		3	2925		9
141	2	160	DTB20		@REEL-SEQUENCE-NUMBER@		20	2945		9
142	2	170			@/31@		3	2948		9
143	2	180	DTB18		@FILE-SERIAL-NUMBER@		18	2966		10
144	2	190			@/01@		3	2969		10
145	2	200			@WORKING-STORAGE@		15	2984		10
146	2	210			@/02@		3	2987		10
147	2	220	DTB15		@RETENTION-CYCLE@		15	3002		11

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@/25@	3	3005		11
149	2	240	DTB14		@IDENTIFICATION@	14	3019		11
150	2	250			@/32@	3	3022		11
151	3	010			@CREATION-DATE@	13	3035		12
152	3	020			@000@	3	3038		12
153	3	030	DTB13		@COMPUTATIONAL@	13	3051		12
154	3	040			@/03@	3	3054		12
155	3	050	DTB12		@ALPHANUMERIC@	12	3066		13
156	3	060			@$01@	3	3069		13
157	3	070	DTB11		@HIGH-VALUES@	11	3080		13
158	3	080			@$02@	3	3083		13
159	3	090			@LOW-VALUES@	10	3093		13
160	3	100			@$01@	3	3096		14
161	3	110			@HIGH-VALUE@	10	3106		14
162	3	120			@000@	3	3109		14
163	3	130			@CHARACTERS@	10	3119		14
164	3	140			@$10@	3	3122		14
165	3	150	DTB10		@ALPHABETIC@	10	3132		14
166	3	160			@/05@	3	3135		15
167	3	170			@REDEFINES@	9	3144		15
168	3	180			@/06@	3	3147		15
169	3	190			@RECORDING@	9	3156		15
170	3	200			@$02@	3	3159		15
171	3	210			@LOW-VALUE@	9	3168		15
172	3	220			@/07@	3	3171		15
173	3	230			@JUSTIFIED@	9	3180		16
174	3	240			@*03@	3	3183		16
175	3	250			@DEPENDING@	9	3192		16
176	4	010			@000@	3	3195		16
177	4	020	DTB09		@CHARACTER@	9	3204		16
178	4	030			@/04@	3	3207		16
179	4	040			@SUPPRESS@	8	3215		17
180	4	050			@/08@	3	3218		17
181	4	060			@STANDARD@	8	3226		17
182	4	070			@000@	3	3229		17
183	4	080			@LOCATION@	8	3237		17
184	4	090			@*06@	3	3240		17
185	4	100			@DIVISION@	8	3248		18
186	4	110			@000@	3	3251		18
187	4	120			@CONTAINS@	8	3259		18
188	4	130			@/09@	3	3262		18
189	4	140	DTB08		@CONSTANT@	8	3270		18
190	4	150			@*08@	3	3273		18
191	4	160			@THROUGH@	7	3280		19
192	4	170			@*09@	3	3283		19
193	4	180			@SECTION@	7	3290		19
194	4	190			@/11@	3	3293		19
195	4	200			@RECORDS@	7	3300		19
196	4	210			@000@	3	3303		19
197	4	220			@PROTECT@	7	3310		19

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230              @)12@                                        3  3313                      20
199  4 240              @PICTURE@                                    7  3320                      20
200  4 250              @*14@                                        3  3323                      20
201  5 010              @OMITTED@                                    7  3330                      20
202  5 020              @$16@                                        3  3333                      20
203  5 030              @NUMERIC@                                    7  3340                      20
204  5 040              @/12@                                        3  3343                      20
205  5 050              @LEAVING@                                    7  3350                      21
206  5 060              @000@                                        3  3353                      21
207  5 070  DTB07       @DISPLAY@                                    7  3360                      21
208  5 080              @$08@                                        3  3363                      21
209  5 090              @ZEROES@                                     6  3369                      21
210  5 100              @/13@                                        3  3372                      21
211  5 110              @VALUES@                                     6  3378                      21
212  5 120              @$02@                                        3  3381                      22
213  5 130              @SPACES@                                     6  3387                      22
214  5 140              @000@                                        3  3390                      22
215  5 150              @SIGNED@                                     6  3396                      22
216  5 160              @/11@                                        3  3399                      22
217  5 170              @RECORD@                                     6  3405                      22
218  5 180              @$09@                                        3  3408                      22
219  5 190              @QUOTES@                                     6  3414                      23
220  5 200              @000@                                        3  3417                      23
221  5 210              @PLACES@                                     6  3423                      23
222  5 220              @/14@                                        3  3426                      23
223  5 230              @OCCURS@                                     6  3432                      23
224  5 240              @/23@                                        3  3435                      23
225  5 250              @FILLER@                                     6  3441                      23
226  6 010              @000@                                        3  3444                      24
227  6 020              @DOLLAR@                                     6  3450                      24
228  6 030              @000@                                        3  3453                      24
229  6 040              @DIGITS@                                     6  3459                      24
230  6 050              @/16@                                        3  3462                      24
231  6 060  DTB06       @BLOCKS@                                     6  3468                      24
232  6 070              @$08@                                        3  3471                      24
233  6 080              @ZEROS@                                      5  3476                      25
234  6 090              @/13@                                        3  3479                      25
235  6 100              @VALUE@                                      5  3484                      25
236  6 110              @000@                                        3  3487                      25
237  6 120              @USAGE@                                      5  3492                      25
238  6 130              @000@                                        3  3495                      25
239  6 140              @TIMES@                                      5  3500                      25
240  6 150              @$02@                                        3  3503                      26
241  6 160              @SPACE@                                      5  3508                      26
242  6 170              @/17@                                        3  3511                      26
243  6 180              @RIGHT@                                      5  3516                      26
244  6 190              @$09@                                        3  3519                      26
245  6 200              @QUOTE@                                      5  3524                      26
246  6 210              @/18@                                        3  3527                      26
247  6 220              @POINT@                                      5  3532                      27
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230                @000@                                        3  3535                      27
249  6 240                @PLACE@                                      5  3540                      27
250  6 250                @000@                                        3  3543                      27
251  7 010                @LINES@                                      5  3548                      27
252  7 020                @/19@                                        3  3551                      27
253  7 030                @LABEL@                                      5  3556                      27
254  7 040                @/20@                                        3  3559                      28
255  7 050                @FLOAT@                                      5  3564                      28
256  7 060                @000@                                        3  3567                      28
257  7 070                @DIGIT@                                      5  3572                      28
258  7 080                @000@                                        3  3575                      28
259  7 090                @CLASS@                                      5  3580                      28
260  7 100                @/21@                                        3  3583                      28
261  7 110                @CHECK@                                      5  3588                      29
262  7 120                @/16@                                        3  3591                      29
263  7 130                @BLOCK@                                      5  3596                      29
264  7 140                @/22@                                        3  3599                      29
265  7 150  DTB05         @BLANK@                                      5  3604                      29
266  7 160                @$08@                                        3  3607                      29
267  7 170                @ZERO@                                       4  3611                      29
268  7 180                @000@                                        3  3614                      30
269  7 190                @WHEN@                                       4  3618                      30
270  7 200                @*08@                                        3  3621                      30
271  7 210                @THRU@                                       4  3625                      30
272  7 220                @/10@                                        3  3628                      30
273  7 230                @SIZE@                                       4  3632                      30
274  7 240                @000@                                        3  3635                      30
275  7 250                @SIGN@                                       4  3639                      31
276  8 010                @000@                                        3  3642                      31
277  8 020                @MODE@                                       4  3646                      31
278  8 030                @000@                                        3  3649                      31
279  8 040                @LINE@                                       4  3653                      31
280  8 050                @/15@                                        3  3656                      31
281  8 060                @LEFT@                                       4  3660                      31
282  8 070                @*28@                                        3  3663                      32
283  8 080                @FROM@                                       4  3667                      32
284  8 090                @*29@                                        3  3670                      32
285  8 100                @FILE@                                       4  3674                      32
286  8 110                @/24@                                        3  3677                      32
287  8 120  DTB04         @DATA@                                       4  3681                      32
288  8 130                @000@                                        3  3684                      32
289  8 140                @FOR@                                        3  3687                      33
290  8 150                @000@                                        3  3690                      33
291  8 160                @ARE@                                        3  3693                      33
292  8 170         DCW    @000@                                        3  3696                      33
293  8 180         DCW    @AND@                                        3  3699                      33
294  8 190                @$40@                                        3  3702                      33
295  8 200  DTB03         @ALL@                                        3  3705                      33
296  8 210                @000@                                        3  3708                      34
297  8 220                @TO@                                         2  3710                      34
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230                @000@                                       3  3713                      34
299  8 240                @ON@                                        2  3715                      34
300  8 250                @*32@                                       3  3718                      34
301  9 010                @OF@                                        2  3720                      34
302  9 020                @000@                                       3  3723                      34
303  9 030                @IS@                                        2  3725                      35
304  9 040                @*32@                                       3  3728                      35
305  9 050                @IN@                                        2  3730                      35
306  9 060                @/25@                                       3  3733                      35
307  9 070                @ID@                                        2  3735                      35
308  9 080                @/26@                                       3  3738                      35
309  9 090                @FD@                                        2  3740                      35
310  9 100                @/03@                                       3  3743                      36
311  9 110  DTB02         @AN@                                        2  3745                      36
312  9 120         DCW    @}@                                         1  3746                      36
313  9 130         END                                                       / 000 080             37
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
```

1401 COBOL - A07 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - A07					
102	1	020		CTL	631 11					
103	1	030		ORG	2800				2800	
104	1	040		DCW	LKTB3		3	2802	Q65	4
105	1	050			@001@		3	2805		4
106	1	060			&PTB02		3	2808	G21	4
107	1	070			@002@		3	2811		4
108	1	080			&PTB03		3	2814	F66	4
109	1	090			@003@		3	2817		4
110	1	100			&PTB04		3	2820	F30	4
111	1	110			@004@		3	2823		5
112	1	120			&PTB05		3	2826	D76	5
113	1	130			@005@		3	2829		5
114	1	140			&PTB06		3	2832	C40	5
115	1	150			@006@		3	2835		5
116	1	160			&PTB07		3	2838	B41	5
117	1	170			@007@		3	2841		5
118	1	180			&PTB08		3	2844	?91	6
119	1	190			@008@		3	2847		6
120	1	200			&PTB09		3	2850	?14	6
121	1	210			@009@		3	2853		6
122	1	220			&PTB10		3	2856	R30	6
123	1	230			@010@		3	2859		6
124	1	240			&PTB11		3	2862	Q91	6
125	1	250	LKTB3		@011@		3	2865		7
126	2	010	*	COBOL KEY-WORD TABLES						
127	2	020	*	PROCEDURE DIVISION TABLES						
128	2	030		DCW	#12		12	2877		7
129	2	040			@$01@		3	2880		7
130	2	050	PTB11		@HIGH-VALUES@		11	2891		7
131	2	060			@$02@		3	2894		7
132	2	070			@LOW-VALUES@		10	2904		8
133	2	080			@$01@		3	2907		8
134	2	090			@HIGH-VALUE@		10	2917		8
135	2	100			@$10@		3	2920		8
136	2	110	PTB10		@ALPHABETIC@		10	2930		8
137	2	120			@*40@		3	2933		8
138	2	130			@REPLACING@		9	2942		9
139	2	140			@*01@		3	2945		9
140	2	150			@PROCEDURE@		9	2954		9
141	2	160			@*02@		3	2957		9
142	2	170			@OTHERWISE@		9	2966		9
143	2	180			@$02@		3	2969		9
144	2	190			@LOW-VALUE@		9	2978		10
145	2	200			@*03@		3	2981		10
146	2	210			@DEPENDING@		9	2990		10
147	2	220			@000@		3	2993		10

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230              @AUTOCODER@                                  9  3002                      10
149  2 240              @000@                                        3  3005                      10
150  2 250  PTB09       @ADVANCING@                                  9  3014                      11
151  3 010              @*39@                                        3  3017                      11
152  3 020              @TALLYING@                                   8  3025                      11
153  3 030              @)01@                                        3  3028                      11
154  3 040              @SUBTRACT@                                   8  3036                      11
155  3 050              @000@                                        3  3039                      11
156  3 060              @SENTENCE@                                   8  3047                      12
157  3 070              @$12@                                        3  3050                      12
158  3 080              @POSITIVE@                                   8  3058                      12
159  3 090              @$14@                                        3  3061                      12
160  3 100              @NEGATIVE@                                   8  3069                      12
161  3 110              @)02@                                        3  3072                      12
162  3 120              @MULTIPLY@                                   8  3080                      13
163  3 130              @*06@                                        3  3083                      13
164  3 140  PTB08       @DIVISION@                                   8  3091                      13
165  3 150              @*07@                                        3  3094                      13
166  3 160              @VARYING@                                    7  3101                      13
167  3 170              @*08@                                        3  3104                      13
168  3 180              @THROUGH@                                    7  3111                      13
169  3 190              @*09@                                        3  3114                      14
170  3 200              @SECTION@                                    7  3121                      14
171  3 210              @*10@                                        3  3124                      14
172  3 220              @ROUNDED@                                    7  3131                      14
173  3 230              @/11@                                        3  3134                      14
174  3 240              @RECORDS@                                    7  3141                      14
175  3 250              @*11@                                        3  3144                      14
176  4 010              @PROCEED@                                    7  3151                      15
177  4 020              @)03@                                        3  3154                      15
178  4 030              @PERFORM@                                    7  3161                      15
179  4 040              @$16@                                        3  3164                      15
180  4 050              @NUMERIC@                                    7  3171                      15
181  4 060              @*37@                                        3  3174                      15
182  4 070              @LEADING@                                    7  3181                      15
183  4 080              @$20@                                        3  3184                      16
184  4 090              @GREATER@                                    7  3191                      16
185  4 100              @000@                                        3  3194                      16
186  4 110              @FILLING@                                    7  3201                      16
187  4 120              @$20@                                        3  3204                      16
188  4 130              @EXCEEDS@                                    7  3211                      16
189  4 140              @)30@                                        3  3214                      16
190  4 150              @EXAMINE@                                    7  3221                      17
191  4 160              @)04@                                        3  3224                      17
192  4 170              @DISPLAY@                                    7  3231                      17
193  4 180              @)05@                                        3  3234                      17
194  4 190  PTB07       @COMPUTE@                                    7  3241                      17
195  4 200              @$08@                                        3  3244                      17
196  4 210              @ZEROES@                                     6  3250                      17
197  4 220              @$02@                                        3  3253                      18
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230              @SPACES@                                     6  3259                      18
199  4 240              @*13@                                        3  3262                      18
200  4 250              @REWIND@                                     6  3268                      18
201  5 010              @/11@                                        3  3271                      18
202  5 020              @RECORD@                                     6  3277                      18
203  5 030              @$09@                                        3  3280                      18
204  5 040              @QUOTES@                                     6  3286                      19
205  5 050              @*15@                                        3  3289                      19
206  5 060              @OUTPUT@                                     6  3295                      19
207  5 070              @*16@                                        3  3298                      19
208  5 080              @GIVING@                                     6  3304                      19
209  5 090              @  #@                                        3  3307                      19
210  5 100              @EQUALS@                                     6  3313                      19
211  5 110              @)06@                                        3  3316                      20
212  5 120              @DIVIDE@                                     6  3322                      20
213  5 130              @*17@                                        3  3325                      20
214  5 140              @BEFORE@                                     6  3331                      20
215  5 150              @)07@                                        3  3334                      20
216  5 160  PTB06       @ACCEPT@                                     6  3340                      20
217  5 170              @$08@                                        3  3343                      20
218  5 180              @ZEROS@                                      5  3348                      21
219  5 190              @)08@                                        3  3351                      21
220  5 200              @WRITE@                                      5  3356                      21
221  5 210              @*18@                                        3  3359                      21
222  5 220              @UNTIL@                                      5  3364                      21
223  5 230              @  *@                                        3  3367                      21
224  5 240              @TIMES@                                      5  3372                      21
225  5 250              @A05@                                        3  3375                      22
226  6 010              @TALLY@                                      5  3380                      22
227  6 020              @$02@                                        3  3383                      22
228  6 030              @SPACE@                                      5  3388                      22
229  6 040              @$09@                                        3  3391                      22
230  6 050              @QUOTE@                                      5  3396                      22
231  6 060              @000@                                        3  3399                      22
232  6 070              @LINES@                                      5  3404                      23
233  6 080              @*20@                                        3  3407                      23
234  6 090              @INPUT@                                      5  3412                      23
235  6 100              @*38@                                        3  3415                      23
236  6 110              @FIRST@                                      5  3420                      23
237  6 120              @000@                                        3  3423                      23
238  6 130              @ERROR@                                      5  3428                      23
239  6 140              @  #@                                        3  3431                      24
240  6 150              @EQUAL@                                      5  3436                      24
241  6 160              @000@                                        3  3439                      24
242  6 170              @ENTER@                                      5  3444                      24
243  6 180              @000@                                        3  3447                      24
244  6 190              @COBOL@                                      5  3452                      24
245  6 200              @)09@                                        3  3455                      24
246  6 210              @CLOSE@                                      5  3460                      25
247  6 220              @)10@                                        3  3463                      25
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```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230              @ALTER@                                       5  3468                      25
249  6 240              @*22@                                         3  3471                      25
250  6 250  PTB05       @AFTER@                                       5  3476                      25
251  7 010              @$08@                                         3  3479                      25
252  7 020              @ZERO@                                        4  3483                      25
253  7 030              @000@                                         3  3486                      26
254  7 040              @WITH@                                        4  3490                      26
255  7 050              @*23@                                         3  3493                      26
256  7 060              @UPON@                                        4  3497                      26
257  7 070              @  *@                                         3  3500                      26
258  7 080              @TIME@                                        4  3504                      26
259  7 090              @*08@                                         3  3507                      26
260  7 100              @THRU@                                        4  3511                      27
261  7 110              @000@                                         3  3514                      27
262  7 120              @THEN@                                        4  3518                      27
263  7 130              @000@                                         3  3521                      27
264  7 140              @THAN@                                        4  3525                      27
265  7 150              @)11@                                         3  3528                      27
266  7 160              @STOP@                                        4  3532                      27
267  7 170              @/10@                                         3  3535                      28
268  7 180              @SIZE@                                        4  3539                      28
269  7 190              @)13@                                         3  3542                      28
270  7 200              @READ@                                        4  3546                      28
271  7 210              @)14@                                         3  3549                      28
272  7 220              @OPEN@                                        4  3553                      28
273  7 230              @*24@                                         3  3556                      28
274  7 240              @NOTE@                                        4  3560                      29
275  7 250              @*25@                                         3  3563                      29
276  8 010              @NEXT@                                        4  3567                      29
277  8 020              @)15@                                         3  3570                      29
278  8 030              @MOVE@                                        4  3574                      29
279  8 040              @*26@                                         3  3577                      29
280  8 050              @LOCK@                                        4  3581                      29
281  8 060              @000@                                         3  3584                      30
282  8 070              @LINE@                                        4  3588                      30
283  8 080              @$21@                                         3  3591                      30
284  8 090              @LESS@                                        4  3595                      30
285  8 100              @*27@                                         3  3598                      30
286  8 110              @INTO@                                        4  3602                      30
287  8 120              @*28@                                         3  3605                      30
288  8 130              @FROM@                                        4  3609                      31
289  8 140              @*29@                                         3  3612                      31
290  8 150              @FILE@                                        4  3616                      31
291  8 160              @)16@                                         3  3619                      31
292  8 170              @EXIT@                                        4  3623                      31
293  8 180              @*02@                                         3  3626                      31
294  8 190  PTB04       @ELSE@                                        4  3630                      31
295  8 200              @*30@                                         3  3633                      32
296  8 210              @RUN@                                         3  3636                      32
297  8 220              @$30@                                         3  3639                      32
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230              @NOT@                                        3  3642                      32
299  8 240              @)17@                                        3  3645                      32
300  8 250              @END@                                        3  3648                      32
301  9 010              @$32@                                        3  3651                      32
302  9 020              @AND@                                        3  3654                      33
303  9 030              @$40@                                        3  3657                      33
304  9 040              @ALL@                                        3  3660                      33
305  9 050              @)18@                                        3  3663                      33
306  9 060  PTB03       @ADD@                                        3  3666                      33
307  9 070              @000@                                        3  3669                      33
308  9 080              @TO@                                         2  3671                      33
309  9 090              @$31@                                        3  3674                      34
310  9 100              @OR@                                         2  3676                      34
311  9 110              @000@                                        3  3679                      34
312  9 120              @ON@                                         2  3681                      34
313  9 130              @*32@                                        3  3684                      34
314  9 140              @OF@                                         2  3686                      34
315  9 150              @*33@                                        3  3689                      34
316  9 160              @NO@                                         2  3691                      35
317  9 170              @000@                                        3  3694                      35
318  9 180              @IS@                                         2  3696                      35
319  9 190              @*32@                                        3  3699                      35
320  9 200              @IN@                                         2  3701                      35
321  9 210              @)19@                                        3  3704                      35
322  9 220              @IF@                                         2  3706                      35
323  9 230              @)20@                                        3  3709                      36
324  9 240              @GO@                                         2  3711                      36
325  9 250              @*35@                                        3  3714                      36
326 10 010              @BY@                                         2  3716                      36
327 10 020              @000@                                        3  3719                      36
328 10 030  PTB02       @AT@                                         2  3721                      36
329 10 040         DCW  @}@                                          1  3722                      36
330 10 050         END                                                        / 000 080            37
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
```



```
 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000     JOB   1401 COBOL - A20
 102  1 020          CTL   631 11
 103  1 030          ORG   1300                                                  1300
 104  1 040  X1      EQU   89                                                   0089
 105  1 050  GETX    EQU   335                                                  0335
 106  1 060  IORW    EQU   343                                                  0343
 107  1 070  SUPER   EQU   351                                                  0351
 108  1 080  PUTX    EQU   363                                                  0363
 109  1 090  START   B     PLACE              SINGLE .AC                    4  1300  B V25               4
 110  1 100          DCW   VAC                                              3  1306  T86                 4
 111  1 110  START1  B     GTPTIL                                          4  1307  B U57               4
 112  1 120          DCW   VDC                                              3  1313  T89                 4
 113  1 130          B     PUTSX              PUTX #DC                     4  1314  B U42               4
 114  1 140          A     &1,CNTR                                         7  1318  A Z81 T83           4
 115  1 150          B     PUTX                                            4  1325  B 363               4
 116  1 160          DCW   VAC                PUTX .AC-COUNTER  FOR EACH   3  1331  T86                 5
 117  1 170          B     PUTX                  AUTOCODER BLOCK           4  1332  B 363               5
 118  1 180          DCW   CNTR                                            3  1338  T83                 5
 119  1 190          B     PLACE                                           4  1339  B V25               5
 120  1 200          DCW   CNTR               PLACE COUNTER FOR EACH BLOCK 3  1345  T83                 5
 121  1 210  START2  B     GETSX                                           4  1346  B U24               5
 122  1 220          C     SX,VDC             PLACE AUTOCODER SYMBOLS      7  1350  C T92 T89           5
 123  1 230          BE    START3               UNTIL #DC                  5  1357  B T73 S             6
 124  1 240          B     PLACE                                           4  1362  B V25               6
 125  1 250          DCW   SX                                              3  1368  T92                 6
 126  2 010          B     START2                                          4  1369  B T46               6
 127  2 020  START3  B     PUTSX              PUTX #DC AS TRAILING DELIMITER 4  1373  B U42               6
 128  2 030          B     START1              ---#DC-.AC-NNN-#DC---       4  1377  B T07               6
 129  2 040  CNTR    DCW   @000@                                            3  1383                      6
 130  2 050  VAC     DCW   @.AC@                                            3  1386                      7
 131  2 060  VDC     DCW   @#DC@                                            3  1389                      7
 132  2 070  SX      DCW   #3                                               3  1392                      7
 133  2 080  EOJ     B     PUTSX                                           4  1393  B U42               7
 134  2 090          B     PLACE                                           4  1397  B V25               7
 135  2 100          DCW   VDE                                              3  1403  U20                 7
 136  2 110          B     PLACE                                           4  1404  B V25               7
 137  2 120          DCW   VEB                                              3  1410  U23                 8
 138  2 130          B     SUPER                                           4  1411  B 351               8
 139  2 140          DCW   @BD1@                                           3  1417                      8
 140  2 150  VDE     DCW   @.DE@                                           3  1420                      8
 141  2 160  VEB     DCW   @.EB@                                           3  1423                      8
 142  2 170  GETSX   SBR   GTSEX&3             GETSX                       4  1424  H U41               8
 143  2 180          B     GETX                                            4  1428  B 335               8
 144  2 190          DCW   &SX                                             3  1434  T92                 9
 145  2 200                &EOJ                                            3  1437  T93                 9
 146  2 210  GTSEX   B     *                                               4  1438  B U41               9
 147  2 220  PUTSX   SBR   PTSEX&3             PUTSX                       4  1442  H U56               9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         B     PUTX                                          4  1446  B 363                9
149  2 240         DCW   &SX                                           3  1452  T92                  9
150  2 250  PTSEX  B     *                                             4  1453  B U56                9
151  3 010  GTPTIL SBR   X1                GTPTIL                      4  1457  H 089               10
152  3 020         MLC   @P@,GTPSW                                     7  1461  M Z82 V24           10
153  3 030         MLC   X1,GTLSV                                      7  1468  M 089 V23           10
154  3 040         MLC   2&X1,GTL03&3                                  7  1475  M 0|2 U89           10
155  3 050  GTL02  B     GETSX                                         4  1482  B U24               10
156  3 060  GTL03  C     *,SX                                          7  1486  C U92 T92           10
157  3 070         BE    GTL04                                         5  1493  B V10 S             11
158  3 080         BCE   PUTSX,GTPSW,P                                 8  1498  B U42 V24 P         11
159  3 090         B     GTL02                                         4  1506  B U82               11
160  3 100  GTL04  MLC   GTLSV,X1                                      7  1510  M V23 089           11
161  3 110         B     3&X1                                          4  1517  B 0|3               11
162  3 120  GTLSV  DCW   #3                                            3  1523                      11
163  3 130  GTPSW        #1                                            1  1524                      11
164  3 140  PLACE  SBR   X1                                            4  1525  H 089               12
165  3 150         SBR   PLC2&3,3&X1                                   7  1529  H V99 0|3           12
166  3 160         MLC   2&X1,PLC1&3                                   7  1536  M 0|2 V46           12
167  3 170  PLC1   MLC   0,PLCSY                                       7  1543  M 000 W79           12
168  3 180  PLC1A  MLC   PLCSY,PLCB                                    7  1550  M W79 W82           12
169  3 190         C     PLCSY,@.EB@                                   7  1557  C W79 Z85           12
170  3 200         BE    PLC3                                          5  1564  B W00 S             13
171  3 210         C     PLC1A&6,&PLCMAX                               7  1569  C V56 Z88           13
172  3 220         BE    PLC3                                          5  1576  B W00 S             13
173  3 230         MA    @003@,PLC1A&6                                                   MACRO
174                SW    PLC1A&6-2                                     4  1581  , V54       GEN     13
175                A     @003@,PLC1A&6                                 7  1585  A Z91 V56   GEN     13
176                CW    PLC1A&6-2                                     4  1592  ) V54       GEN     13
177  3 240  PLC2   B     0                                             4  1596  B 000               13
178  3 250  PLC3   SW    PLC5&1                                        4  1600  , W76               14
179  4 010         B     IORW                                          4  1604  B 343               14
180  4 020         RT    4,PLC5                                        8  1608  M %U4 W75 R         14
181  4 030         DCW   PLC4                                          3  1618  W23                 14
182  4 040         B     PLC3                                          4  1619  B W00               14
183  4 050  PLC4   BSP   4                                             5  1623  U %U4 B             14
184  4 060         SW    PLCMAX&1                                      4  1628  , Z80               14
185  4 070         B     IORW                                          4  1632  B 343               15
186  4 080         WT    4,PLCA                                        8  1636  M %U4 W80 W         15
187  4 090         DCW   *&1                                           3  1646  W47                 15
188  4 100         WTM   4                                             5  1647  U %U4 M             15
189  4 110         BSP   4                                             5  1652  U %U4 B             15
190  4 120         MLC   &PLCB,PLC1A&6                                 7  1657  M Z94 V56           15
191  4 130         ZA    @0@,PLCMAX                                    7  1664  ? Z95 Z79           15
192  4 140         B     PLC2                                          4  1671  B V96               16
193  4 150  PLC5   EQU   *&1                                              1675
194  4 160         DCW   @ }@                                          2  1676                      16
195  4 170  PLCSY  DCW   #3                                            3  1679                      16
196  4 180         DA    1X300                                            1680   1979               16
197  4 190  PLCA         1                                                1680              SBFLD
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 200  PLCB         3                                                  1682              SBFLD
199  4 210  PLCMAX EQU   *                                                  1979
200  4 220         DC    @}@                                             1  1980                      17
201  4 230         LTORG                                                           1981
                   DCW   &1                                              1  1981              LIT     17
                         @P@                                             1  1982              LIT     17
                         @.EB@                                           3  1985              LIT     17
       171               &PLCMAX                                         3  1988  Z79         ADCON   17
                         @003@                                           3  1991              LIT     18
       190               &PLCB                                           3  1994  W82         ADCON   18
                         @0@                                             1  1995              LIT     18
202  4 240         DCW   @}@                                             1  1996                      18
203  4 250         END   START                                                    / T00 080           19
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - BD1 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BD1						
102	1	020		CTL	661111						
103	1	030		ORG	1300				1300		
104	1	040	PUTX	EQU	363			0363			
105	1	050	SUPER	EQU	351			0351			
106	1	060	GETX	EQU	335			0335			
107	1	070	X	B	GETSR1		4	1300	B O10		4
108	1	080		C	SX,@*91@		7	1304	C Q18 Q24		4
109	1	090		BU	X		5	1311	B T00 /		4
110	1	100		SW	1002		4	1316	, |02		4
111	1	110		B	GETSR		4	1320	B M15		4
112	1	120		C	SX,@*06@		7	1324	C Q18 Q27		4
113	1	130		BU	DIOG12		5	1331	B M88 /		4
114	1	140		B	GETSR1		4	1336	B O10		5
115	1	150		C	SX,@.PD@		7	1340	C Q18 Q30		5
116	1	160		BU	DIOG15		5	1347	B M99 /		5
117	1	170		B	GETSR		4	1352	B M15		5
118	1	180		C	SX,@*94@		7	1356	C Q18 Q33		5
119	1	190		BU	DIOG16		5	1363	B N10 /		5
120	1	200		B	GETSR		4	1368	B M15		5
121	1	210		C	SX,@*09@		7	1372	C Q18 Q36		6
122	1	220		BU	DIOG17		5	1379	B N21 /		6
123	1	230		B	GETSR1		4	1384	B O10		6
124	1	240		C	SX,@.PD@		7	1388	C Q18 Q30		6
125	1	250		BU	DIOG15		5	1395	B M99 /		6
126	2	010		B	GETSR		4	1400	B M15		6
127	2	020		C	SX,@*98@		7	1404	C Q18 Q39		6
128	2	030		BU	DIOG27		5	1411	B N54 /		7
129	2	040	K2	B	GETSR1		4	1416	B O10		7
130	2	050		C	SX,@.PD@		7	1420	C Q18 Q30		7
131	2	060		BU	DIOG15		5	1427	B M99 /		7
132	2	070		B	GETSR		4	1432	B M15		7
133	2	080		C	SX,@*84@		7	1436	C Q18 Q42		7
134	2	090		BU	DIOG18		5	1443	B N32 /		7
135	2	100	NOREL	B	GETSR		4	1448	B M15		8
136	2	110		MLC	SX,HOLD		7	1452	M Q18 Q15		8
137	2	120	NOREL1	C	SX,@*76@		7	1459	C Q18 Q45		8
138	2	130		BE	MEMORY		5	1466	B L91 S		8
139	2	140		C	SX,@*90@		7	1471	C Q18 Q48		8
140	2	150		BE	NOREL		5	1478	B U48 S		8
141	2	160		C	SX,@*99@		7	1483	C Q18 Q51		9
142	2	170		BE	NOREL		5	1490	B U48 S		9
143	2	180		C	SX,@*97@		7	1495	C Q18 Q54		9
144	2	190		BU	DIOG22		5	1502	B N65 /		9
145	2	200	K3	B	GETSR1		4	1507	B O10		9
146	2	210		C	SX,@.PD@		7	1511	C Q18 Q30		9
147	2	220		BU	DIOG15		5	1518	B M99 /		10

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          B     GETSR                                        4  1523  B M15               10
149  2 240          C     SX,@*84@                                     7  1527  C Q18 Q42           10
150  2 250          BU    DIOG18                                       5  1534  B N32 /             10
151  3 010  XYZ     B     GETSR                                        4  1539  B M15               10
152  3 020  XYZ1    MLC   SX,HOLD                                     7  1543  M Q18 Q15           10
153  3 030          C     SX,@*76@                                     7  1550  C Q18 Q45           10
154  3 040          BE    MEMOR1                                       5  1557  B W26 S             11
155  3 050          C     SX,@*75@                                     7  1562  C Q18 Q57           11
156  3 060          BE    ASSIGN                                       5  1569  B X14 S             11
157  3 070          C     SX,@*72@                                     7  1574  C Q18 Q60           11
158  3 080          BE    XYZ                                          5  1581  B V39 S             11
159  3 090          C     SX,@*99@                                     7  1586  C Q18 Q51           11
160  3 100          BE    XYZ                                          5  1593  B V39 S             12
161  3 110          C     SX,@*95@                                     7  1598  C Q18 Q63           12
162  3 120          BE    SPECIA                                       5  1605  B X50 S             12
163  3 130  COULD   C     SX,@*93@                                     7  1610  C Q18 Q66           12
164  3 140          BE    INOUT                                        5  1617  B !85 S             12
165  3 150          B     DIOG22                                       4  1622  B N65               12
166  3 160  MEMOR1  B     GETSR                                        4  1626  B M15               12
167  3 170          C     SX,@.NL@                                     7  1630  C Q18 Q69           13
168  3 180          BE    NUM                                          5  1637  B X06 S             13
169  3 190          C     SX,@*74@                                     7  1642  C Q18 Q72           13
170  3 200          BU    DIOG3                                        5  1649  B P85 /             13
171  3 210          B     GETSR                                        4  1654  B M15               13
172  3 220          C     SX,@.NL@                                     7  1658  C Q18 Q69           13
173  3 230          BU    DIOG3                                        5  1665  B P85 /             14
174  3 240          B     SKIP                                         4  1670  B K00               14
175  3 250          B     GETSR                                        4  1674  B M15               14
176  4 010          C     SX,@*08@                                     7  1678  C Q18 Q75           14
177  4 020          BU    DIOG3                                        5  1685  B P85 /             14
178  4 030          B     GETSR                                        4  1690  B M15               14
179  4 040          C     SX,@.NL@                                     7  1694  C Q18 Q69           14
180  4 050          BU    DIOG3                                        5  1701  B P85 /             15
181  4 060  NUM     B     SKIP                                         4  1706  B K00               15
182  4 070          B     XYZ                                          4  1710  B V39               15
183  4 080  ASSIGN  B     GETSR                                        4  1714  B M15               15
184  4 090          C     SX,@*92@                                     7  1718  C Q18 Q78           15
185  4 100          BU    DIOG3                                        5  1725  B P85 /             15
186  4 110          B     GETSR                                        4  1730  B M15               15
187  4 120          C     SX,@*89@                                     7  1734  C Q18 Q81           16
188  4 130          BU    DIOG3                                        5  1741  B P85 /             16
189  4 140          B     XYZ                                          4  1746  B V39               16
190  4 150  SPECIA  B     GETSR1                                       4  1750  B O10               16
191  4 160          C     SX,@.PD@                                     7  1754  C Q18 Q30           16
192  4 170          BU    DIOG15                                       5  1761  B M99 /             16
193  4 180  SPECL   B     GETSR                                        4  1766  B M15               16
194  4 190  SPECL1  MLC   SX,HOLD                                     7  1770  M Q18 Q15           17
195  4 200          C     SX,@*80@                                     7  1777  C Q18 Q84           17
196  4 210          BE    R1402                                        5  1784  B Y89 S             17
197  4 220          C     SX,@*88@                                     7  1789  C Q18 Q87           17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          BE    R1402                                     5  1796  B Y89 S             17
199  4 240          C     SX,@*83@                                  7  1801  C Q18 Q90           17
200  4 250          BE    P1403                                     5  1808  B Z57 S             18
201  5 010          C     SX,@*82@                                  7  1813  C Q18 Q93           18
202  5 020          BE    R1402                                     5  1820  B Y89 S             18
203  5 030          C     SX,@*86@                                  7  1825  C Q18 Q96           18
204  5 040          BE    CB1403                                    5  1832  B Z81 S             18
205  5 050          C     SX,@*85@                                  7  1837  C Q18 Q99           18
206  5 060          BE    CB1403                                    5  1844  B Z81 S             19
207  5 070          C     SX,@*87@                                  7  1849  C Q18 R02           19
208  5 080          BE    CB1403                                    5  1856  B Z81 S             19
209  5 090          C     SX,@*81@                                  7  1861  C Q18 R05           19
210  5 100          BE    SS1401                                    5  1868  B !61 S             19
211  5 110  SPP     C     SX,@.NM@                                  7  1873  C Q18 R08           19
212  5 120          BE    SCP                                       5  1880  B Z45 S             20
213  5 130          B     COULD                                     4  1885  B W10               20
214  5 140  R1402   B     GETSR                                     4  1889  B M15               20
215  5 150          C     SX,@.NL@                                  7  1893  C Q18 Q69           20
216  5 160          BE    R14021                                    5  1900  B Z17 S             20
217  5 170  R140X   C     SX,@.NM@                                  7  1905  C Q18 R08           20
218  5 180          BU    DIOG3                                     5  1912  B P85 /             20
219  5 190  R14021  B     SKIP                                      4  1917  B K00               21
220  5 200          B     GETSR                                     4  1921  B M15               21
221  5 210          C     SX,@.NM@                                  7  1925  C Q18 R08           21
222  5 220          BU    SPECL1                                    5  1932  B X70 /             21
223  5 230          B     SKIP                                      4  1937  B K00               21
224  5 240          B     SPECL                                     4  1941  B X66               21
225  5 250  SCP     B     SKIP                                      4  1945  B K00               21
226  6 010          B     GETSR                                     4  1949  B M15               22
227  6 020          B     SPECL1                                    4  1953  B X70               22
228  6 030  P1403   B     GETSR                                     4  1957  B M15               22
229  6 040          C     SX,@.NM@                                  7  1961  C Q18 R08           22
230  6 050          BU    DIOG3                                     5  1968  B P85 /             22
231  6 060          B     SKIP                                      4  1973  B K00               22
232  6 070          B     SPECL                                     4  1977  B X66               22
233  6 080  CB1403  B     GETSR                                     4  1981  B M15               23
234  6 090          C     SX,@*31@                                  7  1985  C Q18 R11           23
235  6 100          BE    ON                                        5  1992  B !09 S             23
236  6 110          C     SX,@*71@                                  7  1997  C Q18 R14           23
237  6 120          BU    DIOG3                                     5  2004  B P85 /             23
238  6 130  ON      B     GETSR                                     4  2009  B M15               23
239  6 140          C     SX,@.NM@                                  7  2013  C Q18 R08           23
240  6 150          BU    DIOG3                                     5  2020  B P85 /             24
241  6 160          B     SKIP                                      4  2025  B K00               24
242  6 170          B     GETSR                                     4  2029  B M15               24
243  6 180          C     SX,@*31@                                  7  2033  C Q18 R11           24
244  6 190          BE    ON                                        5  2040  B !09 S             24
245  6 200          C     SX,@*71@                                  7  2045  C Q18 R14           24
246  6 210          BE    ON                                        5  2052  B !09 S             24
247  6 220          B     SPECL1                                    4  2057  B X70               25
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  SS1401 B     GETSR                                     4  2061  B M15               25
249  6 240         C     SX,@.NM@                                  7  2065  C Q18 R08           25
250  6 250         BU    DIOG3                                     5  2072  B P85 /             25
251  7 010         B     SKIP                                      4  2077  B K00               25
252  7 020         B     CB1403                                    4  2081  B Z81               25
253  7 030  INOUT  B     GETSR                                     4  2085  B M15               25
254  7 040         C     SX,@*09@                                  7  2089  C Q18 Q36           26
255  7 050         BU    DIOG17                                    5  2096  B N21 /             26
256  7 060         B     GETSR1                                    4  2101  B O10               26
257  7 070         C     SX,@.PD@                                  7  2105  C Q18 Q30           26
258  7 080         BU    DIOG15                                    5  2112  B M99 /             26
259  7 090         B     GETSR                                     4  2117  B M15               26
260  7 100         C     SX,@*96@                                  7  2121  C Q18 R17           26
261  7 110         BU    DIOG25                                    5  2128  B N43 /             27
262  7 120  K10    B     GETSR1                                    4  2133  B O10               27
263  7 130         C     SX,@.PD@                                  7  2137  C Q18 Q30           27
264  7 140         BU    DIOG15                                    5  2144  B M99 /             27
265  7 150  FILE   B     GETSR                                     4  2149  B M15               27
266  7 160  FILE1  MLC   SX,HOLD                                   7  2153  M Q18 Q15           27
267  7 170         C     SX,@*70@                                  7  2160  C Q18 R20           27
268  7 180         BE    RESER                                     5  2167  B K31 S             28
269  7 190         C     SX,@*77@                                  7  2172  C Q18 R23           28
270  7 200         BE    SELECT                                    5  2179  B K71 S             28
271  7 210         C     SX,@*75@                                  7  2184  C Q18 Q57           28
272  7 220         BE    ASG                                       5  2191  B K95 S             28
273  7 230         B     DIOG22                                    4  2196  B N65               28
274  7 240  SKIP   SBR   FINSH&3                                   4  2200  H K30               28
275  7 250         MLC   SX,TEMP                                   7  2204  M Q18 Q21           29
276  8 010  SKIP1  B     GETSR                                     4  2211  B M15               29
277  8 020         C     SX,TEMP                                   7  2215  C Q18 Q21           29
278  8 030         BU    SKIP1                                     5  2222  B K11 /             29
279  8 040  FINSH  B     *                                         4  2227  B K30               29
280  8 050  RESER  B     GETSR                                     4  2231  B M15               29
281  8 060         C     SX,@*33@                                  7  2235  C Q18 R26           29
282  8 070         BE    FILE                                      5  2242  B J49 S             30
283  8 080         B     GETSR                                     4  2247  B M15               30
284  8 090         C     SX,@1  @                                  7  2251  C Q18 R29           30
285  8 100         BU    DIOG3                                     5  2258  B P85 /             30
286  8 110         B     GETSR                                     4  2263  B M15               30
287  8 120         B     FILE                                      4  2267  B J49               30
288  8 130  SELECT B     GETSR                                     4  2271  B M15               30
289  8 140         C     SX,@.NM@                                  7  2275  C Q18 R08           31
290  8 150         BU    DIOG3                                     5  2282  B P85 /             31
291  8 160         B     SKIP                                      4  2287  B K00               31
292  8 170         B     FILE                                      4  2291  B J49               31
293  8 180  ASG    B     GETSR                                     4  2295  B M15               31
294  8 190         C     SX,@*89@                                  7  2299  C Q18 Q81           31
295  8 200         BE    ASG1                                      5  2306  B L51 S             31
296  8 210         C     SX,@*80@                                  7  2311  C Q18 Q84           32
297  8 220         BE    ASG2                                      5  2318  B L71 S             32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          C     SX,@*88@                                   7  2323  C Q18 Q87           32
299  8 240          BE    ASG2                                       5  2330  B L71 S             32
300  8 250          C     SX,@*83@                                   7  2335  C Q18 Q90           32
301  9 010          BE    FILE                                       5  2342  B J49 S             32
302  9 020          B     DIOG3                                      4  2347  B P85               33
303  9 030  ASG1    B     GETSR                                      4  2351  B M15               33
304  9 040          C     SX,@.NL@                                   7  2355  C Q18 Q69           33
305  9 050          BU    DIOG3                                      5  2362  B P85 /             33
306  9 060  ASGG    B     SKIP                                       4  2367  B K00               33
307  9 070  ASG2    B     GETSR                                      4  2371  B M15               33
308  9 080          C     SX,@.NL@                                   7  2375  C Q18 Q69           33
309  9 090          BE    ASGG                                       5  2382  B L67 S             34
310  9 100          B     FILE1                                      4  2387  B J53               34
311  9 110  MEMORY  B     GETSR                                      4  2391  B M15               34
312  9 120          C     SX,@.NL@                                   7  2395  C Q18 Q69           34
313  9 130          BU    DIOG3                                      5  2402  B P85 /             34
314  9 140          B     SKIP                                       4  2407  B K00               34
315  9 150          B     NOREL                                      4  2411  B U48               34
316  9 160  GETSR   SBR   EXIT&3                                    4  2415  H M87               35
317  9 170  GETB1   B     GETX                                       4  2419  B 335               35
318  9 180          DCW   SX                                         3  2425  Q18                 35
319  9 190          DCW   EOP                                        3  2428  P96                 35
320  9 200          B     PUTX                                       4  2429  B 363               35
321  9 210          DCW   SX                                         3  2435  Q18                 35
322  9 220          C     SX,@.CD@                                   7  2436  C Q18 R32           35
323  9 230          BE    CARD                                       5  2443  B N76 S             36
324  9 240          C     SX,@/24@                                   7  2448  C Q18 R35           36
325  9 250          BE    DATA                                       5  2455  B P55 S             36
326 10 010          C     SX,@.DG@                                   7  2460  C Q18 R38           36
327 10 020          BE    DGG                                        5  2467  B O02 S             36
328 10 030          C     SX,@.PD@                                   7  2472  C Q18 Q30           36
329 10 040          BE    GETB1                                      5  2479  B M19 S             37
330 10 050  EXIT    B     *                                          4  2484  B M87               37
331 10 060  DIOG12  MLC   @B2I@,HOLD                                7  2488  M R41 Q15           37
332 10 070          B     DIOG                                       4  2495  B O35               37
333 10 080  DIOG15  MLC   @B2G@,HOLD                                7  2499  M R44 Q15           37
334 10 090          B     DIOG                                       4  2506  B O35               37
335 10 100  DIOG16  MLC   @B2A@,HOLD                                7  2510  M R47 Q15           37
336 10 110          B     DIOG                                       4  2517  B O35               38
337 10 120  DIOG17  MLC   @B2H@,HOLD                                7  2521  M R50 Q15           38
338 10 130          B     DIOG                                       4  2528  B O35               38
339 10 140  DIOG18  MLC   @B2C@,HOLD                                7  2532  M R53 Q15           38
340 10 150          B     DIOG                                       4  2539  B O35               38
341 10 160  DIOG25  MLC   @B2E@,HOLD                                7  2543  M R56 Q15           38
342 10 170          B     DIOG                                       4  2550  B O35               38
343 10 180  DIOG27  MLC   @B2B@,HOLD                                7  2554  M R59 Q15           39
344 10 190          B     DIOG                                       4  2561  B O35               39
345 10 200  DIOG22  MLC   @B2D@,HOLD                                7  2565  M R62 Q15           39
346 10 210          B     DIOG                                       4  2572  B O35               39
347 10 220  CARD    B     GETSR1                                     4  2576  B O10               39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          MLC   SX,CARD1-3                                7  2580  M Q18 Q09           39
349 10 240          B     GETSR1                                    4  2587  B O10               39
350 10 250          MLC   SX,CARD1                                  7  2591  M Q18 Q12           40
351 11 010          B     GETB1                                     4  2598  B M19               40
352 11 020  DGG     B     GETSR1                                    4  2602  B O10               40
353 11 030          B     GETB1                                     4  2606  B M19               40
354 11 040  GETSR1 SBR   EXIT1&3                                   4  2610  H O34               40
355 11 050  GOT1    B     GETX                                      4  2614  B 335               40
356 11 060          DCW   SX                                        3  2620  Q18                 40
357 11 070          DCW   EOP                                       3  2623  P96                 41
358 11 080          B     PUTX                                      4  2624  B 363               41
359 11 090          DCW   SX                                        3  2630  Q18                 41
360 11 100  EXIT1   B     *                                         4  2631  B O34               41
361 11 110  DIOG    B     PUTX                                      4  2635  B 363               41
362 11 120          DCW   &@.DM@                                   3  2641  R65                 41
363 11 130  DGX1    B     PUTX                                      4  2642  B 363               41
364 11 140          DCW   CARD1-3                                  3  2648  Q09                 42
365 11 150          B     PUTX                                      4  2649  B 363               42
366 11 160          DCW   CARD1                                    3  2655  Q12                 42
367 11 170          B     PUTX                                      4  2656  B 363               42
368 11 180          DCW   HOLD                                      3  2662  Q15                 42
369 11 190  DIOG1   C     SX,@*98@                                  7  2663  C Q18 Q39           42
370 11 200          BE    K2                                        5  2670  B U16 S             42
371 11 210          C     SX,@*97@                                  7  2675  C Q18 Q54           43
372 11 220          BE    K3                                        5  2682  B V07 S             43
373 11 230          C     SX,@*95@                                  7  2687  C Q18 Q63           43
374 11 240          BE    SPECIA                                    5  2694  B X50 S             43
375 11 250          C     SX,@*93@                                  7  2699  C Q18 Q66           43
376 12 010          BE    INOUT                                     5  2706  B !85 S             43
377 12 020          C     SX,@*96@                                  7  2711  C Q18 R17           44
378 12 030          BE    K10                                       5  2718  B J33 S             44
379 12 040          C     SX,@*75@                                  7  2723  C Q18 Q57           44
380 12 050          BE    ASG                                       5  2730  B K95 S             44
381 12 060          C     SX,@*77@                                  7  2735  C Q18 R23           44
382 12 070          BE    SELECT                                    5  2742  B K71 S             44
383 12 080          B     GETSR                                     4  2747  B M15               45
384 12 090          B     DIOG1                                     4  2751  B O63               45
385 12 100  DATA    B     GETSR                                     4  2755  B M15               45
386 12 110          C     SX,@/11@                                  7  2759  C Q18 R68           45
387 12 120          BE    EOP                                       5  2766  B P96 S             45
388 12 130          MLC   SX,199                                    7  2771  M Q18 199           45
389 12 140          B     SUPER                                     4  2778  B 351               45
390 12 150          DCW   @BD2@                                    3  2784                      46
391 12 160  DIOG3   B     PUTX                                      4  2785  B 363               46
392 12 170          DCW   &@.ZD@                                   3  2791  R71                 46
393 12 180          B     DGX1                                      4  2792  B O42               46
394 12 190  EOP     SW    1000                                      4  2796  , |00               46
395 12 200          B     SUPER                                     4  2800  B 351               46
396 12 210          DCW   @BD6@                                    3  2806                      46
397 12 220  CARD1   DCW   #6                                        6  2812                      47
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
398	12	230	HOLD	DCW	#3	3	2815			47
399	12	240	SX	DCW	#3	3	2818			47
400	12	250	TEMP	DCW	#3	3	2821			47
401	13	010		LTORG				2822		
				DCW	@*91@	3	2824		LIT	47
					@*06@	3	2827		LIT	47
					@.PD@	3	2830		LIT	47
					@*94@	3	2833		LIT	48
					@*09@	3	2836		LIT	48
					@*98@	3	2839		LIT	48
					@*84@	3	2842		LIT	48
					@*76@	3	2845		LIT	48
					@*90@	3	2848		LIT	48
					@*99@	3	2851		LIT	48
					@*97@	3	2854		LIT	49
					@*75@	3	2857		LIT	49
					@*72@	3	2860		LIT	49
					@*95@	3	2863		LIT	49
					@*93@	3	2866		LIT	49
					@.NL@	3	2869		LIT	49
					@*74@	3	2872		LIT	49
					@*08@	3	2875		LIT	50
					@*92@	3	2878		LIT	50
					@*89@	3	2881		LIT	50
					@*80@	3	2884		LIT	50
					@*88@	3	2887		LIT	50
					@*83@	3	2890		LIT	50
					@*82@	3	2893		LIT	50
					@*86@	3	2896		LIT	51
					@*85@	3	2899		LIT	51
					@*87@	3	2902		LIT	51
					@*81@	3	2905		LIT	51
					@.NM@	3	2908		LIT	51
					@*31@	3	2911		LIT	51
					@*71@	3	2914		LIT	51
					@*96@	3	2917		LIT	52
					@*70@	3	2920		LIT	52
					@*77@	3	2923		LIT	52
					@*33@	3	2926		LIT	52
					@1 @	3	2929		LIT	52
					@.CD@	3	2932		LIT	52
					@/24@	3	2935		LIT	52
					@.DG@	3	2938		LIT	53
					@B2I@	3	2941		LIT	53
					@B2G@	3	2944		LIT	53
					@B2A@	3	2947		LIT	53
					@B2H@	3	2950		LIT	53
					@B2C@	3	2953		LIT	53
					@B2E@	3	2956		LIT	53
					@B2B@	3	2959		LIT	54

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                       @B2D@                                          3  2962              LIT     54
                       @.DM@                                          3  2965              LIT     54
                       @/11@                                          3  2968              LIT     54
                       @.ZD@                                          3  2971              LIT     54
 402 13 020          ORG                                                     2972
 403 13 030          DCW   @}@                                        1  2972                      54
 404 13 040          END                                                    / 000 080               55
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
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1401 COBOL - BD2 PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - BD2
 102  1 020         CTL   661111
 103  1 030         ORG   1300                                                 1300
 104  1 040  SUPER  EQU   351                                              0351
 105  1 050  X1     EQU   89                                               0089
 106  1 060  X2     EQU   94                                               0094
 107  1 070  X3     EQU   99                                               0099
 108  1 080  GETX   EQU   335                                              0335
 109  1 090  PUTX   EQU   363                                              0363
 110  1 100         C     199,@*06@                                   7  1300  C 199 E55            4
 111  1 110         BU    DIOG17                                      5  1307  B C96 /              4
 112  1 120         B     GETSR                                       4  1312  B ?08                4
 113  1 130         C     SX,@.PD@                                    7  1316  C E51 E58            4
 114  1 140         BU    DIOG18                                      5  1323  B D07 /              4
 115  1 150         B     GETSR                                       4  1328  B ?08                4
 116  1 160         C     SX,@*29@                                    7  1332  C E51 E61            4
 117  1 170         BE    FILEX                                       5  1339  B !49 S              5
 118  1 180         C     SX,@/01@                                    7  1344  C E51 E64            5
 119  1 190         BE    WRK                                         5  1351  B U26 S              5
 120  1 200         C     SX,@/09@                                    7  1356  C E51 E67            5
 121  1 210         BU    DIOG19                                      5  1363  B D18 /              5
 122  1 220  XR12   BCE   DIOG20,CONSW,1                             8  1368  B D33 E29 1          5
 123  1 230         A     @1@,CONSW                                   7  1376  A E68 E29            6
 124  1 240  XR     B     GETSR                                       4  1383  B ?08                6
 125  1 250         C     SX,@*09@                                    7  1387  C E51 E71            6
 126  2 010         BU    DIOG21                                      5  1394  B D44 /              6
 127  2 020         B     GETSX                                       4  1399  B O76                6
 128  2 030         SBR   EXRB&3,RECORD                               7  1403  H O55 V40            6
 129  2 040         SBR   YZ1&3                                       4  1410  H W66                6
 130  2 050         SBR   YZ2&3                                       4  1414  H W81                7
 131  2 060         SBR   DEXRB&3                                     4  1418  H O70                7
 132  2 070         B     RECORD                                      4  1422  B V40                7
 133  2 080  WRK    BCE   DIOG22,WRKSW,1                             8  1426  B D55 E30 1          7
 134  2 090         A     @1@,WRKSW                                   7  1434  A E68 E30            7
 135  2 100         B     XR                                          4  1441  B T83                7
 136  2 110  FILE   B     GETSX                                       4  1445  B O76                7
 137  2 120  FILE1  MLC   SX,HOLDS                                    7  1449  M E51 E48            8
 138  2 130         C     SX,@/26@                                    7  1456  C E51 E74            8
 139  2 140         BE    FD                                          5  1463  B W87 S              8
 140  2 150         C     SX,@/06@                                    7  1468  C E51 E77            8
 141  2 160         BE    RECNG                                       5  1475  B J36 S              8
 142  2 170         C     SX,@/16@                                    7  1480  C E51 E80            8
 143  2 180         BE    BLOCK                                       5  1487  B J82 S              9
 144  2 190         C     SX,@/11@                                    7  1492  C E51 E83            9
 145  2 200         BE    RECORS                                      5  1499  B K84 S              9
 146  2 210         C     SX,@/19@                                    7  1504  C E51 E86            9
 147  2 220         BE    LABEL                                       5  1511  B L19 S              9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         C     SX,@/13@                                     7  1516  C E51 E89           9
149  2 240         BE    VALUE                                        5  1523  B M62 S            10
150  2 250         C     SX,@/24@                                     7  1528  C E51 E92          10
151  3 010         BE    DATA                                         5  1535  B N93 S            10
152  3 020  RECORD MLC   SX,HOLDS                                     7  1540  M E51 E48          10
153  3 030         C     SX,@/10@                                     7  1547  C E51 E95          10
154  3 040         BE    XA                                           5  1554  B D81 S            10
155  3 050         C     SX,@/05@                                     7  1559  C E51 E98          11
156  3 060         BE    XA                                           5  1566  B D81 S            11
157  3 070         C     SX,@/14@                                     7  1571  C E51 F01          11
158  3 080         BE    XA                                           5  1578  B D81 S            11
159  3 090         C     SX,@/18@                                     7  1583  C E51 F04          11
160  3 100         BE    XA                                           5  1590  B D81 S            11
161  3 110         C     SX,@/23@                                     7  1595  C E51 F07          12
162  3 120         BE    XA                                           5  1602  B D81 S            12
163  3 130         C     SX,@)12@                                     7  1607  C E51 F10          12
164  3 140         BE    XA                                           5  1614  B D81 S            12
165  3 150         C     SX,@/07@                                     7  1619  C E51 F13          12
166  3 160         BE    XAA                                          5  1626  B D77 S            12
167  3 170         C     SX,@/12@                                     7  1631  C E51 F16          13
168  3 180         BE    XA                                           5  1638  B D81 S            13
169  3 190         C     SX,@/13@                                     7  1643  C E51 E89          13
170  3 200         BE    VALUE1                                       5  1650  B L74 S            13
171  3 210         B     CONTIN                                       4  1655  B M89              13
172  3 220  YZ     B     GETSX                                        4  1659  B O76              13
173  3 230  YZ1    BCE   FILE1,SX-2,/                                8  1663  B U49 E49 /        14
174  3 240         C     SX,@)12@                                     7  1671  C E51 F10          14
175  3 250  YZ2    BE    FILE1                                        5  1678  B U49 S            14
176  4 010         B     DIOG7                                        4  1683  B Y30              14
177  4 020  FD     B     GETSR                                        4  1687  B ?08              14
178  4 030         MLC   @FD@,SAVE1                                  7  1691  M F18 E45          14
179  4 040         ZA    &0,SWCLR                                     7  1698  ? F19 E28          15
180  4 050         CW    SWX                                          4  1705  ) E31              15
181  4 060         C     SX,@.NM@                                     7  1709  C E51 F22          15
182  4 070         B     SXB1                                         4  1716  B E09              15
183  4 080  DIOG   SBR   ME&3,DIGG                                    7  1720  H X58 X59          15
184  4 090         B     PUTX                                         4  1727  B 363              15
185  4 100         DCW   &@.DZ@                                      3  1733  F25                15
186  4 110  DIG7   B     PUTX                                         4  1734  B 363              16
187  4 120         DCW   CARD1-3                                     3  1740  E40                16
188  4 130         B     PUTX                                         4  1741  B 363              16
189  4 140         DCW   CARD1                                      3  1747  E43                16
190  4 150         B     PUTX                                         4  1748  B 363              16
191  4 160         DCW   HOLDS                                      3  1754  E48                16
192  4 170  ME     B     *                                            4  1755  B X58              16
193  4 180  DIGG   B     GETSR                                        4  1759  B ?08              17
194  4 190  DIGGZ  MLC   @N@,LXR1                                    7  1763  M F26 C38          17
195  4 200         BW    ERR0,SRA                                     8  1770  V Y55 E52 1        17
196  4 210         C     SX,@.PD@                                     7  1778  C E51 E58          17
197  4 220         BE    POD1                                         5  1785  B A65 S            17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  SPDG    B     GETSR                                      4  1790  B ?08               17
199  4 240          BCE   YZ1,SX-2,/                                 8  1794  B W63 E49 /         18
200  4 250          C     SX,@)12@                                   7  1802  C E51 F10           18
201  5 010          BE    YZ1                                        5  1809  B W63 S             18
202  5 020          C     SX,@*01@                                   7  1814  C E51 F29           18
203  5 030          BE    DONE1                                      5  1821  B C89 S             18
204  5 040          B     DIGG                                       4  1826  B X59               18
205  5 050  DIOG7   MLC   @B5O@,HOLDS                               7  1830  M F32 E48           19
206  5 060  DIOGG   SBR   ME&3,SPDG                                 7  1837  H X58 X90           19
207  5 070  DIOGX   B     PUTX                                       4  1844  B 363               19
208  5 080          DCW   &@.DM@                                    3  1850  F35                 19
209  5 090          B     DIG7                                       4  1851  B X34               19
210  5 100  ERR0    CW    SRA                                        4  1855  ) E52               19
211  5 110          B     GETSR                                      4  1859  B ?08               19
212  5 120          C     SX,@/01@                                   7  1863  C E51 E64           20
213  5 130          BE    WRK                                        5  1870  B U26 S             20
214  5 140          C     SX,@*01@                                   7  1875  C E51 F29           20
215  5 150          BE    DONE1                                      5  1882  B C89 S             20
216  5 160          C     SX,@*29@                                   7  1887  C E51 E61           20
217  5 170          BE    FILEX                                      5  1894  B !49 S             20
218  5 180          C     SX,@/09@                                   7  1899  C E51 E67           21
219  5 190          BE    XR12                                       5  1906  B T68 S             21
220  5 200          B     ERR0                                       4  1911  B Y55               21
221  5 210  DIOG8   MLC   @B4A@,HOLDS                               7  1915  M F38 E48           21
222  5 220          B     DIOGG                                      4  1922  B Y37               21
223  5 230  EOP     SW    1001                                       4  1926  , |01               21
224  5 240          B     SUPER                                      4  1930  B 351               21
225  5 250          DCW   @BD6@                                    3  1936                      22
226  6 010  DIOG9   MLC   @B4B@,HOLDS                               7  1937  M F41 E48           22
227  6 020          B     DIOGG                                      4  1944  B Y37               22
228  6 030  DIOG10  MLC   @B4C@,HOLDS                               7  1948  M F44 E48           22
229  6 040          B     DIOGG                                      4  1955  B Y37               22
230  6 050  DIOG11  SBR   ME&3                                      4  1959  H X58               22
231  6 060          MLC   @B4D@,HOLDS                               7  1963  M F47 E48           22
232  6 070          B     DIOGG1                                     4  1970  B J71               23
233  6 080  DIOG12  SBR   ME&3                                      4  1974  H X58               23
234  6 090          MLC   @B4E@,HOLDS                               7  1978  M F50 E48           23
235  6 100          B     DIOGG1                                     4  1985  B J71               23
236  6 110  DIOG13  SBR   ME&3                                      4  1989  H X58               23
237  6 120          MLC   @B4F@,HOLDS                               7  1993  M F53 E48           23
238  6 130          B     DIOGG1                                     4  2000  B J71               23
239  6 140  DIOG14  SBR   ME&3                                      4  2004  H X58               24
240  6 150          MLC   @B4G@,HOLDS                               7  2008  M F56 E48           24
241  6 160          B     DIOGG1                                     4  2015  B J71               24
242  6 170  DIOG15  SBR   ME&3                                      4  2019  H X58               24
243  6 180          MLC   @B4H@,HOLDS                               7  2023  M F59 E48           24
244  6 190          B     DIOGG1                                     4  2030  B J71               24
245  6 200  DIOG16  SBR   ME&3                                      4  2034  H X58               24
246  6 210          MLC   @B4I@,HOLDS                               7  2038  M F62 E48           25
247  6 220          B     DIOGG1                                     4  2045  B J71               25
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  FILEX  B     GETSR                                      4  2049  B ?08               25
249  6 240         C     SX,@*09@                                   7  2053  C E51 E71           25
250  6 250         BU    DIOG21                                     5  2060  B D44 /             25
251  7 010         BCE   DIOG8,WRKSW,1                             8  2065  B Z15 E30 1         25
252  7 020         BCE   DIOG9,CONSW,1                            8  2073  B Z37 E29 1         26
253  7 030         SBR   DEXRB&3,FILE1                            7  2081  H O70 U49           26
254  7 040         SBR   YZ2&3                                    4  2088  H W81               26
255  7 050         SBR   EXRB&3                                   4  2092  H O55               26
256  7 060         SBR   YZ1&3                                    4  2096  H W66               26
257  7 070         B     GETSR                                    4  2100  B ?08               26
258  7 080         C     SX,@.PD@                                 7  2104  C E51 E58           26
259  7 090         BU    DIOG18                                   5  2111  B D07 /             27
260  7 100         B     GETSR                                    4  2116  B ?08               27
261  7 110         C     SX,@/26@                                 7  2120  C E51 E74           27
262  7 120         BU    DIOG23                                   5  2127  B D66 /             27
263  7 130         B     FD                                       4  2132  B W87               27
264  7 140  RECNG  B     GETSR                                    4  2136  B ?08               27
265  7 150         A     @1@,RESW                                 7  2140  A E68 E25           27
266  7 160         B     GETSR                                    4  2147  B ?08               28
267  7 170         C     SX,@1  @                                 7  2151  C E51 F65           28
268  7 180         BU    DIOG10                                   5  2158  B Z48 /             28
269  7 190         B     GETSR                                    4  2163  B ?08               28
270  7 200         B     YZ                                       4  2167  B W59               28
271  7 210  DIOGG1 MLC   @B@,LXR1                                 7  2171  M F66 C38           28
272  7 220         B     DIOGX                                    4  2178  B Y44               28
273  7 230  BLOCK  B     GETSR                                    4  2182  B ?08               29
274  7 240         C     SX,@.NL@                                 7  2186  C E51 F69           29
275  7 250         BU    DIOG                                     5  2193  B X20 /             29
276  8 010         A     @1@,BLOCKS                               7  2198  A E68 E26           29
277  8 020         B     SKIP                                     4  2205  B C46               29
278  8 030         B     GETSX                                    4  2209  B O76               29
279  8 040         C     SX,@/11@                                 7  2213  C E51 E83           29
280  8 050         BU    YZ1                                      5  2220  B W63 /             30
281  8 060         B     GETSX                                    4  2225  B O76               30
282  8 070         MLC   SX,HOLDS                                 7  2229  M E51 E48           30
283  8 080         C     SX,@/19@                                 7  2236  C E51 E86           30
284  8 090         BE    LABEL                                    5  2243  B L19 S             30
285  8 100         C     SX,@/24@                                 7  2248  C E51 E92           30
286  8 110         BE    DATA                                     5  2255  B N93 S             31
287  8 120         C     SX,@/06@                                 7  2260  C E51 E77           31
288  8 130         BE    RECNG                                    5  2267  B J36 S             31
289  8 140         C     SX,@/11@                                 7  2272  C E51 E83           31
290  8 150         BU    RECOR2                                   5  2279  B K95 /             31
291  8 160  RECORS B     GETSR                                    4  2284  B ?08               31
292  8 170         A     @1@,RECSW                                7  2288  A E68 E27           32
293  8 180  RECOR2 C     SX,@.NL@                                 7  2295  C E51 F69           32
294  8 190         BU    DIOG                                     5  2302  B X20 /             32
295  8 200         B     SKIP                                     4  2307  B C46               32
296  8 210         B     PAUSE                                    4  2311  B O44               32
297  8 220         B     RECOR2                                   4  2315  B K95               32
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
298	8	230	LABEL	B	GETSR		4	2319	B ?08	32
299	8	240		A	@1@,LABSW		7	2323	A E68 E24	33
300	8	250		C	SX,@/11@		7	2330	C E51 E83	33
301	9	010		BU	DIOG		5	2337	B X20 /	33
302	9	020		B	GETSR		4	2342	B ?08	33
303	9	030		C	SX,@/08@		7	2346	C E51 F72	33
304	9	040		BE	YZ		5	2353	B W59 S	33
305	9	050		C	SX,@*14@		7	2358	C E51 F75	34
306	9	060		BU	DIOG		5	2365	B X20 /	34
307	9	070		B	YZ		4	2370	B W59	34
308	9	080	VALUE1	B	GETSR		4	2374	B ?08	34
309	9	090	VALUE2	C	SX-1,@$0@		7	2378	C E50 F77	34
310	9	100		BE	YZ		5	2385	B W59 S	34
311	9	110		C	SX,@$40@		7	2390	C E51 F80	34
312	9	120		BE	VALUE1		5	2397	B L74 S	35
313	9	130		C	SX,@.NL@		7	2402	C E51 F69	35
314	9	140		BE	AK1		5	2409	B M26 S	35
315	9	150		C	SX,@ @@		7	2414	C E51 F83	35
316	9	160		BU	DIOG		5	2421	B X20 /	35
317	9	170	AK1	B	SKIP		4	2426	B C46	35
318	9	180		B	PAUSE		4	2430	B O44	35
319	9	190		C	SX,@.NL@		7	2434	C E51 F69	36
320	9	200		BE	AK1		5	2441	B M26 S	36
321	9	210		C	SX,@*08@		7	2446	C E51 F86	36
322	9	220		BU	DIOG		5	2453	B X20 /	36
323	9	230		B	VALUE1		4	2458	B L74	36
324	9	240	VALUE	B	GETSR		4	2462	B ?08	36
325	9	250		C	SX,@*32@		7	2466	C E51 F89	36
326	10	010		BU	VALUE2		5	2473	B L78 /	37
327	10	020		A	@1@,VALSW		7	2478	A E68 E28	37
328	10	030		B	GETSR		4	2485	B ?08	37
329	10	040	CONTIN	C	SX,@/32@		7	2489	C E51 F92	37
330	10	050		BE	NUML		5	2496	B N49 S	37
331	10	060		C	SX,@/30@		7	2501	C E51 F95	37
332	10	070		BE	NUML		5	2508	B N49 S	38
333	10	080		C	SX,@/31@		7	2513	C E51 F98	38
334	10	090		BE	NUML		5	2520	B N49 S	38
335	10	100		C	SX,@/25@		7	2525	C E51 G01	38
336	10	110		BE	ALPHA		5	2532	B N73 S	38
337	10	120		C	SX,@/02@		7	2537	C E51 G04	38
338	10	130		BU	DIOG7		5	2544	B Y30 /	39
339	10	140	NUML	B	GETSR		4	2549	B ?08	39
340	10	150	NMN	C	SX,@.NL@		7	2553	C E51 F69	39
341	10	160	NUML1	BU	DIOG		5	2560	B X20 /	39
342	10	170	NMM	B	SKIP		4	2565	B C46	39
343	10	180		B	FILE		4	2569	B U45	39
344	10	190	ALPHA	B	GETSR		4	2573	B ?08	39
345	10	200		C	SX,@ @@		7	2577	C E51 F83	40
346	10	210		BE	NMM		5	2584	B N65 S	40
347	10	220		B	NMN		4	2589	B N53	40

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  DATA    B     GETSR                                      4  2593  B ?08               40
349 10 240          A     @1@,DATAS                                  7  2597  A E68 E23           40
350 10 250          C     SX,@/11@                                   7  2604  C E51 E83           40
351 11 010          BU    DIOG                                       5  2611  B X20 /             40
352 11 020          B     GETSR                                      4  2616  B ?08               41
353 11 030  DATA1   C     SX,@.NM@                                   7  2620  C E51 F22           41
354 11 040          BU    DIOG                                       5  2627  B X20 /             41
355 11 050          B     SKIP                                       4  2632  B C46               41
356 11 060          B     PAUSE                                      4  2636  B O44               41
357 11 070          B     DATA1                                      4  2640  B O20               41
358 11 080  PAUSE   SBR   EXIT1&3                                   4  2644  H O75               41
359 11 090          B     GETSX                                      4  2648  B O76               42
360 11 100  EXRB    BCE   FILE1,SX-2,/                             8  2652  B U49 E49 /         42
361 11 110          C     SX,@)12@                                   7  2660  C E51 F10           42
362 11 120  DEXRB   BE    FILE1                                      5  2667  B U49 S             42
363 11 130  EXIT1   B     *                                          4  2672  B O75               42
364 11 140  GETSX   SBR   EXTK&3                                    4  2676  H Q76               42
365 11 150  GETSX1  B     GETX                                       4  2680  B 335               42
366 11 160          DCW   SX                                         3  2686  E51                 43
367 11 170          DCW   EOP                                        3  2689  Z26                 43
368 11 180          B     PUTX                                       4  2690  B 363               43
369 11 190          DCW   SX                                         3  2696  E51                 43
370 11 200  GETSX2  C     SX,@.DG@                                   7  2697  C E51 G07           43
371 11 210          BU    GRB1                                       5  2704  B P17 /             43
372 11 220          B     GETSR1                                     4  2709  B B25               43
373 11 230          B     GETSR1                                     4  2713  B B25               44
374 11 240  GRB1    C     SX,@.CD@                                   7  2717  C E51 G10           44
375 11 250          BE    CARD                                       5  2724  B A17 S             44
376 12 010          C     SX,@/03@                                   7  2729  C E51 G13           44
377 12 020          BE    GETSX1                                     5  2736  B O80 S             44
378 12 030          C     SX,@/22@                                   7  2741  C E51 G16           44
379 12 040          BE    GETSX1                                     5  2748  B O80 S             45
380 12 050          C     SX,@$08@                                   7  2753  C E51 G19           45
381 12 060          BE    GETSX1                                     5  2760  B O80 S             45
382 12 070          C     SX,@/04@                                   7  2765  C E51 G22           45
383 12 080          BE    GETSX1                                     5  2772  B O80 S             45
384 12 090          C     SX,@/21@                                   7  2777  C E51 G25           45
385 12 100          BE    GETSX1                                     5  2784  B O80 S             46
386 12 110          C     SX,@/20@                                   7  2789  C E51 G28           46
387 12 120          BE    GETSX1                                     5  2796  B O80 S             46
388 12 130          C     SX,@$10@                                   7  2801  C E51 G31           46
389 12 140          BE    GETSX1                                     5  2808  B O80 S             46
390 12 150          C     SX,@$16@                                   7  2813  C E51 G34           46
391 12 160          BE    GETSX1                                     5  2820  B O80 S             47
392 12 170          C     SX,@.PD@                                   7  2825  C E51 E58           47
393 12 180          BE    PERIOD                                     5  2832  B Q77 S             47
394 12 190  EXIT7   C     SX,@*01@                                   7  2837  C E51 F29           47
395 12 200          BE    DONE1                                      5  2844  B C89 S             47
396 12 210          C     SX,@/01@                                   7  2849  C E51 E64           47
397 12 220          BE    WORK                                       5  2856  B C77 S             48
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230         C     SX,@/09@                                   7  2861  C E51 E67           48
399 12 240         BE    XR12                                       5  2868  B T68 S             48
400 12 250  EXTK   B     *                                          4  2873  B Q76               48
401 13 010  PERIOD B     GETSR1                                     4  2877  B B25               48
402 13 020         C     SX,@.DG@                                   7  2881  C E51 G07           48
403 13 030         BU    PERD                                       5  2888  B R01 /             48
404 13 040         B     GETSR1                                     4  2893  B B25               49
405 13 050         B     GETSR1                                     4  2897  B B25               49
406 13 060  PERD   C     SX,@.CD@                                   7  2901  C E51 G10           49
407 13 070         BU    CHECKS                                     5  2908  B ?65 /             49
408 13 080         B     CARD                                       4  2913  B A17               49
409 13 090         C     SX,@.NL@                                   7  2917  C E51 F69           49
410 13 100         BU    CHECKS                                     5  2924  B ?65 /             49
411 13 110         B     GETSR1                                     4  2929  B B25               50
412 13 120         C     SX,@01 @                                   7  2933  C E51 G37           50
413 13 130         BE    L01                                        5  2940  B B50 S             50
414 13 140  LV1    MLC   @  @,SAVE1                                 7  2945  M G39 E45           50
415 13 150         B     GETSR                                      4  2952  B ?08               50
416 13 160         B     GETSR                                      4  2956  B ?08               50
417 13 170         C     SX,@/23@                                   7  2960  C E51 F07           50
418 13 180         BE    GETSX1                                     5  2967  B O80 S             51
419 13 190         C     SX,@.NM@                                   7  2972  C E51 F22           51
420 13 200         BU    DIOG23                                     5  2979  B D66 /             51
421 13 210         B     SKIP                                       4  2984  B C46               51
422 13 220         B     GETSR1                                     4  2988  B B25               51
423 13 230         C     SX,@.CD@                                   7  2992  C E51 G10           51
424 13 240         BE    DIOG18                                     5  2999  B D07 S             51
425 13 250         B     GETSX2                                     4  3004  B O97               52
426 14 010  GETSR  SBR   EXIT8&3                                    4  3008  H ?64               52
427 14 020  GETP   B     GETX                                       4  3012  B 335               52
428 14 030         DCW   SX                                         3  3018  E51                 52
429 14 040         DCW   EOP                                        3  3021  Z26                 52
430 14 050         B     PUTX                                       4  3022  B 363               52
431 14 060         DCW   SX                                         3  3028  E51                 52
432 14 070         C     SX,@.DG@                                   7  3029  C E51 G07           53
433 14 080         BU    XXX8                                       5  3036  B ?49 /             53
434 14 090         B     GETSR1                                     4  3041  B B25               53
435 14 100         B     GETSR1                                     4  3045  B B25               53
436 14 110  XXX8   C     SX,@.CD@                                   7  3049  C E51 G10           53
437 14 120         BE    CARD                                       5  3056  B A17 S             53
438 14 130  EXIT8  B     *                                          4  3061  B ?64               53
439 14 140  CHECKS C     SX,@*01@                                   7  3065  C E51 F29           54
440 14 150         BE    EXIT7                                      5  3072  B Q37 S             54
441 14 160         C     SX,@/01@                                   7  3077  C E51 E64           54
442 14 170         BE    EXIT7                                      5  3084  B Q37 S             54
443 14 180         C     SX,@/26@                                   7  3089  C E51 E74           54
444 14 190         BE    EXIT7                                      5  3096  B Q37 S             54
445 14 200         C     SX,@/09@                                   7  3101  C E51 E67           55
446 14 210         BU    DIOG7                                      5  3108  B Y30 /             55
447 14 220         B     EXIT7                                      4  3113  B Q37               55
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  CARD    SBR   EXIT7A&3                                   4  3117  H A64              55
449 14 240          MLC   EXIT8&3,KEEPS                              7  3121  M ?64 E37          55
450 14 250          B     GETSR                                      4  3128  B ?08              55
451 15 010          MLC   SX,CARD1-3                                 7  3132  M E51 E40          55
452 15 020          B     GETSR                                      4  3139  B ?08              56
453 15 030          MLC   SX,CARD1                                   7  3143  M E51 E43          56
454 15 040          B     GETSR                                      4  3150  B ?08              56
455 15 050          MLC   KEEPS,EXIT8&3                             7  3154  M E37 ?64          56
456 15 060  EXIT7A  B     *                                          4  3161  B A64              56
457 15 070  POD1    B     GETSR1                                     4  3165  B B25              56
458 15 080          C     SX,@.DG@                                   7  3169  C E51 G07          56
459 15 090          BU    POD3                                       5  3176  B A89 /            57
460 15 100          B     GETSR1                                     4  3181  B B25              57
461 15 110          B     GETSR1                                     4  3185  B B25              57
462 15 120  POD3    C     SX,@.CD@                                   7  3189  C E51 G10          57
463 15 130          BU    DIGGZ                                      5  3196  B X63 /            57
464 15 140          B     CARD                                       4  3201  B A17              57
465 15 150          C     SX,@.NL@                                   7  3205  C E51 F69          57
466 15 160          BU    DIGGZ                                      5  3212  B X63 /            58
467 15 170          B     GETSR1                                     4  3217  B B25              58
468 15 180          B     LV1                                        4  3221  B R45              58
469 15 190  GETSR1  SBR   DXRB&3                                    4  3225  H B49              58
470 15 200          B     GETX                                       4  3229  B 335              58
471 15 210          DCW   SX                                         3  3235  E51                58
472 15 220          DCW   EOP                                        3  3238  Z26                58
473 15 230          B     PUTX                                       4  3239  B 363              59
474 15 240          DCW   SX                                         3  3245  E51                59
475 15 250  DXRB    B     *                                          4  3246  B B49              59
476 16 010  L01     BW    LV1,SWX                                    8  3250  V R45 E31 1        59
477 16 020          SW    SWX                                        4  3258  , E31              59
478 16 030          C     SAVE1,@FD@                                 7  3262  C E45 F18          59
479 16 040          BU    LV1                                        5  3269  B R45 /            59
480 16 050          BCE   DIOG11,DATAS,0                            8  3274  B Z59 E23 0        60
481 16 060          BCE   DIOG12,LABSW,0                            8  3282  B Z74 E24 0        60
482 16 070          C     RESW,@1@                                   7  3290  C E25 E68          60
483 16 080          BL    DIOG13                                     5  3297  B Z89 T            60
484 16 090          C     BLOCKS,@1@                                 7  3302  C E26 E68          60
485 16 100          BL    DIOG14                                     5  3309  B !04 T            61
486 16 110          C     RECSW,@1@                                  7  3314  C E27 E68          61
487 16 120          BL    DIOG15                                     5  3321  B !19 T            61
488 16 130          C     VALSW,@1@                                  7  3326  C E28 E68          61
489 16 140          BL    DIOG16                                     5  3333  B !34 T            61
490 16 150  LXR1    NOP   DIGG                                       4  3338  N X59              61
491 16 160          B     LV1                                        4  3342  B R45              61
492 16 170  SKIP    SBR   SKIPEX&3                                  4  3346  H C76              62
493 16 180          MLC   SX,TEMP                                   7  3350  M E51 E34          62
494 16 190  SKIP1   B     GETSR                                      4  3357  B ?08              62
495 16 200          C     SX,TEMP                                    7  3361  C E51 E34          62
496 16 210          BU    SKIP1                                      5  3368  B C57 /            62
497 16 220  SKIPEX  B     *                                          4  3373  B C76              62
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  WORK    BCE   DIOG9,CONSW,1                             8  3377  B Z37 E29 1         62
499 16 240          B     XR                                        4  3385  B T83               63
500 16 250  DONE1   B     SUPER                                     4  3389  B 351               63
501 17 010          DCW   @BD3@                                     3  3395                      63
502 17 020  DIOG17  MLC   @B5Q@,HOLDS                               7  3396  M G42 E48           63
503 17 030          B     DIOGG                                     4  3403  B Y37               63
504 17 040  DIOG18  MLC   @B5J@,HOLDS                               7  3407  M G45 E48           63
505 17 050          B     DIOGG                                     4  3414  B Y37               63
506 17 060  DIOG19  MLC   @B5K@,HOLDS                               7  3418  M G48 E48           64
507 17 070          SW    SRA                                       4  3425  , E52               64
508 17 080          B     DIOGG                                     4  3429  B Y37               64
509 17 090  DIOG20  MLC   @B5L@,HOLDS                               7  3433  M G51 E48           64
510 17 100          B     DIOGG                                     4  3440  B Y37               64
511 17 110  DIOG21  MLC   @B5P@,HOLDS                               7  3444  M G54 E48           64
512 17 120          B     DIOGG                                     4  3451  B Y37               64
513 17 130  DIOG22  MLC   @B5M@,HOLDS                               7  3455  M G57 E48           65
514 17 140          B     DIOGG                                     4  3462  B Y37               65
515 17 150  DIOG23  MLC   @B5N@,HOLDS                               7  3466  M G60 E48           65
516 17 160          B     DIOGG                                     4  3473  B Y37               65
517 17 170  XAA     B     GETSX                                     4  3477  B O76               65
518 17 180  XA      B     GETSX                                     4  3481  B O76               65
519 17 190          BCE   YZ1,SX-2,/                                8  3485  B W63 E49 /         65
520 17 200          C     SX,@)12@                                  7  3493  C E51 F10           66
521 17 210          BE    YZ1                                       5  3500  B W63 S             66
522 17 220          B     XA                                        4  3505  B D81               66
523 17 230  SXB1    BU    DIOG                                      5  3509  B X20 /             66
524 17 240          B     SKIP                                      4  3514  B C46               66
525 17 250          B     YZ                                        4  3518  B W59               66
526 18 010          DCW   #1                                       1  3522                      66
527 18 020  DATAS   DC    #1                                       1  3523                      67
528 18 030  LABSW   DC    #1                                       1  3524                      67
529 18 040  RESW    DC    #1                                       1  3525                      67
530 18 050  BLOCKS  DC    #1                                       1  3526                      67
531 18 060  RECSW   DC    #1                                       1  3527                      67
532 18 070  VALSW   DC    #1                                       1  3528                      67
533 18 080  SWCLR   EQU   *                                          3528
534 18 090  CONSW   DCW   #1                                       1  3529                      67
535 18 100  WRKSW   DCW   #1                                       1  3530                      67
536 18 110  SWX     DC    #1                                       1  3531                      67
537 18 120  TEMP    DCW   #3                                       3  3534                      67
538 18 130  KEEPS   DCW   #3                                       3  3537                      67
539 18 140  CARD1   DCW   #6                                       6  3543                      68
540 18 150  SAVE1   DCW   #2                                       2  3545                      68
541 18 160  HOLDS   DCW   #3                                       3  3548                      68
542 18 170  SX      DCW   #3                                       3  3551                      68
543 18 180  SRA     DC    #1                                       1  3552                      68
544 18 190          LTORG                                                 3553
                    DCW   @*06@                                    3  3555            LIT     68
                          @.PD@                                    3  3558            LIT     68
                          @*29@                                    3  3561            LIT     68
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
					@/01@	3	3564	LIT	69
					@/09@	3	3567	LIT	69
					@1@	1	3568	LIT	69
					@*09@	3	3571	LIT	69
					@/26@	3	3574	LIT	69
					@/06@	3	3577	LIT	69
					@/16@	3	3580	LIT	69
					@/11@	3	3583	LIT	70
					@/19@	3	3586	LIT	70
					@/13@	3	3589	LIT	70
					@/24@	3	3592	LIT	70
					@/10@	3	3595	LIT	70
					@/05@	3	3598	LIT	70
					@/14@	3	3601	LIT	70
					@/18@	3	3604	LIT	71
					@/23@	3	3607	LIT	71
					@)12@	3	3610	LIT	71
					@/07@	3	3613	LIT	71
					@/12@	3	3616	LIT	71
					@FD@	2	3618	LIT	71
					&0	1	3619	LIT	71
					@.NM@	3	3622	LIT	72
					@.DZ@	3	3625	LIT	72
					@N@	1	3626	LIT	72
					@*01@	3	3629	LIT	72
					@B5O@	3	3632	LIT	72
					@.DM@	3	3635	LIT	72
					@B4A@	3	3638	LIT	72
					@B4B@	3	3641	LIT	73
					@B4C@	3	3644	LIT	73
					@B4D@	3	3647	LIT	73
					@B4E@	3	3650	LIT	73
					@B4F@	3	3653	LIT	73
					@B4G@	3	3656	LIT	73
					@B4H@	3	3659	LIT	73
					@B4I@	3	3662	LIT	74
					@1 @	3	3665	LIT	74
					@B@	1	3666	LIT	74
					@.NL@	3	3669	LIT	74
					@/08@	3	3672	LIT	74
					@*14@	3	3675	LIT	74
					@$0@	2	3677	LIT	74
					@$40@	3	3680	LIT	75
					@ @@	3	3683	LIT	75
					@*08@	3	3686	LIT	75
					@*32@	3	3689	LIT	75
					@/32@	3	3692	LIT	75
					@/30@	3	3695	LIT	75
					@/31@	3	3698	LIT	75
					@/25@	3	3701	LIT	76

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                       @/02@                                          3  3704              LIT     76
                       @.DG@                                          3  3707              LIT     76
                       @.CD@                                          3  3710              LIT     76
                       @/03@                                          3  3713              LIT     76
                       @/22@                                          3  3716              LIT     76
                       @$08@                                          3  3719              LIT     76
                       @/04@                                          3  3722              LIT     77
                       @/21@                                          3  3725              LIT     77
                       @/20@                                          3  3728              LIT     77
                       @$10@                                          3  3731              LIT     77
                       @$16@                                          3  3734              LIT     77
                       @01 @                                          3  3737              LIT     77
                       @  @                                           2  3739              LIT     77
                       @B5Q@                                          3  3742              LIT     78
                       @B5J@                                          3  3745              LIT     78
                       @B5K@                                          3  3748              LIT     78
                       @B5L@                                          3  3751              LIT     78
                       @B5P@                                          3  3754              LIT     78
                       @B5M@                                          3  3757              LIT     78
                       @B5N@                                          3  3760              LIT     78
 545 18 200          ORG                                                      3761
 546 18 210          DCW   @}@                                        1  3761                      79
 547 18 220          END                                                    / 000 080             80
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - BD3 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BD3						
102	1	020		CTL	661111						
103	1	030		ORG	1300				1300		
104	1	040	X1	EQU	89			0089			
105	1	050	X2	EQU	94			0094			
106	1	060	X3	EQU	99			0099			
107	1	070	GETX	EQU	335			0335			
108	1	080	PUTX	EQU	363			0363			
109	1	090	SUPER	EQU	351			0351			
110	1	100		B	GETSR		4	1300	B Q31		4
111	1	110		C	SX,@*06@		7	1304	C B73 B89		4
112	1	120		BU	DIOG1		5	1311	B W51 /		4
113	1	130		B	GETSR		4	1316	B Q31		4
114	1	140		C	SX,@.PD@		7	1320	C B73 B92		4
115	1	150		BU	DIOG2		5	1327	B W62 /		4
116	1	160	D0D	B	GETSX		4	1332	B L32		4
117	1	170		BCE	VERB,SX-2,)		8	1336	B T48 B71)		5
118	1	180		B	DIOG3		4	1344	B W73		5
119	1	190	VERB	MLC	SX,SAVE		7	1348	M B73 B67		5
120	1	200		MLC	@B@,GETS8		7	1355	M B93 M88		5
121	1	210		MLC	@B@,GETS7		7	1362	M B93 L65		5
122	1	220		MLC	@B@,PRA		7	1369	M B93 L60		6
123	1	230		MLC	&BEGIN,X2		7	1376	M B96 094		6
124	1	240	RETURN	BCE	TEND,0&X2,$		8	1383	B Y66 0!0 $		6
125	1	250		MLC	0&X2,0&X2		7	1391	M 0!0 0!0		6
126	2	010		SBR	X2		4	1398	H 094		6
127	2	020		C	3&X2,SX		7	1402	C 0!3 B73		7
128	2	030		BU	RETURN		5	1409	B T83 /		7
129	2	040		A	@4@,X2		7	1414	A B97 094		7
130	2	050		MLC	X2,HOLD		7	1421	M 094 B55		7
131	2	060	A	B	GETSX		4	1428	B L32		7
132	2	070	A1	BCE	ALPLIT,0&X2,X		8	1432	B J94 0!0 X		7
133	2	080		BCE	NAME,0&X2,N		8	1440	B J01 0!0 N		8
134	2	090		BCE	PAUSE,2&X2,,		8	1448	B Z11 0!2 ,		8
135	2	100		BCE	DONE,2&X2,.		8	1456	B Z22 0!2 .		8
136	2	110		BCE	INCL,0&X2,*		8	1464	B ?43 0!0 *		8
137	2	120		BCE	REP,0&X2,R		8	1472	B ?10 0!0 R		9
138	2	130		BCE	ALPH,0&X2,A		8	1480	B X06 0!0 A		9
139	2	140	DET	BCE	READ,2&X2,0		8	1488	B Z84 0!2 0		9
140	2	150		BCE	WRITE,2&X2,1		8	1496	B !41 0!2 1		9
141	2	160		BCE	OPEN,2&X2,3		8	1504	B W16 0!2 3		10
142	2	170		C	TEMP,@.NM@		7	1512	C B86 C00		10
143	2	180		BU	DET2		5	1519	B V96 /		10
144	2	190		C	SX,@*16@		7	1524	C B73 C03		10
145	2	200		BU	DET7		5	1531	B V60 /		10
146	2	210	DET3	B	GETSX		4	1536	B L32		10
147	2	220		C	SX,@.NM@		7	1540	C B73 C00		11

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         BU    DIOG                                         5  1547  B Q78 /             11
149  2 240         B     SKIP                                         4  1552  B R56               11
150  2 250         B     PAUSE1                                       4  1556  B Z44               11
151  3 010  DET7   C     SX,@*10@                                     7  1560  C B73 C06           11
152  3 020         BE    DET4                                         5  1567  B V88 S             11
153  3 030  DET6   C     SX,@/10@                                     7  1572  C B73 C09           11
154  3 040         BE    DONE1                                        5  1579  B Z33 S             12
155  3 050         B     OUTPUT                                       4  1584  B Z76               12
156  3 060  DET4   B     PAUSE1                                       4  1588  B Z44               12
157  3 070         B     DET6                                         4  1592  B V72               12
158  3 080  DET2   B     PAUSK                                        4  1596  B Z03               12
159  3 090         C     SX,@*16@                                     7  1600  C B73 C03           12
160  3 100         BU    DIOG                                         5  1607  B Q78 /             12
161  3 110         B     DET3                                         4  1612  B V36               13
162  3 120  OPEN   C     SX,@*20@                                     7  1616  C B73 C12           13
163  3 130         BE    OPEN1                                        5  1623  B W40 S             13
164  3 140         C     SX,@*15@                                     7  1628  C B73 C15           13
165  3 150         BU    DIOG                                         5  1635  B Q78 /             13
166  3 160  OPEN1  A     @3@,X2                                       7  1640  A C16 094           13
167  3 170         B     A                                            4  1647  B U28               13
168  3 180  DIOG1  MLC   @B0D@,SAVE                                   7  1651  M C19 B67           14
169  3 190         B     DGG7                                         4  1658  B W95               14
170  3 200  DIOG2  MLC   @B0C@,SAVE                                   7  1662  M C22 B67           14
171  3 210         B     DGG7                                         4  1669  B W95               14
172  3 220  DIOG3  MLC   @B0A@,SAVE                                   7  1673  M C25 B67           14
173  3 230         B     DGG7                                         4  1680  B W95               14
174  3 240  DIOG4  MLC   @B0B@,SAVE                                   7  1684  M C28 B67           15
175  3 250         B     DGG7                                         4  1691  B W95               15
176  4 010  DGG7   B     PUTX                                         4  1695  B 363               15
177  4 020         DCW   &@.DM@                                       3  1701  C31                 15
178  4 030         B     DIGG71                                       4  1702  B Q85               15
179  4 040  ALPH   BCE   ONLY,2&X2,1                                 8  1706  B Y14 0!2 1         15
180  4 050         C     SX-1,@$0@                                    7  1714  C B72 C33           15
181  4 060         BE    FIG                                          5  1721  B X62 S             16
182  4 070         BCE   A0X,SX,@                                     8  1726  B X58 B73 @         16
183  4 080         C     SX,@.NM@                                     7  1734  C B73 C00           16
184  4 090         BE    A0X                                          5  1741  B X58 S             16
185  4 100         C     SX,@.NL@                                     7  1746  C B73 C36           16
186  4 110         BU    DIOG                                         5  1753  B Q78 /             16
187  4 120  A0X    B     SKIP                                         4  1758  B R56               17
188  4 130  FIG    B     GETSX                                        4  1762  B L32               17
189  4 140         C     SX-1,@$0@                                    7  1766  C B72 C33           17
190  4 150         BE    FIG                                          5  1773  B X62 S             17
191  4 160         BCE   A0X,SX,@                                     8  1778  B X58 B73 @         17
192  4 170         C     SX,@.NM@                                     7  1786  C B73 C00           17
193  4 180         BE    A0X                                          5  1793  B X58 S             18
194  4 190         C     SX,@.NL@                                     7  1798  C B73 C36           18
195  4 200         BE    A0X                                          5  1805  B X58 S             18
196  4 210         B     NAONE                                        4  1810  B J41               18
197  4 220  ONLY   C     SX-1,@$0@                                    7  1814  C B72 C33           18
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          BE    OPEN1                                      5  1821  B W40 S             18
199  4 240          BCE   A0Z,SX,@                                   8  1826  B Y58 B73 @         19
200  4 250          C     SX,@.NM@                                   7  1834  C B73 C00           19
201  5 010          BE    A0Z                                        5  1841  B Y58 S             19
202  5 020          C     SX,@.NL@                                   7  1846  C B73 C36           19
203  5 030          BU    DIOG                                       5  1853  B Q78 /             19
204  5 040  A0Z     B     SKIP                                       4  1858  B R56               19
205  5 050          B     OPEN1                                      4  1862  B W40               20
206  5 060  TEND    MLC   @N@,GETS7                                 7  1866  M C37 L65           20
207  5 070          MLC   @N@,GETS8                                 7  1873  M C37 M88           20
208  5 080          MLC   @N@,PRA                                   7  1880  M C37 L60           20
209  5 090  TEND1   B     GETSX                                      4  1887  B L32               20
210  5 100          BCE   VERB,SX-2,)                               8  1891  B T48 B71 )         20
211  5 110          B     TEND1                                      4  1899  B Y87               21
212  5 120  PAUSK   SBR   EXIT&3                                    4  1903  H Z75               21
213  5 130          B     PAUS1                                      4  1907  B Z52               21
214  5 140  PAUSE   MLC   &NAONE,EXIT&3                            7  1911  M C40 Z75           21
215  5 150          B     PAUS1                                      4  1918  B Z52               21
216  5 160  DONE    MLC   &VERB,EXIT&3                             7  1922  M C43 Z75           21
217  5 170          B     PAUS1                                      4  1929  B Z52               21
218  5 180  DONE1   MLC   &VERB,EXIT&3                             7  1933  M C46 Z75           22
219  5 190          B     PAUS                                       4  1940  B Z48               22
220  5 200  PAUSE1  SBR   EXIT&3                                    4  1944  H Z75               22
221  5 210  PAUS    B     GETSX                                      4  1948  B L32               22
222  5 220  PAUS1   BCE   VERB,SX-2,)                               8  1952  B T48 B71 )         22
223  5 230          C     SX,@.PD@                                   7  1960  C B73 B92           22
224  5 240          BE    D0D                                        5  1967  B T32 S             22
225  5 250  EXIT    B     *                                          4  1972  B Z75               23
226  6 010  OUTPUT  B     PAUSK                                      4  1976  B Z03               23
227  6 020          B     DIOG                                       4  1980  B Q78               23
228  6 030  READ    C     SX,@/11@                                   7  1984  C B73 C49           23
229  6 040          BE    READ3                                      5  1991  B Q70 S             23
230  6 050  READ4   C     SX,@*27@                                   7  1996  C B73 C52           23
231  6 060          BE    DETT                                       5  2003  B !25 S             23
232  6 070  DET9    C     SX,@)17@                                   7  2008  C B73 C55           24
233  6 080          BU    OUTPUT                                     5  2015  B Z76 /             24
234  6 090          BE    DONE1                                      5  2020  B Z33 S             24
235  6 100  DETT    B     GETSX                                      4  2025  B L32               24
236  6 110          B     ONE3                                       4  2029  B J52               24
237  6 120          B     GETSX                                      4  2033  B L32               24
238  6 130          B     DET9                                       4  2037  B !08               24
239  6 140  WRITE   C     SX,@*28@                                   7  2041  C B73 C58           25
240  6 150          BU    DET15                                      5  2048  B !65 /             25
241  6 160          B     GETSX                                      4  2053  B L32               25
242  6 170          B     ONE3                                       4  2057  B J52               25
243  6 180          B     PAUSE1                                     4  2061  B Z44               25
244  6 190  DET15   C     SX,@*22@                                   7  2065  C B73 C61           25
245  6 200          BE    DET12                                      5  2072  B !89 S             25
246  6 210          C     SX,@*17@                                   7  2077  C B73 C64           26
247  6 220          BU    OUTPUT                                     5  2084  B Z76 /             26
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230  DET12   B     GETSX                                     4  2089  B L32               26
249  6 240          B     ONCE2                                     4  2093  B K77               26
250  6 250          B     DONE1                                     4  2097  B Z33               26
251  7 010  NAME    BCE   ONE,2&X2,1                               8  2101  B J60 0!2 1         26
252  7 020          C     SX,@.NM@                                  7  2109  C B73 C00           26
253  7 030          BU    DIOG                                      5  2116  B Q78 /             27
254  7 040  NAMONE  B     SKIP                                      4  2121  B R56               27
255  7 050          B     GETSX                                     4  2125  B L32               27
256  7 060          C     SX,@.NM@                                  7  2129  C B73 C00           27
257  7 070          BE    NAMONE                                    5  2136  B J21 S             27
258  7 080  NAONE   A     @3@,X2                                    7  2141  A C16 094           27
259  7 090          B     A1                                        4  2148  B U32               27
260  7 100  ONE3    SBR   ONE2&3                                   4  2152  H J93               28
261  7 110          B     ONE4                                      4  2156  B J67               28
262  7 120  ONE     MLC   &A,ONE2&3                                7  2160  M C67 J93           28
263  7 130  ONE4    C     SX,@.NM@                                  7  2167  C B73 C00           28
264  7 140          BU    DIOG                                      5  2174  B Q78 /             28
265  7 150  ONE1    B     SKIP                                      4  2179  B R56               28
266  7 160  ONEONE  A     @3@,X2                                    7  2183  A C16 094           28
267  7 170  ONE2    B     A                                         4  2190  B U28               29
268  7 180  ALPLIT  BCE   ONCE,2&X2,1                               8  2194  B K85 0!2 1         29
269  7 190          MLC   &NAONE,NAB&3                            7  2202  M C70 K76           29
270  7 200          B     ALLP                                      4  2209  B K17               29
271  7 210  ALLPA   SBR   NAB&3                                    4  2213  H K76               29
272  7 220  ALLP    C     SX,@.NM@                                  7  2217  C B73 C00           29
273  7 230          BE    ALIT1                                     5  2224  B K41 S             29
274  7 240          C     SX,@.NL@                                  7  2229  C B73 C36           30
275  7 250          BU    DIOG                                      5  2236  B Q78 /             30
276  8 010  ALIT1   B     SKIP                                      4  2241  B R56               30
277  8 020          B     GETSX                                     4  2245  B L32               30
278  8 030          C     SX,@.NM@                                  7  2249  C B73 C00           30
279  8 040          BE    ALIT1                                     5  2256  B K41 S             30
280  8 050          C     SX,@.NL@                                  7  2261  C B73 C36           30
281  8 060          BE    ALIT1                                     5  2268  B K41 S             31
282  8 070  NAB     B     NAONE                                     4  2273  B J41               31
283  8 080  ONCE2   SBR   ONE2&3                                   4  2277  H J93               31
284  8 090          B     ONCE1                                     4  2281  B K92               31
285  8 100  ONCE    MLC   &A,ONE2&3                                7  2285  M C73 J93           31
286  8 110  ONCE1   C     SX,@.NM@                                  7  2292  C B73 C00           31
287  8 120          BE    ONE1                                      5  2299  B J79 S             31
288  8 130          C     SX,@$08@                                  7  2304  C B73 C76           32
289  8 140          BE    ONEONE                                    5  2311  B J83 S             32
290  8 150          C     SX,@.NL@                                  7  2316  C B73 C36           32
291  8 160          BU    DIOG                                      5  2323  B Q78 /             32
292  8 170          B     ONE1                                      4  2328  B J79               32
293  8 180  GETSX   SBR   EXIT1&3                                  4  2332  H M96               32
294  8 190  GETS1   B     GETX                                      4  2336  B 335               32
295  8 200          DCW   SX                                        3  2342  B73                 33
296  8 210          DCW   EOP                                       3  2345  Q56                 33
297  8 220          B     PUTX                                      4  2346  B 363               33
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         DCW   SX                                           3  2352  B73                33
299  8 240  PER1   C     SX,@A05@                                     7  2353  C B73 C79          33
300  8 250  PRA    BE    OUU                                          5  2360  B M97 S            33
301  9 010  GETS7  BCE   OUS,SX,%                                     8  2365  B N58 B73 %        33
302  9 020         C     SX,@*02@                                     7  2373  C B73 C82          34
303  9 030         BE    GETS1                                        5  2380  B L36 S            34
304  9 040         C     SX,@#DC@                                     7  2385  C B73 C85          34
305  9 050         BE    OXB                                          5  2392  B R06 S            34
306  9 060         C     SX,@*25@                                     7  2397  C B73 C88          34
307  9 070         BE    GETS1                                        5  2404  B L36 S            34
308  9 080         C     SX,@*24@                                     7  2409  C B73 C91          35
309  9 090         BE    NOTE1                                        5  2416  B Q11 S            35
310  9 100         C     SX,@$40@                                     7  2421  C B73 C94          35
311  9 110         BE    GAT                                          5  2428  B O34 S            35
312  9 120         C     SX,@.DG@                                     7  2433  C B73 C97          35
313  9 130         BE    DIG                                          5  2440  B N50 S            35
314  9 140         C     SX,@.LB@                                     7  2445  C B73 D00          36
315  9 150         BE    LABEL1                                       5  2452  B P21 S            36
316  9 160         C     SX,@.CD@                                     7  2457  C B73 D03          36
317  9 170         BE    CARD                                         5  2464  B O79 S            36
318  9 180         C     SX,@$32@                                     7  2469  C B73 D06          36
319  9 190         BE    GETS1                                        5  2476  B L36 S            36
320  9 200         C     SX,@*32@                                     7  2481  C B73 D09          37
321  9 210  GETS8  BE    GETS2                                        5  2488  B N12 S            37
322  9 220  EXIT1  B     *                                            4  2493  B M96              37
323  9 230  OUU    MLC   @.NM@,SX                                     7  2497  M C00 B73          37
324  9 240         SW    SS1                                          4  2504  , B74              37
325  9 250         B     EXIT1                                        4  2508  B M93              37
326 10 010  GETS2  MLC   EXIT1&3,KEEP6                               7  2512  M M96 B77          37
327 10 020         B     GETSX                                        4  2519  B L32              38
328 10 030         C     SX,@.NM@                                     7  2523  C B73 C00          38
329 10 040         BU    DIOG                                         5  2530  B Q78 /            38
330 10 050         B     SKIP                                         4  2535  B R56              38
331 10 060         MLC   KEEP6,EXIT1&3                               7  2539  M B77 M96          38
332 10 070         B     GETS1                                        4  2546  B L36              38
333 10 080  DIG    B     GETSR                                        4  2550  B Q31              38
334 10 090         B     GETS1                                        4  2554  B L36              39
335 10 100  OUS    C     SAVE,@)10@                                   7  2558  C B67 D12          39
336 10 110         BE    DIOG                                         5  2565  B Q78 S            39
337 10 120         C     SAVE,@)14@                                   7  2570  C B67 D15          39
338 10 130         BE    DIOG                                         5  2577  B Q78 S            39
339 10 140         MLC   EXIT1&3,KEEP8                               7  2582  M M96 B80          39
340 10 150         B     GETSX                                        4  2589  B L32              39
341 10 160         MLC   NAB&3,KEEP9                                 7  2593  M K76 B83          40
342 10 170         B     ALLPA                                        4  2600  B K13              40
343 10 180         MLC   KEEP9,NAB&3                                 7  2604  M B83 K76          40
344 10 190         C     SX,@  )@                                     7  2611  C B73 D18          40
345 10 200         BU    DIOG                                         5  2618  B Q78 /            40
346 10 210         MLC   KEEP8,EXIT1&3                               7  2623  M B80 M96          40
347 10 220         B     GETS1                                        4  2630  B L36              41
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  GAT     MLC   EXIT1&3,TAT4#3                            7  2634  M M96 D21           41
349 10 240          B     GETSX                                     4  2641  B L32               41
350 10 250          C     SX,@.NL@                                  7  2645  C B73 C36           41
351 11 010          BE    DIO23                                     5  2652  B O68 S             41
352 11 020          MLC   TAT4,EXIT1&3                              7  2657  M D21 M96           41
353 11 030          B     PER1                                      4  2664  B L53               41
354 11 040  DIO23   MLC   @B8E@,SAVE                                7  2668  M D24 B67           42
355 11 050          B     DGG7                                      4  2675  B W95               42
356 11 060  CARD    B     GETSR                                     4  2679  B Q31               42
357 11 070          MLC   SX,CARD1-3                                7  2683  M B73 B58           42
358 11 080          B     GETSR                                     4  2690  B Q31               42
359 11 090          MLC   SX,CARD1                                  7  2694  M B73 B61           42
360 11 100          B     GETSR                                     4  2701  B Q31               42
361 11 110          C     SX,@.PD@                                  7  2705  C B73 B92           43
362 11 120          BE    GETS1                                     5  2712  B L36 S             43
363 11 130          B     GETS7                                     4  2717  B L65               43
364 11 140  LABEL1  B     GETSR                                     4  2721  B Q31               43
365 11 150          BCE   DIOG30,SX-2,)                             8  2725  B R99 B71 )         43
366 11 160          BCE   DIOG30,SX-2,*                             8  2733  B R99 B71 *         43
367 11 170          C     SX,@.LB@                                  7  2741  C B73 D00           44
368 11 180          BU    LABEL1                                    5  2748  B P21 /             44
369 11 190  LABEL2  B     GETSR                                     4  2753  B Q31               44
370 11 200          C     SX,@*09@                                  7  2757  C B73 D27           44
371 11 210          BE    LABEL2                                    5  2764  B P53 S             44
372 11 220          C     SX,@.PD@                                  7  2769  C B73 B92           44
373 11 230          BU    DIOG4                                     5  2776  B W84 /             45
374 11 240          MLC   EXIT1&3,KEEPS                             7  2781  M M96 B64           45
375 11 250          B     GETSX                                     4  2788  B L32               45
376 12 010          MLC   KEEPS,EXIT1&3                             7  2792  M B64 M96           45
377 12 020          BCE   VERB,SX-2,)                               8  2799  B T48 B71 )         45
378 12 030          B     DIOG3                                     4  2807  B W73               45
379 12 040  NOTE1   B     GETSR                                     4  2811  B Q31               45
380 12 050          C     SX,@*24@                                  7  2815  C B73 C91           46
381 12 060          BU    NOTE1                                     5  2822  B Q11 /             46
382 12 070          B     GETS1                                     4  2827  B L36               46
383 12 080  GETSR   SBR   ENDX&3                                    4  2831  H Q55               46
384 12 090          B     GETX                                      4  2835  B 335               46
385 12 100          DCW   SX                                        3  2841  B73                 46
386 12 110          DCW   EOP                                       3  2844  Q56                 46
387 12 120          B     PUTX                                      4  2845  B 363               47
388 12 130          DCW   SX                                        3  2851  B73                 47
389 12 140  ENDX    B     *                                         4  2852  B Q55               47
390 12 150  EOP     B     PUTX                                      4  2856  B 363               47
391 12 160          DCW   SX                                        3  2862  B73                 47
392 12 170          B     SUPER                                     4  2863  B 351               47
393 12 180          DCW   @BD4@                                    3  2869                      47
394 12 190  READ3   B     GETSX                                     4  2870  B L32               48
395 12 200          B     READ4                                     4  2874  B Z96               48
396 12 210  DIOG    B     PUTX                                      4  2878  B 363               48
397 12 220          DCW   &@.DK@                                    3  2884  D30                 48
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  DIGG71  B     PUTX                                           4  2885  B 363              48
399 12 240          DCW   CARD1-3                                       3  2891  B58                48
400 12 250          B     PUTX                                           4  2892  B 363              48
401 13 010          DCW   CARD1                                        3  2898  B61                49
402 13 020          B     PUTX                                           4  2899  B 363              49
403 13 030          DCW   SAVE                                         3  2905  B67                49
404 13 040  OXB     B     GETSR                                          4  2906  B Q31              49
405 13 050          C     SX,@.CD@                                       7  2910  C B73 D03          49
406 13 060          BU    OXB1                                           5  2917  B R44 /            49
407 13 070          B     GETSR                                          4  2922  B Q31              49
408 13 080          MLC   SX,CARD1-3                                    7  2926  M B73 B58          50
409 13 090          B     GETSR                                          4  2933  B Q31              50
410 13 100          MLC   SX,CARD1                                      7  2937  M B73 B61          50
411 13 110  OXB1    BCE   VERB,SX-2,)                                   8  2944  B T48 B71 )        50
412 13 120          B     OXB                                            4  2952  B R06              50
413 13 130  SKIP    SBR   EXR1&3                                        4  2956  H R98              50
414 13 140          MLC   SX,TEMP                                        7  2960  M B73 B86          51
415 13 150          BW    H01,SS1                                        8  2967  V R91 B74 1        51
416 13 160  SKIPER  B     GETSR                                          4  2975  B Q31              51
417 13 170          C     SX,TEMP                                        7  2979  C B73 B86          51
418 13 180          BU    SKIPER                                         5  2986  B R75 /            51
419 13 190  H01     CW    SS1                                            4  2991  ) B74              51
420 13 200  EXR1    B     *                                              4  2995  B R98              51
421 13 210  DIOG30  MLC   @B9B@,SAVE                                    7  2999  M D33 B67          52
422 13 220          B     DGG7                                           4  3006  B W95              52
423 13 230  REP     MLC   HOLD,TEMP                                      7  3010  M B55 B86          52
424 13 240          SW    1&X2                                           4  3017  , 0!1              52
425 13 250          A     2&X2,TEMP                                      7  3021  A 0!2 B86          52
426 14 010          CW    1&X2                                           4  3028  ) 0!1              52
427 14 020          MLC   TEMP,X2                                       7  3032  M B86 094          53
428 14 030          B     A1                                             4  3039  B U32              53
429 14 040  INCL    C     2&X2,SX                                        7  3043  C 0!2 B73          53
430 14 050          BU    DIOG                                           5  3050  B Q78 /            53
431 14 060          A     @3@,X2                                         7  3055  A C16 094          53
432 14 070          B     A                                              4  3062  B U28              53
433 14 080          DCW   @$@                                           1  3066                     53
434 14 090          DCW   @)07N01  ,*28N01  .@                         18  3084                     54
435 14 100          DCW   @)20  ,X01  ,X0M*03N01  .@                   24  3108                     55
436 14 110          DCW   @)10X01*11X01  ,R00@                        18  3126                     56
437 14 120          DCW   @)06X01*27X01E0S@                           15  3141                     56
438 14 130          DCW   @)18X01X0ME0S@                              12  3153                     57
439 14 140          DCW   @)01X0M*28X01E0S@                           15  3168                     57
440 14 150          DCW   @)04A0M  ,*23N01  .@                        18  3186                     58
441 14 160          DCW   @)15A01N0M  .@                              12  3198                     58
442 14 170          DCW   @)02X01*35X01E0S@                           15  3213                     59
443 14 180          DCW   @)14E03N0M  ,R00@                           15  3228                     59
444 14 190          DCW   @)13N01  ,E00@                              12  3240                     60
445 14 200          DCW   @)08N01  ,E01@                              12  3252                     60
446 14 210  BEGIN   EQU   *                                                3252
447 14 220  HOLD    DCW   #3                                            3  3255                     60
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  CARD1  DCW   #6                                        6  3261                      60
449 14 240  KEEPS  DCW   #3                                        3  3264                      60
450 14 250  SAVE   DCW   #3                                        3  3267                      60
451 15 010  PRO    DCW   @*01@                                     3  3270                      61
452 15 020  SX     DCW   #3                                        3  3273                      61
453 15 030  SS1    DC    #1                                        1  3274                      61
454 15 040  KEEP6  DCW   #3                                        3  3277                      61
455 15 050  KEEP8  DCW   #3                                        3  3280                      61
456 15 060  KEEP9  DCW   #3                                        3  3283                      61
457 15 070  TEMP   DCW   #3                                        3  3286                      61
458 15 080         LTORG                                                 3287
                   DCW   @*06@                                     3  3289            LIT       61
                         @.PD@                                     3  3292            LIT       62
                         @B@                                       1  3293            LIT       62
       123               &BEGIN                                    3  3296  B52       ADCON     62
                         @4@                                       1  3297            LIT       62
                         @.NM@                                     3  3300            LIT       62
                         @*16@                                     3  3303            LIT       62
                         @*10@                                     3  3306            LIT       62
                         @/10@                                     3  3309            LIT       63
                         @*20@                                     3  3312            LIT       63
                         @*15@                                     3  3315            LIT       63
                         @3@                                       1  3316            LIT       63
                         @B0D@                                     3  3319            LIT       63
                         @B0C@                                     3  3322            LIT       63
                         @B0A@                                     3  3325            LIT       63
                         @B0B@                                     3  3328            LIT       64
                         @.DM@                                     3  3331            LIT       64
                         @$0@                                      2  3333            LIT       64
                         @.NL@                                     3  3336            LIT       64
                         @N@                                       1  3337            LIT       64
       214               &NAONE                                    3  3340  J41       ADCON     64
       216               &VERB                                     3  3343  T48       ADCON     64
       218               &VERB                                     3  3346  T48       ADCON     65
                         @/11@                                     3  3349            LIT       65
                         @*27@                                     3  3352            LIT       65
                         @)17@                                     3  3355            LIT       65
                         @*28@                                     3  3358            LIT       65
                         @*22@                                     3  3361            LIT       65
                         @*17@                                     3  3364            LIT       65
       262               &A                                        3  3367  U28       ADCON     66
       269               &NAONE                                    3  3370  J41       ADCON     66
       285               &A                                        3  3373  U28       ADCON     66
                         @$08@                                     3  3376            LIT       66
                         @A05@                                     3  3379            LIT       66
                         @*02@                                     3  3382            LIT       66
                         @#DC@                                     3  3385            LIT       66
                         @*25@                                     3  3388            LIT       67
                         @*24@                                     3  3391            LIT       67
                         @$40@                                     3  3394            LIT       67
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                       @.DG@                                        3  3397              LIT     67
                       @.LB@                                        3  3400              LIT     67
                       @.CD@                                        3  3403              LIT     67
                       @$32@                                        3  3406              LIT     67
                       @*32@                                        3  3409              LIT     68
                       @)10@                                        3  3412              LIT     68
                       @)14@                                        3  3415              LIT     68
                       @  )@                                        3  3418              LIT     68
        348  TAT4      #03                                          3  3421              AREA    68
                       @B8E@                                        3  3424              LIT     68
                       @*09@                                        3  3427              LIT     68
                       @.DK@                                        3  3430              LIT     69
                       @B9B@                                        3  3433              LIT     69
 459 15 090          ORG                                                    3434
 460 15 100          DCW   @}@                                    1  3434                      69
 461 15 110          END                                                  / 000 080           70
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - BD4 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BD4						
102	1	020		CTL	661111						
103	1	030		ORG	1300			1300			
104	1	040	SUPER	EQU	351			0351			
105	1	050	X1	EQU	89			0089			
106	1	060	X2	EQU	94			0094			
107	1	070	X3	EQU	99			0099			
108	1	080	GETX	EQU	335			0335			
109	1	090	PUTX	EQU	363			0363			
110	1	100	HRB	B	GETSR		4	1300	B !15		4
111	1	110		C	SX,@/24@		7	1304	C K68 K71		4
112	1	120		BU	HRB		5	1311	B T00 /		4
113	1	130	HR1	B	GETSR		4	1316	B !15		4
114	1	140	HR2	MLC	SX,HOLDS		7	1320	M K68 K52		4
115	1	150		C	SX,@*29@		7	1327	C K68 K74		4
116	1	160		BE	FILLE		5	1334	B U51 S		4
117	1	170		C	SX,@/01@		7	1339	C K68 K77		5
118	1	180		BE	FILLE		5	1346	B U51 S		5
119	1	190		C	SX,@/09@		7	1351	C K68 K80		5
120	1	200		BE	FILLE		5	1358	B U51 S		5
121	1	210		C	SX,@/10@		7	1363	C K68 K83		5
122	1	220		BE	SIZE		5	1370	B U92 S		5
123	1	230		C	SX,@/05@		7	1375	C K68 K86		6
124	1	240		BE	REDEF		5	1382	B U77 S		6
125	1	250		C	SX,@/14@		7	1387	C K68 K89		6
126	2	010		BE	OCCURS		5	1394	B W00 S		6
127	2	020		C	SX,@/18@		7	1399	C K68 K92		6
128	2	030		BE	POINT		5	1406	B X27 S		6
129	2	040		C	SX,@)12@		7	1411	C K68 K95		7
130	2	050		BE	PICT		5	1418	B U62 S		7
131	2	060		C	SX,@/07@		7	1423	C K68 K98		7
132	2	070		BE	JUST		5	1430	B X59 S		7
133	2	080		C	SX,@/12@		7	1435	C K68 L01		7
134	2	090		BE	OCCURS		5	1442	B W00 S		7
135	2	100		B	HR1		4	1447	B T16		8
136	2	110	FILLE	MLC	SX,HBH#3		7	1451	M K68 L04		8
137	2	120		B	HR1		4	1458	B T16		8
138	2	130	PICT	B	GETSR		4	1462	B !15		8
139	2	140		C	SX,@.PC@		7	1466	C K68 L07		8
140	2	150		B	SXB1		4	1473	B W11		8
141	2	160	REDEF	B	GETSR		4	1477	B !15		8
142	2	170		C	SX,@.NM@		7	1481	C K68 L10		9
143	2	180		B	SRRX1		4	1488	B V71		9
144	2	190	SIZE	B	GETSR		4	1492	B !15		9
145	2	200		C	SX,@.NL@		7	1496	C K68 L13		9
146	2	210		BU	DIOG		5	1503	B K18 /		9
147	2	220		B	SKIP		4	1508	B J87		9

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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          B     GETSX                                        4  1512  B Y34               9
149  2 240          C     SX,@.NL@                                     7  1516  C K68 L13          10
150  2 250          BU    HRC                                          5  1523  B W24 /            10
151  3 010          B     SKIP                                         4  1528  B J87              10
152  3 020          B     GETSR                                        4  1532  B !15              10
153  3 030          C     SX,@*03@                                     7  1536  C K68 L16          10
154  3 040          BU    DIOG                                         5  1543  B K18 /            10
155  3 050          C     HBH,@*29@                                    7  1548  C L04 K74          10
156  3 060          BU    DIOG                                         5  1555  B K18 /            11
157  3 070  QUAL    B     GETSR                                        4  1560  B !15              11
158  3 080          C     SX,@.NM@                                     7  1564  C K68 L10          11
159  3 090  SRRX1   BU    DIOG                                         5  1571  B K18 /            11
160  3 100          B     SKIP                                         4  1576  B J87              11
161  3 110          B     GETSX                                        4  1580  B Y34              11
162  3 120          C     SX,@*32@                                     7  1584  C K68 L19          11
163  3 130          BE    QUAL                                         5  1591  B V60 S            12
164  3 140          B     HRC                                          4  1596  B W24              12
165  3 150  OCCURS  B     GETSR                                        4  1600  B !15              12
166  3 160          C     SX,@.NL@                                     7  1604  C K68 L13          12
167  3 170  SXB1    BU    DIOG                                         5  1611  B K18 /            12
168  3 180  HHA     B     SKIP                                         4  1616  B J87              12
169  3 190  HHH     B     GETSX                                        4  1620  B Y34              12
170  3 200  HRC     BCE   HR2,SX-2,/                                   8  1624  B T20 K66 /        13
171  3 210          C     SX,@)12@                                     7  1632  C K68 K95          13
172  3 220          BE    HR2                                          5  1639  B T20 S            13
173  3 230          C     SX,@.PD@                                     7  1644  C K68 L22          13
174  3 240          BE    OUTS                                         5  1651  B W74 S            13
175  3 250          B     PUTX                                         4  1656  B 363              13
176  4 010          DCW   &@.DM@                                       3  1662  L25                13
177  4 020          MLC   @B5O@,HOLDS                                 7  1663  M L28 K52          14
178  4 030          B     DIG7                                         4  1670  B K25              14
179  4 040  OUTS    B     GETSX                                        4  1674  B Y34              14
180  4 050          C     SX,@.NL@                                     7  1678  C K68 L13          14
181  4 060          BU    HR1                                          5  1685  B T16 /            14
182  4 070          B     SKIP                                         4  1690  B J87              14
183  4 080          B     GETSX                                        4  1694  B Y34              14
184  4 090          C     SX,@/23@                                     7  1698  C K68 L31          15
185  4 100          BE    HHH                                          5  1705  B W20 S            15
186  4 110          C     SX,@.NM@                                     7  1710  C K68 L10          15
187  4 120          BE    HHA                                          5  1717  B W16 S            15
188  4 130          B     HR1                                          4  1722  B T16              15
189  4 140  EOP     H                                                  1  1726  .                  15
190  4 150  POINT   B     GETSR                                        4  1727  B !15              15
191  4 160          C     SX,@/15@                                     7  1731  C K68 L34          16
192  4 170          BE    OCCURS                                       5  1738  B W00 S            16
193  4 180          C     SX,@/17@                                     7  1743  C K68 L37          16
194  4 190          BU    DIOG                                         5  1750  B K18 /            16
195  4 200          B     OCCURS                                       4  1755  B W00              16
196  4 210  JUST    B     GETSR                                        4  1759  B !15              16
197  4 220          C     SX,@/15@                                     7  1763  C K68 L34          16
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
198	4	230		BE	HHH		5	1770	B W20 S	17
199	4	240		C	SX,@/17@		7	1775	C K68 L37	17
200	4	250		BU	DIOG		5	1782	B K18 /	17
201	5	010		B	HHH		4	1787	B W20	17
202	5	020	DONE1	BW	DDD,SWT7		8	1791	V Y27 K53 1	17
203	5	030		B	PUTX		4	1799	B 363	17
204	5	040		DCW	&@.DM@		3	1805	L25	17
205	5	050		B	PUTX		4	1806	B 363	18
206	5	060		DCW	CARD1-3		3	1812	K62	18
207	5	070		B	PUTX		4	1813	B 363	18
208	5	080		DCW	CARD1		3	1819	K65	18
209	5	090		B	PUTX		4	1820	B 363	18
210	5	100		DCW	&@B9A@		3	1826	L40	18
211	5	110	DDD	B	SUPER		4	1827	B 351	18
212	5	120		DCW	@BD5@		3	1833		19
213	5	130	GETSX	SBR	EXTK&3		4	1834	H !14	19
214	5	140	GETSX1	B	GETX		4	1838	B 335	19
215	5	150		DCW	SX		3	1844	K68	19
216	5	160		DCW	EOP		3	1847	X26	19
217	5	170		B	PUTX		4	1848	B 363	19
218	5	180		DCW	SX		3	1854	K68	19
219	5	190	EXIT7	C	SX,@*01@		7	1855	C K68 L43	20
220	5	200		BE	DONE1		5	1862	B X91 S	20
221	5	210		C	SX,@.DG@		7	1867	C K68 L46	20
222	5	220		BU	GRB1		5	1874	B Y87 /	20
223	5	230		B	GETSR1		4	1879	B J34	20
224	5	240		B	GETSR1		4	1883	B J34	20
225	5	250	GRB1	C	SX,@.CD@		7	1887	C K68 L49	20
226	6	010		BE	CARD		5	1894	B J00 S	21
227	6	020		C	SX,@.PD@		7	1899	C K68 L22	21
228	6	030		BE	PERS		5	1906	B J79 S	21
229	6	040		CW	SWT7		4	1911	) K53	21
230	6	050	GGG	C	SX,@/03@		7	1915	C K68 L52	21
231	6	060		BE	GETSX1		5	1922	B Y38 S	21
232	6	070		C	SX,@/22@		7	1927	C K68 L55	22
233	6	080		BE	GETSX1		5	1934	B Y38 S	22
234	6	090		C	SX,@$08@		7	1939	C K68 L58	22
235	6	100		BE	GETSX1		5	1946	B Y38 S	22
236	6	110		C	SX,@/04@		7	1951	C K68 L61	22
237	6	120		BE	GETSX1		5	1958	B Y38 S	22
238	6	130		C	SX,@/21@		7	1963	C K68 L64	23
239	6	140		BE	GETSX1		5	1970	B Y38 S	23
240	6	150		C	SX,@/20@		7	1975	C K68 L67	23
241	6	160		BE	GETSX1		5	1982	B Y38 S	23
242	6	170		C	SX,@$10@		7	1987	C K68 L70	23
243	6	180		BE	GETSX1		5	1994	B Y38 S	23
244	6	190		C	SX,@$16@		7	1999	C K68 L73	24
245	6	200		BE	GETSX1		5	2006	B Y38 S	24
246	6	210	EXTK	B	*		4	2011	B !14	24
247	6	220	GETSR	SBR	EXIT8&3		4	2015	H !99	24

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  GETP    B     GETX                                     4  2019  B 335               24
249  6 240          DCW   SX                                       3  2025  K68                 24
250  6 250          DCW   EOP                                      3  2028  X26                 24
251  7 010          B     PUTX                                     4  2029  B 363               25
252  7 020          DCW   SX                                       3  2035  K68                 25
253  7 030          C     SX,@*01@                                 7  2036  C K68 L43           25
254  7 040          BE    DONE1                                    5  2043  B X91 S             25
255  7 050          C     SX,@.DG@                                 7  2048  C K68 L46           25
256  7 060          BU    XXX8                                     5  2055  B !68 /             25
257  7 070          B     GETSR1                                   4  2060  B J34               25
258  7 080          B     GETSR1                                   4  2064  B J34               26
259  7 090  XXX8    C     SX,@.CD@                                 7  2068  C K68 L49           26
260  7 100          BE    CARD                                     5  2075  B J00 S             26
261  7 110          C     SX,@.PD@                                 7  2080  C K68 L22           26
262  7 120          BE    PPP                                      5  2087  B J71 S             26
263  7 130          CW    SWT7                                     4  2092  ) K53               26
264  7 140  EXIT8   B     *                                        4  2096  B !99              26
265  7 150  CARD    SBR   EXIT7A&3                                 4  2100  H J33               27
266  7 160          B     GETSR1                                   4  2104  B J34               27
267  7 170          MLC   SX,CARD1-3                               7  2108  M K68 K62           27
268  7 180          B     GETSR1                                   4  2115  B J34               27
269  7 190          MLC   SX,CARD1                                7  2119  M K68 K65           27
270  7 200          B     GETSR1                                   4  2126  B J34               27
271  7 210  EXIT7A  B     *                                        4  2130  B J33               27
272  7 220  GETSR1  SBR   DXRB&3                                  4  2134  H J70               28
273  7 230          B     GETX                                     4  2138  B 335               28
274  7 240          DCW   SX                                       3  2144  K68                 28
275  7 250          DCW   EOP                                      3  2147  X26                 28
276  8 010          B     PUTX                                     4  2148  B 363               28
277  8 020          DCW   SX                                       3  2154  K68                 28
278  8 030          C     SX,@*01@                                 7  2155  C K68 L43           28
279  8 040          BE    DONE1                                    5  2162  B X91 S             29
280  8 050  DXRB    B     *                                        4  2167  B J70               29
281  8 060  PPP     SW    SWT7                                     4  2171  , K53               29
282  8 070          B     EXIT8                                    4  2175  B !96              29
283  8 080  PERS    SW    SWT7                                     4  2179  , K53               29
284  8 090          B     GGG                                      4  2183  B Z15               29
285  8 100  SKIP    SBR   SKIPEX&3                                 4  2187  H K17               29
286  8 110          MLC   SX,TEMP                                  7  2191  M K68 K56           30
287  8 120  SKIP1   B     GETSR                                    4  2198  B !15              30
288  8 130          C     SX,TEMP                                  7  2202  C K68 K56           30
289  8 140          BU    SKIP1                                    5  2209  B J98 /             30
290  8 150  SKIPEX  B     *                                        4  2214  B K17               30
291  8 160  DIOG    B     PUTX                                     4  2218  B 363               30
292  8 170          DCW   &@.DZ@                                   3  2224  L76                 30
293  8 180  DIG7    B     PUTX                                     4  2225  B 363               31
294  8 190          DCW   CARD1-3                                  3  2231  K62                 31
295  8 200          B     PUTX                                     4  2232  B 363               31
296  8 210          DCW   CARD1                                    3  2238  K65                 31
297  8 220          B     PUTX                                     4  2239  B 363               31
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         DCW   HOLDS                                       3  2245  K52                 31
299  8 240         B     HR1                                         4  2246  B T16               31
300  8 250  HOLDS  DCW   #3                                          3  2252                      32
301  9 010  SWT7   DC    #1                                          1  2253                      32
302  9 020  TEMP   DCW   #3                                          3  2256                      32
303  9 030  KEEPS  DCW   #3                                          3  2259                      32
304  9 040  CARD1  DCW   #6                                          6  2265                      32
305  9 050  SX     DCW   #3                                          3  2268                      32
306  9 060         LTORG                                                  2269
                    DCW   @/24@                                       3  2271             LIT  32
                          @*29@                                       3  2274             LIT  32
                          @/01@                                       3  2277             LIT  33
                          @/09@                                       3  2280             LIT  33
                          @/10@                                       3  2283             LIT  33
                          @/05@                                       3  2286             LIT  33
                          @/14@                                       3  2289             LIT  33
                          @/18@                                       3  2292             LIT  33
                          @)12@                                       3  2295             LIT  33
                          @/07@                                       3  2298             LIT  34
                          @/12@                                       3  2301             LIT  34
       136  HBH           #03                                         3  2304             AREA 34
                          @.PC@                                       3  2307             LIT  34
                          @.NM@                                       3  2310             LIT  34
                          @.NL@                                       3  2313             LIT  34
                          @*03@                                       3  2316             LIT  34
                          @*32@                                       3  2319             LIT  35
                          @.PD@                                       3  2322             LIT  35
                          @.DM@                                       3  2325             LIT  35
                          @B5O@                                       3  2328             LIT  35
                          @/23@                                       3  2331             LIT  35
                          @/15@                                       3  2334             LIT  35
                          @/17@                                       3  2337             LIT  35
                          @B9A@                                       3  2340             LIT  36
                          @*01@                                       3  2343             LIT  36
                          @.DG@                                       3  2346             LIT  36
                          @.CD@                                       3  2349             LIT  36
                          @/03@                                       3  2352             LIT  36
                          @/22@                                       3  2355             LIT  36
                          @$08@                                       3  2358             LIT  36
                          @/04@                                       3  2361             LIT  37
                          @/21@                                       3  2364             LIT  37
                          @/20@                                       3  2367             LIT  37
                          @$10@                                       3  2370             LIT  37
                          @$16@                                       3  2373             LIT  37
                          @.DZ@                                       3  2376             LIT  37
307  9 070         ORG                                                    2377
308  9 080         DCW   @}@                                         1  2377                      37
309  9 090         END                                                    / 000 080                 38
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - BD5 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BD5						
102	1	020		CTL	661111						
103	1	030		ORG	1300				1300		
104	1	040	X1	EQU	89			0089			
105	1	050	X3	EQU	99			0099			
106	1	060	X2	EQU	94			0094			
107	1	070	GETX	EQU	335			0335			
108	1	080	PUTX	EQU	363			0363			
109	1	090	SUPER	EQU	351			0351			
110	1	100	X7	B	GETSR		4	1300	B C16		4
111	1	110		BCE	VERB,SX-2,)		8	1304	B T16 E26)		4
112	1	120		B	X7		4	1312	B T00		4
113	1	130	VERB	MLC	SX,HOLD		7	1316	M E28 E41		4
114	1	140		C	SX,@)03@		7	1323	C E28 E51		4
115	1	150		BE	PEFORM		5	1330	B Z67 S		4
116	1	160		C	SX,@)19@		7	1335	C E28 E54		5
117	1	170		BE	IF1		5	1342	B T87 S		5
118	1	180		C	SX,@)05@		7	1347	C E28 E57		5
119	1	190		BE	COMPT		5	1354	B O49 S		5
120	1	200		C	SX,@)09@		7	1359	C E28 E60		5
121	1	210		BE	CLOSE		5	1366	B R93 S		5
122	1	220		C	SX,@)11@		7	1371	C E28 E63		6
123	1	230		BE	STOP		5	1378	B ?57 S		6
124	1	240		B	X7		4	1383	B T00		6
125	1	250	IF1	B	GETSX		4	1387	B Y15		6
126	2	010		C	SX,@ @@		7	1391	C E28 E66		6
127	2	020		BE	IFX1		5	1398	B U55 S		6
128	2	030		BCE	BACK,SX,%		8	1403	B U99 E28 %		7
129	2	040		BCE	BACK,SX,&		8	1411	B U99 E28 &		7
130	2	050		BCE	BACK,SX,-		8	1419	B U99 E28 -		7
131	2	060		C	SX,@.NL@		7	1427	C E28 E69		7
132	2	070		BE	IFX1		5	1434	B U55 S		7
133	2	080		C	SX,@.NM@		7	1439	C E28 E72		8
134	2	090		BU	BACK7		5	1446	B U63 /		8
135	2	100		B	IF3		4	1451	B X11		8
136	2	110	IFX1	B	SKIP		4	1455	B D83		8
137	2	120		B	BACK		4	1459	B U99		8
138	2	130	BACK7	C	SX,@$30@		7	1463	C E28 E75		8
139	2	140		BE	BACK		5	1470	B U99 S		8
140	2	150		C	SX-1,@$0@		7	1475	C E27 E77		9
141	2	160		BE	BACK		5	1482	B U99 S		9
142	2	170		C	SX,@$40@		7	1487	C E28 E80		9
143	2	180		BU	DIOG		5	1494	B D05 /		9
144	2	190	BACK	B	GETSX		4	1499	B Y15		9
145	2	200	BACK1	BCE	VERB,SX-2,)		8	1503	B T16 E26)		9
146	2	210		C	SX,@ @@		7	1511	C E28 E66		10
147	2	220		BE	IFX1		5	1518	B U55 S		10

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		C	SX,@.NM@		7	1523	C E28 E72	10
149	2	240		BE	BBBK		5	1530	B X95 S	10
150	2	250		C	SX,@.NL@		7	1535	C E28 E69	10
151	3	010		BE	IFX1		5	1542	B U55 S	10
152	3	020		C	SX,@$20@		7	1547	C E28 E83	11
153	3	030		BE	GREQLS		5	1554	B W63 S	11
154	3	040		C	SX,@ #@		7	1559	C E28 E86	11
155	3	050		BE	GREQLS		5	1566	B W63 S	11
156	3	060		C	SX,@$21@		7	1571	C E28 E89	11
157	3	070		BE	GREQLS		5	1578	B W63 S	11
158	3	080		C	SX,@$30@		7	1583	C E28 E75	12
159	3	090		BE	NOT		5	1590	B K39 S	12
160	3	100		BCE	MULT,SX,*		8	1595	B W79 E28 *	12
161	3	110		BCE	MULT,SX,/		8	1603	B W79 E28 /	12
162	3	120		BCE	PLUS,SX,&		8	1611	B X71 E28 &	12
163	3	130		BCE	PLUS,SX,-		8	1619	B X71 E28 -	13
164	3	140		C	SX,@$32@		7	1627	C E28 E92	13
165	3	150		BE	ANDORL		5	1634	B K99 S	13
166	3	160		C	SX,@$31@		7	1639	C E28 E95	13
167	3	170		BE	ANDORL		5	1646	B K99 S	13
168	3	180		BCE	RPAREN,SX,)		8	1651	B L07 E28)	14
169	3	190		B	BACK		4	1659	B U99	14
170	3	200	GREQLS	B	GETSX		4	1663	B Y15	14
171	3	210		BCE	DIOG,SX-2,)		8	1667	B D05 E26)	14
172	3	220		B	BACK1		4	1675	B V03	14
173	3	230	MULT	B	GETSX		4	1679	B Y15	14
174	3	240	MULT1	BCE	DIOG,SX,*		8	1683	B D05 E28 *	15
175	3	250		BCE	DIOG,SX,/		8	1691	B D05 E28 /	15
176	4	010		BCE	DIOG,SX,)		8	1699	B D05 E28)	15
177	4	020		B	BACK1		4	1707	B V03	15
178	4	030	IF3	B	SKIP		4	1711	B D83	15
179	4	040		B	GETSX		4	1715	B Y15	15
180	4	050		C	SX,@$02@		7	1719	C E28 E98	16
181	4	060		BE	DIOG		5	1726	B D05 S	16
182	4	070		C	SX,@$01@		7	1731	C E28 F01	16
183	4	080		BE	DIOG		5	1738	B D05 S	16
184	4	090		C	SX,@$09@		7	1743	C E28 F04	16
185	4	100		BE	DIOG		5	1750	B D05 S	16
186	4	110		C	SX,@$40@		7	1755	C E28 E80	17
187	4	120		BE	DIOG		5	1762	B D05 S	17
188	4	130		B	IF4		4	1767	B Y03	17
189	4	140	PLUS	B	GETSX		4	1771	B Y15	17
190	4	150		BCE	DIOG,SX,&		8	1775	B D05 E28 &	17
191	4	160		BCE	DIOG,SX,-		8	1783	B D05 E28 -	17
192	4	170		B	MULT1		4	1791	B W83	18
193	4	180	BBBK	B	SKIP		4	1795	B D83	18
194	4	190		B	GETSX		4	1799	B Y15	18
195	4	200	IF4	BCE	SUB8,SX,%		8	1803	B A09 E28 %	18
196	4	210		B	BACK1		4	1811	B V03	18
197	4	220	GETSX	SBR	EXIT&3		4	1815	H Z35	18

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  GETSX1 B     GETX                                       4  1819  B 335              18
199  4 240         DCW   SX                                         3  1825  E28                19
200  4 250         DCW   EOP                                        3  1828  M23                19
201  5 010         B     PUTX                                       4  1829  B 363              19
202  5 020         DCW   SX                                         3  1835  E28                19
203  5 030         C     SX,@.PD@                                   7  1836  C E28 F07          19
204  5 040         BE    PSK                                        5  1843  B B88 S            19
205  5 050         CW    SST                                        4  1848  ) E42              19
206  5 060  GGC    C     SX,@A05@                                   7  1852  C E28 F10          20
207  5 070         BE    SPS                                        5  1859  B Z36 S            20
208  5 080         C     SX,@#DC@                                   7  1864  C E28 F13          20
209  5 090         BE    X7                                         5  1871  B T00 S            20
210  5 100         C     SX,@.DG@                                   7  1876  C E28 F16          20
211  5 110         BE    GRX                                        5  1883  B Z51 S            20
212  5 120         C     SX,@.CD@                                   7  1888  C E28 F19          21
213  5 130         BE    CARD                                       5  1895  B A87 S            21
214  5 140         BCE   OUS,SX,%                                   8  1900  B A17 E28 %        21
215  5 150         C     SX,@*32@                                   7  1908  C E28 F22          21
216  5 160         BE    QUALIF                                     5  1915  B L35 S            21
217  5 161         C     SX,@$32@                                   7  1920  C E28 E92          21
218  5 162         BE    GETSX1                                     5  1927  B Y19 S            22
219  5 170  EXIT   B     *                                          4  1932  B Z35              22
220  5 180  SPS    MLC   @.NM@,SX                                   7  1936  M E72 E28          22
221  5 190         SW    SS1                                        4  1943  , E29              22
222  5 200         B     EXIT                                       4  1947  B Z32              22
223  5 210  GRX    B     GETSR                                      4  1951  B C16              22
224  5 220         B     GETSX1                                     4  1955  B Y19              22
225  5 230  SKIP1  B     SKIP                                       4  1959  B D83              23
226  5 240         B     BACK                                       4  1963  B U99              23
227  5 250  PEFORM B     GETSX                                      4  1967  B Y15              23
228  6 010         B     PROI                                       4  1971  B M97              23
229  6 020         B     GETSX                                      4  1975  B Y15              23
230  6 030         B     PAUSK                                      4  1979  B N33              23
231  6 040  PERM   C     SX,@.NM@                                   7  1983  C E28 E72          23
232  6 050         BE    ONCALL                                     5  1990  B J07 S            24
233  6 060         C     SX,@.NL@                                   7  1995  C E28 E69          24
234  6 070         BE    ONCALL                                     5  2002  B J07 S            24
235  6 080         C     SX,@*08@                                   7  2007  C E28 F25          24
236  6 090         BE    THRU                                       5  2014  B L91 S            24
237  6 100         C     SX,@*07@                                   7  2019  C E28 F28          24
238  6 110         BE    VARY                                       5  2026  B !47 S            25
239  6 120         C     SX,@*18@                                   7  2031  C E28 F31          25
240  6 130         BE    UNTIL                                      5  2038  B L59 S            25
241  6 140         B     DIOG                                       4  2043  B D05              25
242  6 150  VARY   B     GETSX                                      4  2047  B Y15              25
243  6 160         B     DATI                                       4  2051  B M73              25
244  6 170  FROM   B     GETSX                                      4  2055  B Y15              25
245  6 180         C     SX,@*28@                                   7  2059  C E28 F34          26
246  6 190         BU    DIOG                                       5  2066  B D05 /            26
247  6 200         B     GETSX                                      4  2071  B Y15              26
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 210         B     PROI                                       4  2075  B M97               26
249  6 220         B     GETSX                                      4  2079  B Y15               26
250  6 230         C     SX,@*35@                                   7  2083  C E28 F37           26
251  6 240         BU    DIOG                                       5  2090  B D05 /             26
252  6 250         B     GETSX                                      4  2095  B Y15               27
253  7 010         B     PROI                                       4  2099  B M97               27
254  7 020         B     UNTIL                                      4  2103  B L59               27
255  7 030  ONCALL B     SKIP                                       4  2107  B D83               27
256  7 040         B     GETSX                                      4  2111  B Y15               27
257  7 050         C     SX,@  *@                                   7  2115  C E28 F40           27
258  7 060         BU    DIOG                                       5  2122  B D05 /             27
259  7 070         B     GETSX                                      4  2127  B Y15               28
260  7 080         B     DONE1                                      4  2131  B C00               28
261  7 090  HERE   B     GETSX                                      4  2135  B Y15               28
262  7 100         BCE   SUB,SX,%                                  8  2139  B J51 E28 %         28
263  7 110         B     BACK1                                      4  2147  B V03               28
264  7 120  SUB    B     NAME1                                      4  2151  B J71               28
265  7 130         C     SX,@  )@                                   7  2155  C E28 F43           28
266  7 140         BU    DIOG                                       5  2162  B D05 /             29
267  7 150         B     BACK                                       4  2167  B U99               29
268  7 160  NAME1  SBR   FIX&3                                     4  2171  H K38               29
269  7 170         B     GETSX                                      4  2175  B Y15               29
270  7 180  PRRI   C     SX,@.NM@                                   7  2179  C E28 E72           29
271  7 190         BE    NAME2                                      5  2186  B K03 S             29
272  7 200         C     SX,@.NL@                                   7  2191  C E28 E69           29
273  7 210         BU    DIOG                                       5  2198  B D05 /             30
274  7 220  NAME2  B     SKIP                                       4  2203  B D83               30
275  7 230  NAAA   B     GETSX                                      4  2207  B Y15               30
276  7 240         C     SX,@.NM@                                   7  2211  C E28 E72           30
277  7 250         BE    NAME2                                      5  2218  B K03 S             30
278  8 010         C     SX,@.NL@                                   7  2223  C E28 E69           30
279  8 020         BE    NAME2                                      5  2230  B K03 S             30
280  8 030  FIX    B     *                                          4  2235  B K38               31
281  8 040  NOT    B     GETSX                                      4  2239  B Y15               31
282  8 050         C     SX,@$30@                                   7  2243  C E28 E75           31
283  8 060         BE    DIOG                                       5  2250  B D05 S             31
284  8 070  NOT1   C     SX,@$32@                                   7  2255  C E28 E92           31
285  8 080         BE    DIOG                                       5  2262  B D05 S             31
286  8 090         C     SX,@$31@                                   7  2267  C E28 E95           31
287  8 100         BE    DIOG                                       5  2274  B D05 S             32
288  8 110         BCE   DIOG,SX-2,)                               8  2279  B D05 E26 )         32
289  8 120         BCE   DIOG,SX,)                                 8  2287  B D05 E28 )         32
290  8 130         B     BACK1                                      4  2295  B V03               32
291  8 140  ANDORL B     GETSX                                      4  2299  B Y15               32
292  8 150         B     NOT1                                       4  2303  B K55               32
293  8 160  RPAREN B     GETSX                                      4  2307  B Y15               32
294  8 170         C     SX,@$30@                                   7  2311  C E28 E75           33
295  8 180         BE    DIOG                                       5  2318  B D05 S             33
296  8 190         BCE   DIOG,SX,%                                 8  2323  B D05 E28 %         33
297  8 200         B     BACK1                                      4  2331  B V03               33
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SEQ PG LIN  LABEL  OP   OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 210  QUALIF B    GETSR                                      4  2335  B C16               33
299  8 220         C    SX,@.NM@                                   7  2339  C E28 E72           33
300  8 230         BU   DIOG                                       5  2346  B D05 /             34
301  8 240         B    SKIP                                       4  2351  B D83               34
302  8 250         B    GETSX1                                     4  2355  B Y19               34
303  9 010  UNTIL  B    GETSR                                      4  2359  B C16               34
304  9 020         B    PAUSK                                      4  2363  B N33               34
305  9 030         C    SX,@*22@                                   7  2367  C E28 F46           34
306  9 040         BU   UNTIL                                      5  2374  B L59 /             34
307  9 050         B    GETSX                                      4  2379  B Y15               35
308  9 060         B    DATI                                       4  2383  B M73               35
309  9 070         B    FROM                                       4  2387  B !55               35
310  9 080  THRU   B    GETSX                                      4  2391  B Y15               35
311  9 090         B    PROI                                       4  2395  B M97               35
312  9 100         B    GETSX                                      4  2399  B Y15               35
313  9 110         B    PAUSK                                      4  2403  B N33               35
314  9 120         C    SX,@*08@                                   7  2407  C E28 F25           36
315  9 130         BE   DIOG                                       5  2414  B D05 S             36
316  9 140         B    PERM                                       4  2419  B Z83               36
317  9 150  EOP    BW   EOP1,SST                                   8  2423  V M59 E42 1         36
318  9 160         B    PUTX                                       4  2431  B 363               36
319  9 170         DCW  &@.DM@                                     3  2437  F49                 36
320  9 180         B    PUTX                                       4  2438  B 363               36
321  9 190         DCW  CARD1-3                                    3  2444  E35                 37
322  9 200         B    PUTX                                       4  2445  B 363               37
323  9 210         DCW  CARD1                                      3  2451  E38                 37
324  9 220         B    PUTX                                       4  2452  B 363               37
325  9 230         DCW  &@B3A@                                     3  2458  F52                 37
326  9 240  EOP1   B    PUTX                                       4  2459  B 363               37
327  9 250         DCW  SX                                         3  2465  E28                 37
328 10 010         B    SUPER                                      4  2466  B 351               38
329 10 020         DCW  @BD6@                                      3  2472                      38
330 10 030  DATI   SBR  EXIT3&3                                    4  2473  H M96               38
331 10 040         C    SX,@.NM@                                   7  2477  C E28 E72           38
332 10 050         BU   DIOG                                       5  2484  B D05 /             38
333 10 060         B    SKIP                                       4  2489  B D83               38
334 10 070  EXIT3  B    *                                          4  2493  B M96               38
335 10 080  PROI   SBR  EXIT1&3                                    4  2497  H N32               39
336 10 090         C    SX,@.NL@                                   7  2501  C E28 E69           39
337 10 100         BE   PRO2                                       5  2508  B N25 S             39
338 10 110         C    SX,@.NM@                                   7  2513  C E28 E72           39
339 10 120         BU   DIOG                                       5  2520  B D05 /             39
340 10 130  PRO2   B    SKIP                                       4  2525  B D83               39
341 10 140  EXIT1  B    *                                          4  2529  B N32               39
342 10 150  PAUSK  SBR  EXIT2&3                                    4  2533  H O08               40
343 10 160         C    SX,@$32@                                   7  2537  C E28 E92           40
344 10 170         BE   GETSR                                      5  2544  B C16 S             40
345 10 180         C    SX,@.PD@                                   7  2549  C E28 F07           40
346 10 190         BE   X7A                                        5  2556  B O09 S             40
347 10 200         C    SX,@*02@                                   7  2561  C E28 F55           40
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 210          BE    X7                                         5  2568  B T00 S             41
349 10 220          C     SX,@*25@                                   7  2573  C E28 F58           41
350 10 230          BE    X7                                         5  2580  B T00 S             41
351 10 240          BCE   VERB,SX-2,)                               8  2585  B T16 E26 )         41
352 10 250          C     SX,@*24@                                   7  2593  C E28 F61           41
353 11 010          BE    X7                                         5  2600  B T00 S             41
354 11 020  EXIT2   B     *                                          4  2605  B O08               42
355 11 030  X7A     B     GETSX                                      4  2609  B Y15               42
356 11 040          BCE   VERB,SX-2,)                               8  2613  B T16 E26 )         42
357 11 050          C     SX,@.LB@                                   7  2621  C E28 F64           42
358 11 060          BE    X7                                         5  2628  B T00 S             42
359 11 070          C     SX,@*24@                                   7  2633  C E28 F61           42
360 11 080          BU    DIOG                                       5  2640  B D05 /             43
361 11 090          B     X7                                         4  2645  B T00               43
362 11 100  COMPT   B     GETSX                                      4  2649  B Y15               43
363 11 110          B     DATI                                       4  2653  B M73               43
364 11 120  COMP0   B     GETSX                                      4  2657  B Y15               43
365 11 130          BCE   SUB8,SX,%                                 8  2661  B A09 E28 %         43
366 11 140          BCE   COMPUT,SX,#                               8  2669  B O93 E28 #         43
367 11 150          C     SX,@*10@                                   7  2677  C E28 F67           44
368 11 160          BU    DIOG                                       5  2684  B D05 /             44
369 11 170          B     COMP0                                      4  2689  B O57               44
370 11 180  COMPUT  B     GETSX                                      4  2693  B Y15               44
371 11 190  COMPP   C     SX,@.NM@                                   7  2697  C E28 E72           44
372 11 200          BE    COMP1                                      5  2704  B Q65 S             44
373 11 210          C     SX,@/10@                                   7  2709  C E28 F70           44
374 11 220          BE    X7                                         5  2716  B T00 S             45
375 11 230          C     SX,@$08@                                   7  2721  C E28 F73           45
376 11 240          BE    COMP9                                      5  2728  B R01 S             45
377 11 250          C     SX,@.NL@                                   7  2733  C E28 E69           45
378 12 010          BE    COMP12                                     5  2740  B Q97 S             45
379 12 020          BCE   COMP3,SX,&                                 8  2745  B Q41 E28 &         45
380 12 030          BCE   COMP3,SX,-                                 8  2753  B Q41 E28 -         46
381 12 040          BCE   COMP9,SX,)                                8  2761  B R01 E28 )         46
382 12 050          BCE   COMP7,SX,%                                 8  2769  B P97 E28 %         46
383 12 060          BCE   COMP7,SX,/                                 8  2777  B P97 E28 /         46
384 12 070          BCE   COMP7,SX,*                                 8  2785  B P97 E28 *         47
385 12 080          B     DIOG                                       4  2793  B D05               47
386 12 090  COMP7   B     GETSX                                      4  2797  B Y15               47
387 12 100  COMP7A  C     SX,@.PD@                                   7  2801  C E28 F07           47
388 12 110          BE    DIOG                                       5  2808  B D05 S             47
389 12 120          BCE   DIOG,SX,*                                 8  2813  B D05 E28 *         47
390 12 130          BCE   DIOG,SX,/                                 8  2821  B D05 E28 /         48
391 12 140          BCE   DIOG,SX,)                                 8  2829  B D05 E28 )         48
392 12 150          B     COMPP                                      4  2837  B O97               48
393 12 160  COMP3   B     GETSX                                      4  2841  B Y15               48
394 12 170          BCE   DIOG,SX,&                                 8  2845  B D05 E28 &         48
395 12 180          BCE   DIOG,SX,-                                 8  2853  B D05 E28 -         49
396 12 190          B     COMP7A                                     4  2861  B Q01               49
397 12 200  COMP1   B     SKIP                                       4  2865  B D83               49
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 210          B     GETSX                                      4  2869  B Y15               49
399 12 220          C     SX,@  %@                                   7  2873  C E28 F76           49
400 12 230          BU    OTHER                                      5  2880  B R13 /             49
401 12 240          B     SUB8                                       4  2885  B A09               49
402 12 250          B     PAUSK                                      4  2889  B N33               50
403 13 010          B     COMPP                                      4  2893  B O97               50
404 13 020  COMP12  B     SKIP                                       4  2897  B D83               50
405 13 030  COMP9   B     GETSX                                      4  2901  B Y15               50
406 13 040          BCE   DIOG,SX,%                                 8  2905  B D05 E28 %         50
407 13 050  OTHER   BCE   DIOG,SX-2,$                               8  2913  B D05 E26 $         50
408 13 060          C     SX,@.NM@                                   7  2921  C E28 E72           50
409 13 070          BE    DIOG                                       5  2928  B D05 S             51
410 13 080          C     SX,@.NL@                                   7  2933  C E28 E69           51
411 13 090          BE    DIOG                                       5  2940  B D05 S             51
412 13 100          B     PAUSK                                      4  2945  B N33               51
413 13 110          B     COMPP                                      4  2949  B O97               51
414 13 120  NAME6   SBR   NAME12&3                                  4  2953  H R92               51
415 13 130          C     SX,@.NM@                                   7  2957  C E28 E72           51
416 13 140          BU    DIOG                                       5  2964  B D05 /             52
417 13 150  NAMONE  B     SKIP                                       4  2969  B D83               52
418 13 160          B     GETSX                                      4  2973  B Y15               52
419 13 170          C     SX,@.NM@                                   7  2977  C E28 E72           52
420 13 180          BE    NAMONE                                     5  2984  B R69 S             52
421 13 190  NAME12  B     *                                          4  2989  B R92               52
422 13 200  CLOSE   B     GETSX                                      4  2993  B Y15               52
423 13 210  CLOSE3  B     NAME6                                      4  2997  B R53               53
424 13 220          B     PAUSK                                      4  3001  B N33               53
425 13 230          C     SX,@*33@                                   7  3005  C E28 F79           53
426 13 240          BE    CLOSE2                                     5  3012  B ?33 S             53
427 13 250          C     SX,@*26@                                   7  3017  C E28 F82           53
428 14 010          BE    PAUSE1                                     5  3024  B C89 S             53
429 14 020          B     CLOSE3                                     4  3029  B R97               53
430 14 030  CLOSE2  B     GETSX                                      4  3033  B Y15               54
431 14 040          C     SX,@*13@                                   7  3037  C E28 F85           54
432 14 050          BU    DIOG                                       5  3044  B D05 /             54
433 14 060          B     PAUSE1                                     4  3049  B C89               54
434 14 070          B     CLOSE3                                     4  3053  B R97               54
435 14 080  STOP    B     GETSX                                      4  3057  B Y15               54
436 14 090          C     SX,@.NL@                                   7  3061  C E28 E69           54
437 14 100          BU    STOP1                                      5  3068  B ?81 /             55
438 14 110  STOP3   B     SKIP                                       4  3073  B D83               55
439 14 120          B     DONE1                                      4  3077  B C00               55
440 14 130  STOP1   C     SX,@*30@                                   7  3081  C E28 F88           55
441 14 140          BE    DONE1                                      5  3088  B C00 S             55
442 14 150          C     SX,@  @@                                   7  3093  C E28 E66           55
443 14 160          BU    DIOG                                       5  3100  B D05 /             55
444 14 170          B     STOP3                                      4  3105  B ?73               56
445 14 180  SUB8    SBR   EXIT&3                                     4  3109  H Z35               56
446 14 190          B     OUST1                                      4  3113  B A41               56
447 14 200  OUS     C     HOLD,@)05@                                 7  3117  C E41 E57           56
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 210          BE    EXIT                                       5  3124  B Z32 S             56
449 14 220          C     HOLD,@)19@                                 7  3129  C E41 E54           56
450 14 230          BE    EXIT                                       5  3136  B Z32 S             56
451 14 240  OUST1   MLC   EXIT&3,KEEP8                               7  3141  M Z35 E48           57
452 14 250          B     GETSX                                      4  3148  B Y15               57
453 15 010          B     ALLPA                                      4  3152  B A79               57
454 15 020          C     SX,@  )@                                   7  3156  C E28 F43           57
455 15 030          BU    DIOG                                       5  3163  B D05 /             57
456 15 040          MLC   KEEP8,EXIT&3                             7  3168  M E48 Z35           57
457 15 050          B     GETSX1                                     4  3175  B Y19               57
458 15 060  ALLPA   SBR   FIX&3                                     4  3179  H K38               58
459 15 070          B     PRRI                                       4  3183  B J79               58
460 15 080  CARD    SBR   EXT&3                                     4  3187  H B46               58
461 15 090  CADD    MLC   EXIT10&3,SAVR                            7  3191  M C88 E32           58
462 15 100          B     GETSR                                      4  3198  B C16               58
463 15 110          MLC   SX,CARD1-3                                 7  3202  M E28 E35           58
464 15 120          B     GETSR                                      4  3209  B C16               58
465 15 130          MLC   SX,CARD1                                  7  3213  M E28 E38           59
466 15 140          B     GETT                                       4  3220  B B47               59
467 15 150          C     SX,@.CD@                                   7  3224  C E28 F19           59
468 15 160          BE    CADD                                       5  3231  B A91 S             59
469 15 170          MLC   SAVR,EXIT10&3                            7  3236  M E32 C88           59
470 15 180  EXT     B     *                                          4  3243  B B46               59
471 15 190  GETT    SBR   EET&3                                     4  3247  H B87               59
472 15 200          B     GETX                                       4  3251  B 335               60
473 15 210          DCW   SX                                         3  3257  E28                 60
474 15 220          DCW   EOP                                        3  3260  M23                 60
475 15 230          B     PUTX                                       4  3261  B 363               60
476 15 240          DCW   SX                                         3  3267  E28                 60
477 15 250          C     SX,@.PD@                                   7  3268  C E28 F07           60
478 16 010          BE    PSK                                        5  3275  B B88 S             60
479 16 020          CW    SST                                        4  3280  ) E42               61
480 16 030  EET     B     *                                          4  3284  B B87               61
481 16 040  PSK     SBR   X2                                         4  3288  H 094               61
482 16 050          SW    SST                                        4  3292  , E42               61
483 16 060          B     4&X2                                       4  3296  B 0!4               61
484 16 070  DONE1   C     SX,@.PD@                                   7  3300  C E28 F07           61
485 16 080          BE    X7                                         5  3307  B T00 S             61
486 16 090          B     VERB                                       4  3312  B T16               62
487 16 100  GETSR   SBR   EXIT10&3                                  4  3316  H C88               62
488 16 110  GETSR1  B     GETX                                       4  3320  B 335               62
489 16 120          DCW   SX                                         3  3326  E28                 62
490 16 130          DCW   EOP                                        3  3329  M23                 62
491 16 140          B     PUTX                                       4  3330  B 363               62
492 16 150          DCW   SX                                         3  3336  E28                 62
493 16 160          C     SX,@.PD@                                   7  3337  C E28 F07           63
494 16 170          BE    PSK                                        5  3344  B B88 S             63
495 16 180          CW    SST                                        4  3349  ) E42               63
496 16 190  GGK     C     SX,@.CD@                                   7  3353  C E28 F19           63
497 16 200          BE    CARD                                       5  3360  B A87 S             63
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 210         C     SX,@.DG@                                       7  3365  C E28 F16           63
499 16 220         BU    EXIT10                                         5  3372  B C85 /             64
500 16 230         B     GETT                                           4  3377  B B47               64
501 16 240         B     GETSR1                                         4  3381  B C20               64
502 16 250  EXIT10 B     *                                              4  3385  B C88               64
503 17 010  PAUSE1 SBR   PK1&3                                          4  3389  H D04               64
504 17 020         B     GETSX                                          4  3393  B Y15               64
505 17 030         B     PAUSK                                          4  3397  B N33               64
506 17 040  PK1    B     *                                              4  3401  B D04               65
507 17 050  DIOG   B     PUTX                                           4  3405  B 363               65
508 17 060         DCW   &@.DK@                                         3  3411  F91                 65
509 17 070         B     PUTX                                           4  3412  B 363               65
510 17 080         DCW   CARD1-3                                        3  3418  E35                 65
511 17 090         B     PUTX                                           4  3419  B 363               65
512 17 100         DCW   CARD1                                          3  3425  E38                 65
513 17 110         B     PUTX                                           4  3426  B 363               66
514 17 120         DCW   HOLD                                           3  3432  E41                 66
515 17 130  OXB    B     GETSR                                          4  3433  B C16               66
516 17 140         C     SX,@.CD@                                       7  3437  C E28 F19           66
517 17 150         BU    OXB1                                           5  3444  B D71 /             66
518 17 160         B     GETSR                                          4  3449  B C16               66
519 17 170         MLC   SX,CARD1-3                                     7  3453  M E28 E35           66
520 17 180         B     GETSR                                          4  3460  B C16               67
521 17 190         MLC   SX,CARD1                                       7  3464  M E28 E38           67
522 17 200  OXB1   BCE   VERB,SX-2,)                                    8  3471  B T16 E26 )         67
523 17 210         B     OXB                                            4  3479  B D33               67
524 17 220  SKIP   SBR   EXR1&3                                         4  3483  H E25               67
525 17 230         MLC   SX,TEMP                                        7  3487  M E28 E45           67
526 17 240         BW    SKKK,SS1                                       8  3494  V E18 E29 1         68
527 17 250  SKIPER B     GETSR                                          4  3502  B C16               68
528 18 010         C     SX,TEMP                                        7  3506  C E28 E45           68
529 18 020         BU    SKIPER                                         5  3513  B E02 /             68
530 18 030  SKKK   CW    SS1                                            4  3518  ) E29               68
531 18 040  EXR1   B     *                                              4  3522  B E25               68
532 18 050  SX     DCW   #3                                             3  3528                       68
533 18 060  SS1    DC    #1                                             1  3529                       69
534 18 070  SAVR   DCW   #3                                             3  3532                       69
535 18 080  CARD1  DCW   #6                                             6  3538                       69
536 18 090  HOLD   DCW   #3                                             3  3541                       69
537 18 100  SST    DC    #1                                             1  3542                       69
538 18 110  TEMP   DCW   #3                                             3  3545                       69
539 18 120  KEEP8  DCW   #3                                             3  3548                       70
540 18 130         LTORG                                                         3549
                   DCW   @)03@                                          3  3551              LIT     70
                         @)19@                                          3  3554              LIT     70
                         @)05@                                          3  3557              LIT     70
                         @)09@                                          3  3560              LIT     70
                         @)11@                                          3  3563              LIT     70
                         @  @@                                          3  3566              LIT     70
                         @.NL@                                          3  3569              LIT     71
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
					@.NM@	3	3572		LIT	71
					@$30@	3	3575		LIT	71
					@$0@	2	3577		LIT	71
					@$40@	3	3580		LIT	71
					@$20@	3	3583		LIT	71
					@ #@	3	3586		LIT	71
					@$21@	3	3589		LIT	72
					@$32@	3	3592		LIT	72
					@$31@	3	3595		LIT	72
					@$02@	3	3598		LIT	72
					@$01@	3	3601		LIT	72
					@$09@	3	3604		LIT	72
					@.PD@	3	3607		LIT	72
					@A05@	3	3610		LIT	73
					@#DC@	3	3613		LIT	73
					@.DG@	3	3616		LIT	73
					@.CD@	3	3619		LIT	73
					@*32@	3	3622		LIT	73
					@*08@	3	3625		LIT	73
					@*07@	3	3628		LIT	73
					@*18@	3	3631		LIT	74
					@*28@	3	3634		LIT	74
					@*35@	3	3637		LIT	74
					@ *@	3	3640		LIT	74
					@)@	3	3643		LIT	74
					@*22@	3	3646		LIT	74
					@.DM@	3	3649		LIT	74
					@B3A@	3	3652		LIT	75
					@*02@	3	3655		LIT	75
					@*25@	3	3658		LIT	75
					@*24@	3	3661		LIT	75
					@.LB@	3	3664		LIT	75
					@*10@	3	3667		LIT	75
					@/10@	3	3670		LIT	75
					@$08@	3	3673		LIT	76
					@ %@	3	3676		LIT	76
					@*33@	3	3679		LIT	76
					@*26@	3	3682		LIT	76
					@*13@	3	3685		LIT	76
					@*30@	3	3688		LIT	76
					@.DK@	3	3691		LIT	76
541	18	140		ORG				3692		
542	18	150		DCW	@}@	1	3692			77
543	18	160		END				/ 000 080		78

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3
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1401 COBOL - BD6 PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - BD6
 102  1 020         CTL   661111
 103  1 030         ORG   1300                                                 1300
 104  1 040  OK     EQU   3500                                          3500
 105  1 050  GETX   EQU   335                                           0335
 106  1 060  PUTX   EQU   363                                           0363
 107  1 070  SUPER  EQU   351                                           0351
 108  1 080  OUT1   EQU   208                                           0208
 109  1 090  X2     EQU   94                                            0094
 110  1 100         B     SUPER                                   4  1300  B 351                 4
 111  1 110         DCW   @BT1@                                    3  1306                        4
 112  1 120         BW    START1,1002                               8  1307  V T19 |02 1           4
 113  1 130         B     ERS2                                      4  1315  B U93                 4
 114  1 140  START1 BW    ERS,1000                                  8  1319  V V15 |00 1           4
 115  1 150         BW    ERS1,1001                                 8  1327  V V04 |01 1           4
 116  1 160  START  B     GETSX                                     4  1335  B J11                 4
 117  1 170  X71    C     SX,@.DG@                                  7  1339  C K00 K03             5
 118  1 180         BE    LEO                                       5  1346  B U77 S               5
 119  1 190         C     SX,@.DK@                                  7  1351  C K00 K06             5
 120  1 200         BE    PRO                                       5  1358  B V98 S               5
 121  1 210         C     SX,@.ZD@                                  7  1363  C K00 K09             5
 122  1 220         BE    PRO                                       5  1370  B V98 S               5
 123  1 230         C     SX,@.DM@                                  7  1375  C K00 K12             6
 124  1 240         BE    ALL                                       5  1382  B W44 S               6
 125  1 250         C     SX,@.DZ@                                  7  1387  C K00 K15             6
 126  2 010         BE    PRO                                       5  1394  B V98 S               6
 127  2 020         B     PUTSX                                     4  1399  B J29                 6
 128  2 030         C     SX,@.CD@                                  7  1403  C K00 K18             6
 129  2 040         BE    CARD                                      5  1410  B V64 S               7
 130  2 050  STTR   C     SX,@/24@                                  7  1415  C K00 K21             7
 131  2 060         BU    LXX1                                      5  1422  B U54 /               7
 132  2 070         B     GETSX                                     4  1427  B J11                 7
 133  2 080         C     SX,@*06@                                  7  1431  C K00 K24             7
 134  2 090         BU    X71                                       5  1438  B T39 /               7
 135  2 100         B     PUTSX                                     4  1443  B J29                 7
 136  2 110         B     SUPER                                     4  1447  B 351                 8
 137  2 120         DCW   @BT2@                                     3  1453                        8
 138  2 130  LXX1   C     SX,@*01@                                  7  1454  C K00 K27             8
 139  2 140         BU    LXX2                                      5  1461  B U73 /               8
 140  2 150         B     SUPER                                     4  1466  B 351                 8
 141  2 160         DCW   @BT3@                                     3  1472                        8
 142  2 170  LXX2   B     START                                     4  1473  B T35                 8
 143  2 180  LEO    B     HEADER                                    4  1477  B X09                 9
 144  2 190         B     GETSX                                     4  1481  B J11                 9
 145  2 200         B     LOOKUP                                    4  1485  B W52                 9
 146  2 210         B     OUTPUT                                    4  1489  B X79                 9
 147  2 220  ERS2   MLC   @B99@,SX                                  7  1493  M K30 K00             9
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SEQ PG LIN  LABEL  OP    OPERANDS                              SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     ECC                                      4  1500  B V22               9
149  2 240  ERS1   MLC   @B98@,SX                                 7  1504  M K33 K00           9
150  2 250         B     ECC                                      4  1511  B V22              10
151  3 010  ERS    MLC   @B97@,SX                                 7  1515  M K36 K00          10
152  3 020  ECC    B     HEADER                                   4  1522  B X09              10
153  3 030         B     LOOKUP                                   4  1526  B W52              10
154  3 040         CS    299                                      4  1530  / 299              10
155  3 050         MLC   @**@,OUT1&7                             7  1534  M K38 215          10
156  3 060         MLC   SX,OUT1&16                               7  1541  M K00 224          10
157  3 070         MRCM  1&X2,OUT1&30                             7  1548  P 0!1 238          11
158  3 080         MLC   @. @                                    4  1555  M K40              11
159  3 090         W                                              1  1559  2                  11
160  3 100         B     ST4                                      4  1560  B Z91              11
161  3 110  CARD   B     GETSX                                    4  1564  B J11              11
162  3 120         B     PUTSX                                    4  1568  B J29              11
163  3 130         MLC   SX,CARD1-3                              7  1572  M K00 J70          11
164  3 140         B     GETSX                                    4  1579  B J11              12
165  3 150         B     PUTSX                                    4  1583  B J29              12
166  3 160         MLC   SX,CARD1                                 7  1587  M K00 J73          12
167  3 170         B     STTR                                     4  1594  B U15              12
168  3 180  PRO    B     HEADER                                   4  1598  B X09              12
169  3 190         B     GETSX                                    4  1602  B J11              12
170  3 200         MLC   SX,CARD1-3                              7  1606  M K00 J70          12
171  3 210         B     GETSX                                    4  1613  B J11              13
172  3 220         MLC   SX,CARD1                                 7  1617  M K00 J73          13
173  3 230         B     GETSX                                    4  1624  B J11              13
174  3 240         B     LOOKUP                                   4  1628  B W52              13
175  3 250         BW    OUTPUT,SWX                               8  1632  V X79 J60 1        13
176  4 010         B     OUT12                                    4  1640  B Y50              13
177  4 020  ALL    SW    SWX                                      4  1644  , J60              13
178  4 030         B     PRO                                      4  1648  B V98              14
179  4 040  LOOKUP SBR   EXIT&3                                  4  1652  H X08              14
180  4 050         SBR   X2,OK                                    7  1656  H 094 E00          14
181  4 060  LOOK1  BCE   START,0&X2,$                            8  1663  B T35 0!0 $        14
182  4 070         MLC   0&X2,0&X2                                7  1671  M 0!0 0!0          14
183  4 080         SBR   X2                                       4  1678  H 094              14
184  4 090         C     3&X2,SX                                  7  1682  C 0!3 K00          15
185  4 100         BU    LOOK1                                    5  1689  B W63 /            15
186  4 110         MLC   0&X2,0&X2                                7  1694  M 0!0 0!0          15
187  4 120         SBR   X2                                       4  1701  H 094              15
188  4 130  EXIT   B     *                                        4  1705  B X08              15
189  4 140  HEADER SBR   ONE&3                                   4  1709  H X78              15
190  4 150         BW    ONE,SW1                                  8  1713  V X75 J74 1        15
191  4 160         SW    SW1                                      4  1721  , J74              16
192  4 170         CS    332                                      4  1725  / 332              16
193  4 180         CS                                             1  1729  /                  16
194  4 190         MLC   @*** DIAGNOSTICS ***@,OUT1&57            7  1730  M K59 265          16
195  4 200         W                                              1  1737  2                  16
196  4 210         CC    J                                        2  1738  F J                16
197  4 220         CS    299                                      4  1740  / 299              16
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          MLC   @FLAG@,OUT1&8                                 7  1744  M K63 216           17
199  4 240          MLC   @REF@,OUT1&16                                 7  1751  M K66 224           17
200  4 250          MLC   @SEQUENCE@,OUT1&26                           7  1758  M K74 234           17
201  5 010          MLC   @MESSAGE@,OUT1&43                           7  1765  M K81 251           17
202  5 020          W                                                   1  1772  2                   17
203  5 030          CC    J                                             2  1773  F J                 17
204  5 040  ONE     B     *                                             4  1775  B X78               17
205  5 050  OUTPUT  CS    332                                           4  1779  / 332               18
206  5 060          CS                                                  1  1783  /                   18
207  5 070          CW    SWX                                           4  1784  ) J60               18
208  5 080          BWZ   HANG,SX,2                                     8  1788  V Y04 K00 2         18
209  5 090          B     HANG1                                         4  1796  B Y94               18
210  5 100          B     HAGG                                          4  1800  B Y11               18
211  5 110  HANG    A     @1@,NONHLT                                    7  1804  A K82 J63           18
212  5 120  HAGG    SW    NHLT                                          4  1811  , J59               19
213  5 130          MCS   CARD1,OUT1&25                                 7  1815  Z J73 233           19
214  5 140          MLC   SX,OUT1&16                                    7  1822  M K00 224           19
215  5 150          MRCM  1&X2,OUT1&30                                  7  1829  P 0!1 238           19
216  5 160          MLC   @. @                                         4  1836  M K40               19
217  5 170          W                                                   1  1840  2                   19
218  5 180          BCV   OVS                                           5  1841  B J49 @             19
219  5 190          B     START                                         4  1846  B T35               20
220  5 200  OUT12   CS    332                                           4  1850  / 332               20
221  5 210          CS                                                  1  1854  /                   20
222  5 220          B     HANG1                                         4  1855  B Y94               20
223  5 230          MCS   CARD1,OUT1&25                                 7  1859  Z J73 233           20
224  5 240          MLC   @FORMAT ERROR-@,OUT1&42                       7  1866  M K95 250           20
225  5 250          MRCM  1&X2,OUT1&45                                  7  1873  P 0!1 253           20
226  6 010          MLC   @. @                                         4  1880  M K40               21
227  6 020          W                                                   1  1884  2                   21
228  6 030          BCV   OVS                                           5  1885  B J49 @             21
229  6 040          B     START                                         4  1890  B T35               21
230  6 050  HANG1   SBR   RETURN&3                                      4  1894  H Z26               21
231  6 060          A     @1@,HANGER                                    7  1898  A K82 J66           21
232  6 070          SW    HLT                                           4  1905  , J67               21
233  6 080          MLZS  @ @,SX                                        7  1909  Y K96 K00           22
234  6 090          MLC   @**@,OUT1&7                                   7  1916  M K38 215           22
235  6 100  RETURN  B     *                                             4  1923  B Z26               22
236  6 110  STOPS   CC    K                                             2  1927  F K                 22
237  6 120          CS    299                                           4  1929  / 299               22
238  6 130          MLC   @NUMBER OF ERRORS NEEDING CORRECTION-@,265     7  1933  M L32 265           22
239  6 140          MCS   HANGER,270                                    7  1940  Z J66 270           22
240  6 150          W                                                   1  1947  2                   23
241  6 160          BCV   OVV                                           5  1948  B J44 @             23
242  6 170  STT     CS    299                                           4  1953  / 299               23
243  6 180          MLC   TOT,250                                       7  1957  M J97 250           23
244  6 190          A     HANGER,NONHLT                                 7  1964  A J66 J63           23
245  6 200          MCS   NONHLT,255                                    7  1971  Z J63 255           23
246  6 210          W                                                   1  1978  2                   23
247  6 220          BCV   OVR                                           5  1979  B J54 @             24
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         CC    1                                           2  1984  F 1                 24
249  6 240         BSS   EOP1,E                                      5  1986  B !97 E             24
250  6 250  ST4    CS    299                                         4  1991  / 299               24
251  7 010         CC    K                                           2  1995  F K                 24
252  7 020         MLC   @COMPILATION SUSPENDED@,250                7  1997  M L53 250           24
253  7 030         W                                                 1  2004  2                   24
254  7 040         CC    1                                           2  2005  F 1                 25
255  7 050         RWD   1                                           5  2007  U %U1 R             25
256  7 060         RWD   5                                           5  2012  U %U5 R             25
257  7 070         RWD   6                                           5  2017  U %U6 R             25
258  7 080         RWD   4                                           5  2022  U %U4 R             25
259  7 090         H     *-3                                         4  2027  . !27               25
260  7 100         B     *-7                                         4  2031  B !27               25
261  7 110  NSTOP  CS    299                                         4  2035  / 299               26
262  7 120         CC    K                                           2  2039  F K                 26
263  7 130         MLC   TOT,250                                     7  2041  M J97 250           26
264  7 140         MCS   NONHLT,255                                 7  2048  Z J63 255           26
265  7 150         W                                                 1  2055  2                   26
266  7 160         CS    299                                         4  2056  / 299               26
267  7 170         CC    K                                           2  2060  F K                 26
268  7 180         MLC   @PRESS START TO CONTINUE@,250              7  2062  M L76 250           27
269  7 190         W                                                 1  2069  2                   27
270  7 200         CC    1                                           2  2070  F 1                 27
271  7 210         BSS   EOP1,E                                      5  2072  B !97 E             27
272  7 220         H     EOP1                                        4  2077  . !97               27
273  7 230  EOP    BW    STOPS,HLT                                   8  2081  V Z27 J67 1         27
274  7 240         BW    NSTOP,NHLT                                  8  2089  V !35 J59 1         27
275  7 250  EOP1   B     PUTX                                        4  2097  B 363               28
276  8 010         DCW   SX                                          3  2103  K00                 28
277  8 020         B     SUPER                                       4  2104  B 351               28
278  8 030         DCW   @B01@                                      3  2110                      28
279  8 040  GETSX  SBR   EXIT7&3                                    4  2111  H J28               28
280  8 050         B     GETX                                        4  2115  B 335               28
281  8 060         DCW   SX                                          3  2121  K00                 28
282  8 070         DCW   EOP                                         3  2124  !81                 29
283  8 080  EXIT7  B     *                                           4  2125  B J28               29
284  8 090  PUTSX  SBR   EX1&3                                      4  2129  H J43               29
285  8 100         B     PUTX                                        4  2133  B 363               29
286  8 110         DCW   SX                                          3  2139  K00                 29
287  8 120  EX1    B     *                                           4  2140  B J43               29
288  8 130  OVV    CCB   STT,1                                      5  2144  F Z53 1             29
289  8 140  OVS    CCB   START,1                                    5  2149  F T35 1             30
290  8 150  OVR    CCB   ST4,1                                      5  2154  F Z91 1             30
291  8 160  NHLT   DC    #1                                          1  2159                      30
292  8 170  SWX    DC    #1                                          1  2160                      30
293  8 180  NONHLT DCW   @000@                                      3  2163                      30
294  8 190  HANGER DCW   @000@                                      3  2166                      30
295  8 200  HLT    DC    #1                                          1  2167                      30
296  8 210  CARD1  DCW   #6                                          6  2173                      30
297  8 220  SW1    DC    #1                                          1  2174                      30
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  TOT    DCW   @TOTAL NUMBER OF ERRORS-@                   23  2197                      31
299  8 240  SX     DCW   #3                                          3  2200                      31
300  8 250         LTORG                                                   2201
                   DCW   @.DG@                                       3  2203            LIT       31
                         @.DK@                                       3  2206            LIT       31
                         @.ZD@                                       3  2209            LIT       31
                         @.DM@                                       3  2212            LIT       31
                         @.DZ@                                       3  2215            LIT       32
                         @.CD@                                       3  2218            LIT       32
                         @/24@                                       3  2221            LIT       32
                         @*06@                                       3  2224            LIT       32
                         @*01@                                       3  2227            LIT       32
                         @B99@                                       3  2230            LIT       32
                         @B98@                                       3  2233            LIT       32
                         @B97@                                       3  2236            LIT       33
                         @**@                                        2  2238            LIT       33
                         @. @                                        2  2240            LIT       33
       194               @*** DIAGNOSTICS ***@                      19  2259            LIT       33
                         @FLAG@                                      4  2263            LIT       33
                         @REF@                                       3  2266            LIT       33
       200               @SEQUENCE@                                  8  2274            LIT       34
       201               @MESSAGE@                                   7  2281            LIT       34
                         @1@                                         1  2282            LIT       34
       224               @FORMAT ERROR-@                            13  2295            LIT       34
                         @ @                                         1  2296            LIT       34
       238               @NUMBER OF ERRORS NEEDING CORRECTION-@     36  2332            LIT       35
       252               @COMPILATION SUSPENDED@                    21  2353            LIT       36
       268               @PRESS START TO CONTINUE@                  23  2376            LIT       37
301  9 010         ORG                                                     2377
302  9 020         DCW   @}@                                         1  2377                      37
303  9 030         END                                                     / 000 080                 38
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - BT1 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BT1				
102	1	020		CTL	661111				
103	1	030		ORG	2400			2400	
104	1	040		DCW	@$@	1	2400		4
105	1	050		DCW	@ASSIGN|@	7	2407		4
106	1	060		DCW	@*75@	3	2410		4
107	1	070		DCW	@DEVICE NAME 1403-CT|@	20	2430		4
108	1	080		DCW	@*82@	3	2433		4
109	1	090		DCW	@DEVICE NAME 1403-P|@	19	2452		5
110	1	100		DCW	@*83@	3	2455		5
111	1	110		DCW	@SWITCH NAME 1403-P-CB|@	22	2477		6
112	1	120		DCW	@*86@	3	2480		6
113	1	130		DCW	@MEMORY SIZE|@	12	2492		6
114	1	140		DCW	@*76@	3	2495		7
115	1	150		DCW	@SWITCH NAME 1403-P-C9|@	22	2517		7
116	1	160		DCW	@*85@	3	2520		7
117	1	170		DCW	@DEVICE NAME 1402-P|@	19	2539		8
118	1	180		DCW	@*88@	3	2542		8
119	1	190		DCW	@DEVICE NAME 1402-R|@	19	2561		9
120	1	200		DCW	@*80@	3	2564		9
121	1	210		DCW	@SELECT|@	7	2571		9
122	1	220		DCW	@*77@	3	2574		9
123	1	230		DCW	@RESERVE ALTERNATE AREA|@	23	2597		10
124	1	240		DCW	@*70@	3	2600		10
125	1	250		DCW	@SWITCH NAME 1401-SS|@	20	2620		11
126	2	010		DCW	@*81@	3	2623		11
127	2	020		DCW	@SWITCH NAME 1403-P-CV|@	22	2645		12
128	2	030		DCW	@*87@	3	2648		12
129	2	040		DCW	@CONFIGURATION SECTION NOT SENSED|@	33	2681		13
130	2	050		DCW	@B2A@	3	2684		13
131	2	060		DCW	@KEYWORD SOURCE-COMPUTER MUST FOLLOW@	35	2719		14
132	2	070		DC	@ CONFIGURATION SECTION|@	23	2742		15
133	2	080		DCW	@B2B@	3	2745		15
134	2	090		DCW	@IBM-1401 CLAUSE NOT SENSED|@	27	2772		16
135	2	100		DCW	@B2C@	3	2775		16
136	2	110		DCW	@INVALID ENTRY|@	14	2789		17
137	2	120		DCW	@B2D@	3	2792		17
138	2	130		DCW	@KEYWORD FILE-CONTROL MUST FOLLOW INPUT-OUTPUT@	45	2837		19
139	2	140		DC	@ SECTION|@	9	2846		19
140	2	150		DCW	@B2E@	3	2849		19
141	2	160		DCW	@PERIOD MUST FOLLOW PARAGRAPH SECTION OR DIVISION|@	49	2898		21
142	2	170		DCW	@B2F@	3	2901		21
143	2	180		DCW	@PERIOD MUST FOLLOW ENTRY|@	25	2926		21
144	2	190		DCW	@B2G@	3	2929		22
145	2	200		DCW	@KEYWORD SECTION NOT SENSED|@	27	2956		22
146	2	210		DCW	@B2H@	3	2959		22
147	2	220		DCW	@KEYWORD DIVISION NOT SENSED|@	28	2987		23

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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         DCW   @B2I@                                               3  2990                      23
149  2 240         DCW   @NEXT CARD OUT OF SEQUENCE|@                       26  3016                      24
150  2 250         DCW   @A01@                                               3  3019                      24
151  3 010         DCW   @FORMAT ERROR-CONTINUATION OF ALPHANUMERIC@         41  3060                      26
152  3 020         DC    @ LITERAL|@                                        9  3069                      26
153  3 030         DCW   @A0B@                                               3  3072                      26
154  3 040         DCW   @NUMERIC LITERAL EXCEEDS LEGAL LENGTH|@           37  3109                      27
155  3 050         DCW   @A0C@                                               3  3112                      28
156  3 060         DCW   @NAME EXCEEDS LEGAL LENGTH|@                      26  3138                      28
157  3 070         DCW   @A0D@                                               3  3141                      28
158  3 080         DCW   @ALPHANUMERIC LITERAL EXCEEDS LEGAL LENGTH|@       42  3183                      30
159  3 090         DCW   @A0E@                                               3  3186                      30
160  3 100         DCW   @SPECIAL-CHARACTER MUST BE IN ALPHANUMERIC LITERAL|@ 50  3236                      32
161  3 110         DCW   @A0F@                                               3  3239                      32
162  3 120         DCW   @PROGRAM-ID NOT SENSED|@                          22  3261                      32
163  3 130         DCW   @A0H@                                               3  3264                      32
164  3 140         DCW   @IDENTIFICATION DIVISION NOT SENSED|@             35  3299                      33
165  3 150         DCW   @A0I@                                               3  3302                      33
166  3 160         DCW   @ENVIRONMENT DIVISION NOT SENSED  |@              34  3336                      34
167  3 170         DCW   @B99@                                               3  3339                      34
168  3 180         DCW   @DATA DIVISION NOT SENSED|@                       25  3364                      35
169  3 190         DCW   @B97@                                               3  3367                      35
170  3 200         DCW   @PROCEDURE DIVISION NOT SENSED |@                 31  3398                      36
171  3 210         DCW   @B98@                                               3  3401                      36
172  3 220         DCW   @CONTINUATION MUST BEGIN IN COLUMN 12|@           37  3438                      37
173  3 230         DCW   @A1?@                                               3  3441                      38
174  3 240         LTORG                                                          3442
175  3 250         ORG                                                            3442
176  4 010         DCW   @}@                                                 1  3442                      38
177  4 020         END                                                                / 000 080            39
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040               3
```

1401 COBOL - BT2 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BT2				
102	1	020		CTL	661111				
103	1	030		ORG	2400			2400	
104	1	040		DCW	@$@	1	2400		4
105	1	050		DCW	@FD|@	3	2403		4
106	1	060		DCW	@/26@	3	2406		4
107	1	070		DCW	@RECORDING MODE|@	15	2421		4
108	1	080		DCW	@/06@	3	2424		4
109	1	090		DCW	@BLOCK CONTAINS|@	15	2439		5
110	1	100		DCW	@/16@	3	2442		5
111	1	110		DCW	@RECORD CONTAINS|@	16	2458		5
112	1	120		DCW	@/11@	3	2461		5
113	1	130		DCW	@LABEL RECORD|@	13	2474		6
114	1	140		DCW	@/19@	3	2477		6
115	1	150		DCW	@VALUE OF|@	9	2486		6
116	1	160		DCW	@/13@	3	2489		6
117	1	170		DCW	@DATA RECORD|@	12	2501		7
118	1	180		DCW	@/24@	3	2504		7
119	1	190		DCW	@SIZE|@	5	2509		7
120	1	200		DCW	@/10@	3	2512		7
121	1	210		DCW	@REDEFINES|@	10	2522		7
122	1	220		DCW	@/05@	3	2525		7
123	1	230		DCW	@OCCURS|@	7	2532		8
124	1	240		DCW	@/14@	3	2535		8
125	1	250		DCW	@POINT LOCATION|@	15	2550		8
126	2	010		DCW	@/18@	3	2553		8
127	2	020		DCW	@PICTURE|@	8	2561		8
128	2	030		DCW	@)12@	3	2564		8
129	2	040		DCW	@JUSTIFIED|@	10	2574		9
130	2	050		DCW	@/07@	3	2577		9
131	2	060		DCW	@LEAVING|@	8	2585		9
132	2	070		DCW	@/12@	3	2588		9
133	2	080		DCW	@VALUE|@	6	2594		9
134	2	090		DCW	@/13@	3	2597		9
135	2	100		DCW	@WORKING-STORAGE SECTION OUT OF SEQUENCE|@	40	2637		11
136	2	110		DCW	@B4A@	3	2640		11
137	2	120		DCW	@CONSTANT SECTION OUT OF SEQUENCE|@	33	2673		11
138	2	130		DCW	@B4B@	3	2676		12
139	2	140		DCW	@RECORDING MODE MUST BE 1|@	25	2701		12
140	2	150		DCW	@B4C@	3	2704		12
141	2	160		DCW	@DATA RECORDS CLAUSE MUST BE IN FD|@	34	2738		13
142	2	170		DCW	@B4D@	3	2741		13
143	2	180		DCW	@LABEL RECORDS CLAUSE MUST BE IN FD|@	35	2776		14
144	2	190		DCW	@B4E@	3	2779		14
145	2	200		DCW	@DUPLICATE RECORD CONTAINS CLAUSE|@	33	2812		15
146	2	210		DCW	@B4H@	3	2815		15
147	2	220		DCW	@DUPLICATE BLOCK CONTAINS CLAUSE|@	32	2847		16

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		DCW	@B4G@	3	2850		16
149	2	240		DCW	@DUPLICATE RECORDING MODE CLAUSE|@	32	2882		17
150	2	250		DCW	@B4F@	3	2885		17
151	3	010		DCW	@DUPLICATE VALUE OF CLAUSE|@	26	2911		18
152	3	020		DCW	@B4I@	3	2914		18
153	3	030		DCW	@A PERIOD MUST FOLLOW ENTRY|@	27	2941		19
154	3	040		DCW	@B5J@	3	2944		19
155	3	050		DCW	@DATA DIVISION NOT FOLLOWED BY VALID SECTION|@	44	2988		21
156	3	060		DCW	@B5K@	3	2991		21
157	3	070		DCW	@DUPLICATE CONSTANT SECTION|@	27	3018		21
158	3	080		DCW	@B5L@	3	3021		21
159	3	090		DCW	@DUPLICATE WORKING-STORAGE SECTION|@	34	3055		22
160	3	100		DCW	@B5M@	3	3058		22
161	3	110		DCW	@LEVEL NUMBER MUST BE FOLLOWED BY NAME OR FILLER|@	48	3106		24
162	3	120		DCW	@B5N@	3	3109		24
163	3	130		DCW	@FORMAT ERROR|@	13	3122		24
164	3	140		DCW	@B5O@	3	3125		24
165	3	150		DCW	@NEXT CARD OUT OF SEQUENCE|@	26	3151		25
166	3	160		DCW	@A01@	3	3154		25
167	3	170		DCW	@FORMAT ERROR-CONTINUATION OF ALPHANUMERIC@	41	3195		27
168	3	180		DC	@ LITERAL|@	9	3204		27
169	3	190		DCW	@A0B@	3	3207		27
170	3	200		DCW	@NUMERIC LITERAL EXCEEDS LEGAL LENGTH|@	37	3244		28
171	3	210		DCW	@A0C@	3	3247		29
172	3	220		DCW	@NAME EXCEEDS LEGAL LENGTH|@	26	3273		29
173	3	230		DCW	@A0D@	3	3276		29
174	3	240		DCW	@ALPHANUMERIC LITERAL EXCEEDS LEGAL LENGTH|@	42	3318		31
175	3	250		DCW	@A0E@	3	3321		31
176	4	010		DCW	@SPECIAL-CHARACTER MUST BE IN ALPHANUMERIC LITERAL|@	50	3371		33
177	4	020		DCW	@A0F@	3	3374		33
178	4	030		DCW	@KEYWORD SECTION NOT SENSED|@	27	3401		34
179	4	040		DCW	@B5P@	3	3404		34
180	4	050		DCW	@KEYWORD DIVISION NOT SENSED|@	28	3432		35
181	4	060		DCW	@B5Q@	3	3435		35
182	4	070		DCW	@CONTINUATION MUST BEGIN IN COLUMN 12|@	37	3472		36
183	4	080		DCW	@A1?@	3	3475		37
184	4	090		LTORG				3476	
185	4	100		ORG				3476	
186	4	110		DCW	@}@	1	3476		37
187	4	120		END				/ 000 080	38

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?              2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040              3
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1401 COBOL - BT3 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - BT3				
102	1	020		CTL	661111				
103	1	030		ORG	2400			2400	
104	1	040		DCW	@$@	1	2400		4
105	1	050		DCW	@MOVE|@	5	2405		4
106	1	060		DCW	@)15@	3	2408		4
107	1	070		DCW	@OPEN|@	5	2413		4
108	1	080		DCW	@)14@	3	2416		4
109	1	090		DCW	@MULTIPLY|@	9	2425		4
110	1	100		DCW	@)02@	3	2428		4
111	1	110		DCW	@GO TO|@	6	2434		5
112	1	120		DCW	@)20@	3	2437		5
113	1	130		DCW	@DISPLAY|@	8	2445		5
114	1	140		DCW	@)04@	3	2448		5
115	1	150		DCW	@SUBTRACT|@	9	2457		5
116	1	160		DCW	@)01@	3	2460		5
117	1	170		DCW	@ADDITION|@	9	2469		6
118	1	180		DCW	@)18@	3	2472		6
119	1	190		DCW	@DIVIDE|@	7	2479		6
120	1	200		DCW	@)06@	3	2482		6
121	1	210		DCW	@ALTER|@	6	2488		6
122	1	220		DCW	@)10@	3	2491		6
123	1	230		DCW	@ACCEPT|@	7	2498		6
124	1	240		DCW	@)07@	3	2501		7
125	1	250		DCW	@CLOSE|@	6	2507		7
126	2	010		DCW	@)09@	3	2510		7
127	2	020		DCW	@WRITE|@	6	2516		7
128	2	030		DCW	@)08@	3	2519		7
129	2	040		DCW	@READ|@	5	2524		7
130	2	050		DCW	@)13@	3	2527		7
131	2	060		DCW	@COMPUTE|@	8	2535		8
132	2	070		DCW	@)05@	3	2538		8
133	2	080		DCW	@STOP|@	5	2543		8
134	2	090		DCW	@)11@	3	2546		8
135	2	100		DCW	@PERFORM|@	8	2554		8
136	2	110		DCW	@)03@	3	2557		8
137	2	120		DCW	@IF|@	3	2560		8
138	2	130		DCW	@)19@	3	2563		9
139	2	140		DCW	@PERIOD MUST BE FOLLOWED BY VERB PARAGRAPH OR SECT@	49	2612		11
140	2	150		DC	@ION NAME|@	9	2621		11
141	2	160		DCW	@B0A@	3	2624		11
142	2	170		DCW	@PERIOD MUST FOLLOW PARAGRAPH OR SECTION NAME|@	45	2669		13
143	2	180		DCW	@B0B@	3	2672		13
144	2	190		DCW	@KEYWORD DIVISION MUST BE FOLLOWED BY PERIOD|@	44	2716		15
145	2	200		DCW	@B0C@	3	2719		15
146	2	210		DCW	@KEYWORD DIVISION NOT SENSED|@	28	2747		15
147	2	220		DCW	@B0D@	3	2750		15

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		DCW	@NEXT CARD OUT OF SEQUENCE|@	26	2776		16
149	2	240		DCW	@A01@	3	2779		16
150	2	250		DCW	@FORMAT ERROR-CONTINUATION OF ALPHANUMERIC@	41	2820		18
151	3	010		DC	@ LITERAL|@	9	2829		18
152	3	020		DCW	@A0B@	3	2832		18
153	3	030		DCW	@NUMERIC LITERAL EXCEEDS LEGAL LENGTH|@	37	2869		19
154	3	040		DCW	@A0C@	3	2872		20
155	3	050		DCW	@NAME EXCEEDS LEGAL LENGTH|@	26	2898		20
156	3	060		DCW	@A0D@	3	2901		20
157	3	070		DCW	@ALPHANUMERIC LITERAL EXCEEDS LEGAL LENGTH|@	42	2943		22
158	3	080		DCW	@A0E@	3	2946		22
159	3	090		DCW	@SPECIAL-CHARACTER MUST BE IN ALPHANUMERIC LITERAL|@	50	2996		24
160	3	100		DCW	@A0F@	3	2999		24
161	3	110		DCW	@ONLY AUTOCODER CAN BE ENTERED FROM COBOL|@	41	3040		26
162	3	120		DCW	@A0G@	3	3043		26
163	3	130		DCW	@MISSING PERIOD AT END OF PROGRAM|@	33	3076		26
164	3	140		DCW	@B3A@	3	3079		27
165	3	150		DCW	@KEYWORD MUST NOT BE USED AS LABEL|@	34	3113		27
166	3	160		DCW	@B9B@	3	3116		28
167	3	170		DCW	@MISSING PERIOD BEFORE PROCEDURE DIVISION|@	41	3157		30
168	3	180		DCW	@B9A@	3	3160		30
169	3	190		DCW	@FIGCON ALL MUST BE FOLLOWED BY ALPHANUMERIC @	44	3204		32
170	3	200		DC	@LITERAL|@	8	3212		32
171	3	210		DCW	@B8E@	3	3215		32
172	3	220		DCW	@CONTINUATION MUST BEGIN IN COLUMN 12|@	37	3252		33
173	3	230		DCW	@A1?@	3	3255		34
174	3	240		LTORG				3256	
175	3	250		ORG				3256	
176	4	010		DCW	@}@	1	3256		34
177	4	020		END				/ 000 080	35

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B01 PAGE 1

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - B01
 102  1 020         CTL   631 11
 103  1 030  X1     EQU   89                                              0089
 104  1 040  X2     EQU   94                                              0094
 105  1 050  X3     EQU   99                                              0099
 106  1 060  ADSZE  EQU   188                                             0188
 107  1 070  GETX   EQU   335                                             0335
 108  1 080  PUTX   EQU   363                                             0363
 109  1 090  SUPER  EQU   351                                             0351
 110  1 100  SZSW   EQU   1126                                            1126
 111  1 110         ORG   1300                                                  1300
 112  1 120  DTCN1  DCW   @A10@                                      3   1302                      4
 113  1 130  SPSW   DCW   @0@                                        1   1303                      4
 114  1 140  LV88SW DCW   @0@                                        1   1304                      4
 115  1 150  DVALSW DCW   @0@                                        1   1305                      4
 116  1 160  DTCN   DCW   @A10@                                      3   1308                      4
 117  1 170  DTEND  DCW   @   @                                      3   1311                      4
 118  1 180  DTADR  DCW   @   @                                      3   1314                      4
 119  1 190  PRCN1  DCW   @J01@                                      3   1317                      5
 120  1 200  PRCN   DCW   @J01@                                      3   1320                      5
 121  1 210  PREND  DCW   @   @                                      3   1323                      5
 122  1 220  PRADR  DCW   @   @                                      3   1326                      5
 123  1 230  LTNM1  DCW   @S01@                                      3   1329                      5
 124  1 240  LTNM   DCW   @S01@                                      3   1332                      5
 125  1 250  OVSW   DCW   @0@                                        1   1333                      5
 126  2 010  OVFSW  DC    @0@                                        1   1334                      6
 127  2 020  DOVSW  DCW   @0@                                        1   1335                      6
 128  2 030  POVSW  DCW   @0@                                        1   1336                      6
 129  2 040  DQSW   DCW   @0@                                        1   1337                      6
 130  2 050  PQSW   DCW   @0@                                        1   1338                      6
 131  2 060  LITSW  DCW   @0@                                        1   1339                      7
 132  2 070  SYSW   DCW   @0@                                        1   1340                      7
 133  2 080  TBSW   DCW   @0@                                        1   1341                      7
 134  2 090  UNSW   DCW   @0@                                        1   1342                      7
 135  2 100         ORG   1350                                                  1350
 136  2 110  INIT   MLC   @004@,MEMCNT                               7   1350  M E86 B04           8
 137  2 120         BWZ   INIT6,ADSZE,2                             8   1357  V U02 188 2         8
 138  2 130         BWZ   MEM02,ADSZE,S                             8   1365  V T95 188 S         8
 139  2 140         BWZ   MEM03,ADSZE,K                             8   1373  V T88 188 K         8
 140  2 150         A     &4,MEMCNT                                 7   1381  A E87 B04           8
 141  2 160  MEM03  A     &4,MEMCNT                                 7   1388  A E87 B04           9
 142  2 170  MEM02  A     &4,MEMCNT                                 7   1395  A E87 B04           9
 143  2 180  INIT6  MN    MEMCNT,SZSW                               7   1402  D B04 /26           9
 144  2 190         B     GTSYM                                     4   1409  B Z39               9
 145  2 200         B     GTSYM                                     4   1413  B Z39               9
 146  2 210         B     INIT2                                     4   1417  B U25               9
 147  2 220  INIT1  B     PTGTSY                                    4   1421  B P57               9
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230	INIT2	C	CURNT,SENV		7	1425	C A22 A49	10
149	2	240		BU	INIT1		5	1432	B U21 /	10
150	2	250	PTEST	B	PUTX		4	1437	B 363	10
151	3	010		DCW	CURNT		3	1443	A22	10
152	3	020	GTEST	B	GTSYM		4	1444	B Z39	10
153	3	030	TEST	B	TSTRTN		4	1448	B P76	10
154	3	040		B	PTEST		4	1452	B U37	10
155	3	050	SOURCE	B	PUTX		4	1456	B 363	11
156	3	060		DCW	SPRD		3	1462	B59	11
157	3	070		MLC	@1@,SCTSW		7	1463	M E88 A29	11
158	3	080		B	PTEST		4	1470	B U37	11
159	3	090	OBJECT	B	PUTX		4	1474	B 363	11
160	3	100		DCW	SPRD		3	1480	B59	11
161	3	110		MLC	@2@,SCTSW		7	1481	M E89 A29	11
162	3	120		B	PTGTSY		4	1488	B P57	12
163	3	130		B	PUTX		4	1492	B 363	12
164	3	140		DCW	SNOREL		3	1498	E35	12
165	3	150		B	TEST		4	1499	B U48	12
166	3	160	MEMORY	BCE	MEMTST,SCTSW,1		8	1503	B Y54 A29 1	12
167	3	170		B	PTEST		4	1511	B U37	12
168	3	180	NOREL	BCE	GTEST,SCTSW,2		8	1515	B U44 A29 2	12
169	3	190		B	PTEST		4	1523	B U37	13
170	3	200	SPNAME	MLC	@1@,SPNMSW		7	1527	M E88 A50	13
171	3	210		MLC	@1@,SPSW		7	1534	M E88 T03	13
172	3	220		B	SECT1		4	1541	B V52	13
173	3	230	SECT	MLC	@0@,SPNMSW		7	1545	M E90 A50	13
174	3	240	SECT1	B	PUTX		4	1552	B 363	13
175	3	250		DCW	SPRD		3	1558	B59	13
176	4	010		B	PTEST		4	1559	B U37	14
177	4	020	ALL	C	NEW-1,@$0@		7	1563	C A24 E92	14
178	4	030		BU	PTEST		5	1570	B U37 /	14
179	4	040		B	PTGTSY		4	1575	B P57	14
180	4	050		MLC	@A@,CURNT-2		7	1579	M E93 A20	14
181	4	060		MZ	@-@,CURNT		7	1586	Y E94 A22	14
182	4	070		B	PTEST		4	1593	B U37	14
183	4	080	PRD	C	NEW,NLIT		7	1597	C A25 B41	15
184	4	090		BU	PTEST		5	1604	B U37 /	15
185	4	100		B	PTGTSY		4	1609	B P57	15
186	4	110		BCE	PSNAME,CDSW,0		8	1613	B P49 A34 0	15
187	4	120		B	PUTX		4	1621	B 363	15
188	4	130		DCW	LVOP		3	1627	A56	15
189	4	140		B	ENTFLD		4	1628	B K27	15
190	4	150		MLC	FIELD&X2,SYM		7	1632	M AO9 A59	16
191	4	160		B	PUTX		4	1639	B 363	16
192	4	170		DCW	SYM		3	1645	A59	16
193	4	180		B	TEST		4	1646	B U48	16
194	4	190	PROC	MLC	&PRTB,TBADR		7	1650	M E97 A62	16
195	4	200		B	PTEST		4	1657	B U37	16
196	4	210	DATA	B	PUTX		4	1661	B 363	16
197	4	220		DCW	SPRD		3	1667	B59	17

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SEQ PG LIN  LABEL   OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          MLC   @B@,GT09                     7  1668  M E98 Z67           17
199  4 240          MLC   &DTTB,TBADR                  7  1675  M F01 A62           17
200  4 250          B     PTEST                        4  1682  B U37               17
201  5 010  DVRTN   B     PTGTSY                       4  1686  B P57               17
202  5 020          C     CURNT,NLIT                   7  1690  C A22 B41           17
203  5 030          BE    PASSSY                       5  1697  B O79 S             17
204  5 040  DVRTN1  C     CURNT,CNOP                   7  1702  C A22 B47           18
205  5 050          BE    PASSSY                       5  1709  B O79 S             18
206  5 060          B     TEST                         4  1714  B U48               18
207  5 070  SWITCH  B     PTGTSY                       4  1718  B P57               18
208  5 080          C     CURNT,CNOP                   7  1722  C A22 B47           18
209  5 090          BU    TEST                         5  1729  B U48 /             18
210  5 100          B     GTSYM                        4  1734  B Z39               18
211  5 110          B     PUTX                         4  1738  B 363               19
212  5 120          DCW   AFLIT                        3  1744  B26                 19
213  5 130          MLC   CURNT-2,CURNT                7  1745  M A20 A22           19
214  5 140          MLC                                1  1752  M                   19
215  5 150          B     PUTX                         4  1753  B 363               19
216  5 160          DCW   CURNT                        3  1759  A22                 19
217  5 170  SWCH01  B     GTSYM                        4  1760  B Z39               19
218  5 180          C     CURNT,CNOP                   7  1764  C A22 B47           20
219  5 190          BU    SWCH01                       5  1771  B X60 /             20
220  5 200          B     PUTX                         4  1776  B 363               20
221  5 210          DCW   AFLIT                        3  1782  B26                 20
222  5 220          B     GTSYM                        4  1783  B Z39               20
223  5 230          B     DVRTN1                       4  1787  B X02               20
224  5 240  VALUE   B     PTGTSY                       4  1791  B P57               20
225  5 250          C     CURNT,QUAL                   7  1795  C A22 B14           21
226  6 010          BE    GTEST                        5  1802  B U44 S             21
227  6 020          B     TEST                         4  1807  B U48               21
228  6 030  SIZOCC  B     PTGTSY                       4  1811  B P57               21
229  6 040          C     CURNT,NLIT                   7  1815  C A22 B41           21
230  6 050          BE    CMPSZE                       5  1822  B J87 S             21
231  6 060          C     CURNT,NLIT                   7  1827  C A22 B41           21
232  6 070          BU    TEST                         5  1834  B U48 /             22
233  6 080          B     PUTX                         4  1839  B 363               22
234  6 090          DCW   SSZE                         3  1845  B83                 22
235  6 100          B     CMPSZE                       4  1846  B J87               22
236  6 110          B     TEST                         4  1850  B U48               22
237  6 120  MEMTST  C     NEW,NLIT                     7  1854  C A25 B41           22
238  6 130          BU    PTEST                        5  1861  B U37 /             22
239  6 140          B     GTSYM                        4  1866  B Z39               23
240  6 150          B     ENTFLD                       4  1870  B K27               23
241  6 160          C     SYMCNT,@02@                  7  1874  C B09 F03           23
242  6 170          BU    TEST                         5  1881  B U48 /             23
243  6 180  MEM01   C     FIELD&X2,MEMCNT&3            7  1886  C AO9 B07           23
244  6 190          BH    MEM04                        5  1893  B Z09 U             23
245  6 200  MEM05   MN    MEMCNT,SZSW                  7  1898  D B04 /26           23
246  6 210          B     TEST                         4  1905  B U48               24
247  6 220  MEM04   C     MEMCNT,@004@                 7  1909  C B04 E86           24
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         BE    MEM05                                5  1916  B Y98 S             24
249  6 240         S     &4,MEMCNT                            7  1921  S E87 B04           24
250  6 250         MZ    @ @,MEMCNT                           7  1928  Y F04 B04           24
251  7 010         B     MEM01                                4  1935  B Y86               24
252  7 020  GTSYM  SBR   GT01&3                               4  1939  H !71               24
253  7 030         MLC   @0@,CDSW                            7  1943  M E90 A34           25
254  7 040         MLC   NEW,CURNT                            7  1950  M A25 A22           25
255  7 050  GT02   B     GETX                                 4  1957  B 335               25
256  7 060         DCW   NEW                                  3  1963  A25                 25
257  7 070         DCW   GTEOJ                                3  1966  J76                 25
258  7 080  GT09   NOP   GT11                                 4  1967  N Z83               25
259  7 090         C     NEW,SPRD                             7  1971  C A25 B59           25
260  7 100         BE    GT02                                 5  1978  B Z57 S             26
261  7 110  GT11   C     NEW,SCARD                            7  1983  C A25 A28           26
262  7 120         BE    GT03                                 5  1990  B !72 S             26
263  7 130         BCE   GT04,GTSW3,0                         8  1995  B !46 A33 0         26
264  7 140  GT08   MLC   @01@,CDSW                           7  2003  M F06 A34           26
265  7 150         B     PUTX                                 4  2010  B 363               26
266  7 160         DCW   SCARD                                3  2016  A28                 26
267  7 170         B     PUTX                                 4  2017  B 363               27
268  7 180         DCW   CDSV1                                3  2023  A40                 27
269  7 190         B     PUTX                                 4  2024  B 363               27
270  7 200         DCW   CDSV2                                3  2030  A37                 27
271  7 210         BCE   GT05,GTSW2,1                         8  2031  B J42 A32 1         27
272  7 220         MLC   @00@,GTSW1                           7  2039  M F08 A31           27
273  7 230  GT04   BCE   GT10,GTSW1,0                         8  2046  B !61 A31 0         27
274  7 240         MLC   @1@,GTSW3                           7  2054  M E88 A33           28
275  7 250  GT10   MLC   @0@,GTSW4                           7  2061  M E90 A30           28
276  8 010  GT01   B     *                                    4  2068  B !71               28
277  8 020  GT03   BCE   GT07,GTSW1,1                         8  2072  B J11 A31 1         28
278  8 030         B     GETX                                 4  2080  B 335               28
279  8 040         DCW   CDSV1                                3  2086  A40                 28
280  8 050         DCW   GTEOJ                                3  2089  J76                 28
281  8 060         B     GETX                                 4  2090  B 335               29
282  8 070         DCW   CDSV2                                3  2096  A37                 29
283  8 080         DCW   GTEOJ                                3  2099  J76                 29
284  8 090         MLC   @11@,GTSW1                          7  2100  M F10 A31           29
285  8 100         B     GT02                                 4  2107  B Z57               29
286  8 110  GT07   B     GETX                                 4  2111  B 335               29
287  8 120         DCW   CDSV3                                3  2117  A46                 29
288  8 130         DCW   GTEOJ                                3  2120  J76                 30
289  8 140         B     GETX                                 4  2121  B 335               30
290  8 150         DCW   CDSV4                                3  2127  A43                 30
291  8 160         DCW   GTEOJ                                3  2130  J76                 30
292  8 170         MLC   @1@,GTSW2                           7  2131  M E88 A32           30
293  8 180         B     GT02                                 4  2138  B Z57               30
294  8 190  GT05   MLC   CDSV3,CDSV1                         7  2142  M A46 A40           30
295  8 200         MLC                                        1  2149  M                   31
296  8 210         MLC   @0@,GTSW2                           7  2150  M E90 A32           31
297  8 220         BCE   GT08,GTSW4,1                         8  2157  B !03 A30 1         31
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
298	8	230		MLC	@1@,GTSW1		7	2165	M E88 A31	31
299	8	240		B	GT09		4	2172	B Z67	31
300	8	250	GTEOJ	MLC	&EOJ,GT02&3		7	2176	M F13 Z60	31
301	9	010		B	GT01		4	2183	B !68	31
302	9	020	CMPSZE	SBR	CMP01&3		4	2187	H K26	32
303	9	030		B	ENTFLD		4	2191	B K27	32
304	9	040		MLC	FIELD-3&X2,SYM		7	2195	M AO6 A59	32
305	9	050		B	PUTX		4	2202	B 363	32
306	9	060		DCW	SYM		3	2208	A59	32
307	9	070		MLC	FIELD&X2,SYM		7	2209	M AO9 A59	32
308	9	080		B	PUTX		4	2216	B 363	32
309	9	090		DCW	SYM		3	2222	A59	33
310	9	100	CMP01	B	*		4	2223	B K26	33
311	9	110	ENTFLD	SBR	ENTFXX&3		4	2227	H L16	33
312	9	120		MLC	CURNT,SYM		7	2231	M A22 A59	33
313	9	130		MLC	@002@,X2		7	2238	M F16 094	33
314	9	140		B	GTSYM		4	2245	B Z39	33
315	9	150		B	ENTF05		4	2249	B K83	33
316	9	160		MLC	@00@,SYMCNT		7	2253	M F08 B09	34
317	9	170	ENTF01	B	GTSYM		4	2260	B Z39	34
318	9	180		C	CURNT,SYM		7	2264	C A22 A59	34
319	9	190		BE	ENTF02		5	2271	B L01 S	34
320	9	200		A	&3,X2		7	2276	A F17 094	34
321	9	210	ENTF05	MLC	CURNT,FIELD&X2		7	2283	M A22 AO9	34
322	9	220		A	&1,SYMCNT		7	2290	A F18 B09	35
323	9	230		B	ENTF01		4	2297	B K60	35
324	9	240	ENTF02	B	GTSYM		4	2301	B Z39	35
325	9	250	ENTF04	BCE	ENTF03,FIELD&X2,		8	2305	B L17 AO9	35
326	10	010	ENTFXX	B	*		4	2313	B L16	35
327	10	020	ENTF03	S	&1,X2		7	2317	S F18 094	35
328	10	030		MZ	@ @,X2		7	2324	Y F04 094	36
329	10	040		B	ENTF04		4	2331	B L05	36
330	10	050	PRNMRT	MLC	@00@,PCNT		7	2335	M F08 B11	36
331	10	060	PRN01	B	PTGTSY		4	2342	B P57	36
332	10	070	PRN03	C	CURNT,CNOP		7	2346	C A22 B47	36
333	10	080		BE	PRN02		5	2353	B L70 S	36
334	10	090		C	CURNT,NLIT		7	2358	C A22 B41	37
335	10	100		BU	TEST		5	2365	B U48 /	37
336	10	110	PRN02	B	PSCNME		4	2370	B M62	37
337	10	120		C	CURNT,QUAL		7	2374	C A22 B14	37
338	10	130		BE	PRN01		5	2381	B L42 S	37
339	10	140		A	&1,PCNT		7	2386	A F18 B11	37
340	10	150		BCE	TEST,PSW1,1		8	2393	B U48 B15 1	38
341	10	160		B	PRN03		4	2401	B L46	38
342	10	170	GOTO	C	NEW,NLIT		7	2405	C A25 B41	38
343	10	180		BE	PRCEED		5	2412	B M29 S	38
344	10	190		C	NEW,CNOP		7	2417	C A25 B47	38
345	10	200		BU	GOTO1		5	2424	B M51 /	38
346	10	210	PRCEED	MLC	@000@,PSW3		7	2429	M F21 B17	39
347	10	220		B	PRNMRT		4	2436	B L35	39

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  NLCNCK MLC   @100@,PSW3                               7  2440  M F24 B17           39
349 10 240         B     PRNMRT                                  4  2447  B L35               39
350 10 250  GOTO1  B     PUTX                                    4  2451  B 363               39
351 11 010         DCW   ALGOP                                   3  2457  B20                 39
352 11 020         B     GTEST                                   4  2458  B U44               39
353 11 030  PSCNME SBR   PSC01&3                                 4  2462  H N21               40
354 11 040         MLC   CURNT,SYM                               7  2466  M A22 A59           40
355 11 050         B     PUTX                                    4  2473  B 363               40
356 11 060         DCW   PNOP                                    3  2479  B23                 40
357 11 070  PSC02  B     GTSYM                                   4  2480  B Z39               40
358 11 080         C     CURNT,SYM                               7  2484  C A22 A59           40
359 11 090         BE    PSC03                                   5  2491  B N07 S             40
360 11 100         B     PUTX                                    4  2496  B 363               41
361 11 110         DCW   CURNT                                   3  2502  A22                 41
362 11 120         B     PSC02                                   4  2503  B M80               41
363 11 130  PSC03  B     PUTX                                    4  2507  B 363               41
364 11 140         DCW   PNOP                                    3  2513  B23                 41
365 11 150         B     GTSYM                                   4  2514  B Z39               41
366 11 160  PSC01  B     *                                       4  2518  B N21               41
367 11 170  BFAFT  B     PTGTSY                                  4  2522  B P57               42
368 11 180         C     CURNT,NLIT                              7  2526  C A22 B41           42
369 11 190         BU    TEST                                    5  2533  B U48 /             42
370 11 200         B     ENTFLD                                  4  2538  B K27               42
371 11 210         MLC   FIELD&X2,SYM                            7  2542  M AO9 A59           42
372 11 220         B     PUTX                                    4  2549  B 363               42
373 11 230         DCW   SYM                                     3  2555  A59                 42
374 11 240         B     TEST                                    4  2556  B U48               43
375 11 250  RPLCG  B     PTGTSY                                  4  2560  B P57               43
376 12 010         B     PTEST                                   4  2564  B U37               43
377 12 020  STOP   B     PTGTSY                                  4  2568  B P57               43
378 12 030         C     CURNT,NLIT                              7  2572  C A22 B41           43
379 12 040         BU    TEST                                    5  2579  B U48 /             43
380 12 050         BCE   STOP1,NEW,                             8  2584  B N96 A25           43
381 12 060         B     TEST                                    4  2592  B U48               44
382 12 070  STOP1  BWZ   STOP2,NEW-1,2                           8  2596  V O08 A24 2         44
383 12 080         B     TEST                                    4  2604  B U48               44
384 12 090  STOP2  BWZ   STOP3,NEW-2,2                           8  2608  V O20 A23 2         44
385 12 100         B     TEST                                    4  2616  B U48               44
386 12 110  STOP3  MLC   NEW,FIELD&2                            7  2620  M A25 A71           44
387 12 120         MLC   @000@,X2                               7  2627  M F21 094           45
388 12 130  STOP4  BCE   STOP5,FIELD&1&X2,                      8  2634  B O53 AP0           45
389 12 140         A     &1,X2                                   7  2642  A F18 094           45
390 12 150         B     STOP4                                   4  2649  B O34               45
391 12 160  STOP5  MLC   FIELD&X2,SYM                            7  2653  M AO9 A59           45
392 12 170         B     PUTX                                    4  2660  B 363               45
393 12 180         DCW   SYM                                     3  2666  A59                 46
394 12 190         B     GTSYM                                   4  2667  B Z39               46
395 12 200         B     GTSYM                                   4  2671  B Z39               46
396 12 210         B     GTEST                                   4  2675  B U44               46
397 12 220  PASSSY SBR   PSS01&3                                 4  2679  H P13               46
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          MLC   CURNT,SYM                                7  2683  M A22 A59           46
399 12 240  PSS02   B     PTGTSY                                   4  2690  B P57               46
400 12 250          C     CURNT,SYM                                7  2694  C A22 A59           47
401 13 010          BU    PSS02                                    5  2701  B O90 /             47
402 13 020          B     PTGTSY                                   4  2706  B P57               47
403 13 030  PSS01   B     *                                        4  2710  B P13               47
404 13 040  CNPASS BCE   PSNAME,SPNMSW,0                          8  2714  B P49 A50 0         47
405 13 050          B     PASSSY                                   4  2722  B O79               47
406 13 060          C     CURNT,CNOP                               7  2726  C A22 B47           47
407 13 070          BU    TEST                                     5  2733  B U48 /             48
408 13 080          B     PUTX                                     4  2738  B 363               48
409 13 090          DCW   AUTO                                     3  2744  A53                 48
410 13 100          B     PSNAME                                   4  2745  B P49               48
411 13 110  PSNAME  B     PASSSY                                   4  2749  B O79               48
412 13 120          B     TEST                                     4  2753  B U48               48
413 13 130  PTGTSY SBR   PTGT01&3                                 4  2757  H P75               48
414 13 140          B     PUTX                                     4  2761  B 363               49
415 13 150          DCW   CURNT                                    3  2767  A22                 49
416 13 160          B     GTSYM                                    4  2768  B Z39               49
417 13 170  PTGT01  B     *                                        4  2772  B P75               49
418 13 180  TSTRTN  C     CURNT,@$08@                              7  2776  C A22 F27           49
419 13 190          BE    ZERO                                     5  2783  B R87 S             49
420 13 200          C     CURNT-1,@$0@                             7  2788  C A21 E92           49
421 13 210          BU    TST03                                    5  2795  B Q18 /             50
422 13 220  FIGCON MLC   @A@,CURNT-2                              7  2800  M E93 A20           50
423 13 230          MZ    @-@,CURNT                                7  2807  Y E94 A22           50
424 13 240          B     PTEST                                    4  2814  B U37               50
425 13 250  TST03   C     CURNT,@.DG@                              7  2818  C A22 F30           50
426 14 010          BU    TST04                                    5  2825  B Q38 /             50
427 14 020          B     GTSYM                                    4  2830  B Z39               50
428 14 030          B     GTEST                                    4  2834  B U44               51
429 14 040  TST04   MLC   TBADR,X3                                7  2838  M A62 099           51
430 14 050  TST01   C     0&X3,CURNT                               7  2845  C 0?0 A22           51
431 14 060          BE    TST02                                    5  2852  B Q81 S             51
432 14 070          BL    PTEST                                    5  2857  B U37 T             51
433 14 080          BCE   PTEST,0&X3,*                             8  2862  B U37 0?0 *         51
434 14 090          A     &6,X3                                    7  2870  A F31 099           52
435 14 100          B     TST01                                    4  2877  B Q45               52
436 14 110  TST02   MLC   3&X3,X3                                 7  2881  M 0?3 099           52
437 14 120          B     0&X3                                     4  2888  B 0?0               52
438 14 130  DTRCD   B     GTSYM                                    4  2892  B Z39               52
439 14 140          C     CURNT,SRCD                               7  2896  C A22 B29           52
440 14 150          BU    DTRCD1                                   5  2903  B R12 /             52
441 14 160          B     GTSYM                                    4  2908  B Z39               53
442 14 170  DTRCD1  C     CURNT,CNOP                               7  2912  C A22 B47           53
443 14 180          BU    TEST                                     5  2919  B U48 /             53
444 14 190          B     DLNAME                                   4  2924  B R32               53
445 14 200          B     DTRCD1                                   4  2928  B R12               53
446 14 210  DLNAME  SBR   DLN01&3                                 4  2932  H R66               53
447 14 220          MLC   CURNT,SYM                                7  2936  M A22 A59           53
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  DLN02  B     GTSYM                                     4  2943  B Z39               54
449 14 240         C     CURNT,SYM                                 7  2947  C A22 A59           54
450 14 250         BU    DLN02                                     5  2954  B R43 /             54
451 15 010         B     GTSYM                                     4  2959  B Z39               54
452 15 020  DLN01  B     *                                         4  2963  B R66               54
453 15 030  LBLE   B     PTGTSY                                    4  2967  B P57               54
454 15 040         C     CURNT,SRCD                                7  2971  C A22 B29           54
455 15 050         BE    GTEST                                     5  2978  B U44 S             55
456 15 060         B     TEST                                      4  2983  B U48               55
457 15 070  ZERO   C     NEW,SSPRSS                                7  2987  C A25 B32           55
458 15 080         BU    FIGCON                                    5  2994  B Q00 /             55
459 15 090  ZRBLK  B     PTGTSY                                    4  2999  B P57               55
460 15 100         B     GTEST                                     4  3003  B U44               55
461 15 110  BLANK  C     NEW,@$08@                                 7  3007  C A25 F27           55
462 15 120         BE    ZRBLK                                     5  3014  B R99 S             56
463 15 130         B     PTEST                                     4  3019  B U37               56
464 15 140  EOJ    BCE   EOJ2,SZSW,4                               8  3023  B ?58 /26 4         56
465 15 150         BCE   EOJ3,SZSW,8                               8  3031  B ?69 /26 8         56
466 15 160         BCE   EOJ4,SZSW,2                               8  3039  B ?80 /26 2         56
467 15 170         MLC   @C9D@,DTADR                              7  3047  M F34 T14           57
468 15 180         B     EOJ1                                      4  3054  B ?87               57
469 15 190  EOJ2   MLC   @G96@,DTADR                              7  3058  M F37 T14           57
470 15 200         B     EOJ1                                      4  3065  B ?87               57
471 15 210  EOJ3   MLC   @F3V@,DTADR                              7  3069  M F40 T14           57
472 15 220         B     EOJ1                                      4  3076  B ?87               57
473 15 230  EOJ4   MLC   @C9M@,DTADR                              7  3080  M F43 T14           58
474 15 240  EOJ1   B     PUTX                                      4  3087  B 363               58
475 15 250         DCW   SPRD                                      3  3093  B59                 58
476 16 010         B     PUTX                                      4  3094  B 363               58
477 16 020         DCW   EOP                                       3  3100  A17                 58
478 16 030         MLC   DTADR,DTEND                               7  3101  M T14 T11           58
479 16 040         B     SUPER                                     4  3108  B 351               58
480 16 050         DCW   @B02@                                     3  3114                      59
481 16 060  EOP    DCW   @.EP@                                     3  3117                      59
482 16 070         DCW   @  @                                     2  3119                      59
483 16 080  CURNT  DCW   #3                                        3  3122                      59
484 16 090  NEW    DCW   #3                                        3  3125                      59
485 16 100  SCARD  DCW   @.CD@                                     3  3128                      59
486 16 110  SCTSW  DCW   @0@                                       1  3129                      59
487 16 120  GTSW4  DCW   @0@                                       1  3130                      60
488 16 130  GTSW1  DC    @0@                                       1  3131                      60
489 16 140  GTSW2  DC    @0@                                       1  3132                      60
490 16 150  GTSW3  DC    @0@                                       1  3133                      60
491 16 160  CDSW   DC    @0@                                       1  3134                      60
492 16 170  CDSV2  DCW   #3                                        3  3137                      60
493 16 180  CDSV1  DCW   #3                                        3  3140                      60
494 16 190  CDSV4  DCW   #3                                        3  3143                      60
495 16 200  CDSV3  DCW   #3                                        3  3146                      60
496 16 210  SENV   DCW   @*91@                                     3  3149                      60
497 16 220  SPNMSW DCW   @0@                                       1  3150                      60
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
498	16	230	AUTO	DCW	@.AN@	3	3153		61
499	16	240	LVOP	DCW	@.LV@	3	3156		61
500	16	250	SYM	DCW	#3	3	3159		61
501	17	010	TBADR	DCW	&ENVTB	3	3162	D45	61
502	17	020		DCW	@0000000@	6	3168		61
503	17	030	FIELD	DC	@ @	1	3169		61
504	17	040		DC	#32	32	3201		62
505	17	050	MEMCNT	DCW	@000@	3	3204		62
506	17	060		DC	@000@	3	3207		62
507	17	070	SYMCNT	DCW	@00@	2	3209		63
508	17	080	PCNT	DCW	@00@	2	3211		63
509	17	090	QUAL	DCW	@*32@	3	3214		63
510	17	100	PSW1	DCW	@0@	1	3215		63
511	17	110	PSW2	DC	@0@	1	3216		63
512	17	120	PSW3	DC	@0@	1	3217		63
513	17	130	ALGOP	DCW	@)99@	3	3220		63
514	17	140	PNOP	DCW	@.PN@	3	3223		63
515	17	150	AFLIT	DCW	@ @@	3	3226		63
516	17	160	SRCD	DCW	@/11@	3	3229		64
517	17	170	SSPRSS	DCW	@/04@	3	3232		64
518	17	180	DTTB	DCW	@ @@	3	3235		64
519	17	190			PSNAME	3	3238	P49	64
520	17	200	NLIT	DCW	@.NL@	3	3241		64
521	17	210			PSNAME	3	3244	P49	64
522	17	220	CNOP	DCW	@.NM@	3	3247		64
523	17	230			PSNAME	3	3250	P49	65
524	17	240			@.PC@	3	3253		65
525	17	250			PSNAME	3	3256	P49	65
526	18	010	SPRD	DCW	@.PD@	3	3259		65
527	18	020			PRD	3	3262	V97	65
528	18	030			@)12@	3	3265		65
529	18	040			GTEST	3	3268	U44	65
530	18	050			@$40@	3	3271		66
531	18	060			ALL	3	3274	V63	66
532	18	070			@*01@	3	3277		66
533	18	080			PROC	3	3280	W50	66
534	18	090	SSZE	DCW	@/10@	3	3283		66
535	18	100			SIZOCC	3	3286	Y11	66
536	18	110			@/12@	3	3289		66
537	18	120			BFAFT	3	3292	N22	67
538	18	130			@/13@	3	3295		67
539	18	140			VALUE	3	3298	X91	67
540	18	150			@/14@	3	3301		67
541	18	160			SIZOCC	3	3304	Y11	67
542	18	170			@/15@	3	3307		67
543	18	180			BFAFT	3	3310	N22	67
544	18	190			@/17@	3	3313		68
545	18	200			BFAFT	3	3316	N22	68
546	18	210			@/19@	3	3319		68
547	18	220			LBLE	3	3322	R67	68

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230                @/22@                                        3  3325                    68
549 18 240                BLANK                                        3  3328  ?07               68
550 18 250                @/24@                                        3  3331                    68
551 19 010                DTRCD                                        3  3334  Q92               69
552 19 020                @***@                                        3  3337                    69
553 19 030  PRTB    DCW   @  @@                                        3  3340                    69
554 19 040                PSNAME                                       3  3343  P49               69
555 19 050                @.LB@                                        3  3346                    69
556 19 060                PSNAME                                       3  3349  P49               69
557 19 070                @.NL@                                        3  3352                    69
558 19 080                PSNAME                                       3  3355  P49               70
559 19 090                @.NM@                                        3  3358                    70
560 19 100                PSNAME                                       3  3361  P49               70
561 19 110                @)03@                                        3  3364                    70
562 19 120                NLCNCK                                       3  3367  M40               70
563 19 130                @)10@                                        3  3370                    70
564 19 140                NLCNCK                                       3  3373  M40               70
565 19 150                @)11@                                        3  3376                    71
566 19 160                STOP                                         3  3379  N68               71
567 19 170                @)20@                                        3  3382                    71
568 19 180                GOTO                                         3  3385  M05               71
569 19 190                @$40@                                        3  3388                    71
570 19 200                ALL                                          3  3391  V63               71
571 19 210                @*08@                                        3  3394                    71
572 19 220                NLCNCK                                       3  3397  M40               72
573 19 230                @*11@                                        3  3400                    72
574 19 240                PRCEED                                       3  3403  M29               72
575 19 250                @*17@                                        3  3406                    72
576 20 010                BFAFT                                        3  3409  N22               72
577 20 020                @*22@                                        3  3412                    72
578 20 030                BFAFT                                        3  3415  N22               72
579 20 040                @*24@                                        3  3418                    73
580 20 050                PSNAME                                       3  3421  P49               73
581 20 060                @*39@                                        3  3424                    73
582 20 070                RPLCG                                        3  3427  N60               73
583 20 080                @*40@                                        3  3430                    73
584 20 090                RPLCG                                        3  3433  N60               73
585 20 100                @#DC@                                        3  3436                    73
586 20 110                PSNAME                                       3  3439  P49               74
587 20 120                @***@                                        3  3442                    74
588 20 130  ENVTB   DCW   @  @@                                        3  3445                    74
589 20 140                PSNAME                                       3  3448  P49               74
590 20 150                @.NM@                                        3  3451                    74
591 20 160                CNPASS                                       3  3454  P14               74
592 20 170                @.NL@                                        3  3457                    74
593 20 180                PSNAME                                       3  3460  P49               75
594 20 190                @*31@                                        3  3463                    75
595 20 200                DVRTN                                        3  3466  W86               75
596 20 210                @*71@                                        3  3469                    75
597 20 220                DVRTN                                        3  3472  W86               75
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

598 20 230                @*76@                                       3  3475                      75
599 20 240                MEMORY                                      3  3478  V03                 75
600 20 250                @*80@                                       3  3481                      76
601 21 010                DVRTN                                       3  3484  W86                 76
602 21 020                @*81@                                       3  3487                      76
603 21 030                SWITCH                                      3  3490  X18                 76
604 21 040                @*82@                                       3  3493                      76
605 21 050                DVRTN                                       3  3496  W86                 76
606 21 060                @*83@                                       3  3499                      76
607 21 070                DVRTN                                       3  3502  W86                 77
608 21 080                @*84@                                       3  3505                      77
609 21 090                GTEST                                       3  3508  U44                 77
610 21 100                @*85@                                       3  3511                      77
611 21 110                DVRTN                                       3  3514  W86                 77
612 21 120                @*86@                                       3  3517                      77
613 21 130                DVRTN                                       3  3520  W86                 77
614 21 140                @*87@                                       3  3523                      78
615 21 150                DVRTN                                       3  3526  W86                 78
616 21 160                @*88@                                       3  3529                      78
617 21 170                DVRTN                                       3  3532  W86                 78
618 21 180  SNOREL DCW    @*90@                                       3  3535                      78
619 21 190                NOREL                                       3  3538  V15                 78
620 21 200                @*93@                                       3  3541                      78
621 21 210                SECT                                        3  3544  V45                 79
622 21 220                @*94@                                       3  3547                      79
623 21 230                SECT                                        3  3550  V45                 79
624 21 240                @*95@                                       3  3553                      79
625 21 250                SPNAME                                      3  3556  V27                 79
626 22 010                @*96@                                       3  3559                      79
627 22 020                SECT                                        3  3562  V45                 79
628 22 030                @*97@                                       3  3565                      80
629 22 040                OBJECT                                      3  3568  U74                 80
630 22 050                @*98@                                       3  3571                      80
631 22 060                SOURCE                                      3  3574  U56                 80
632 22 070                @/24@                                       3  3577                      80
633 22 080                DATA                                        3  3580  W61                 80
634 22 090                @***@                                       3  3583                      80
635 22 100         LTORG                                                     3584
                   DCW    @004@                                       3  3586            LIT     81
                          &4                                          1  3587            LIT     81
                          @1@                                         1  3588            LIT     81
                          @2@                                         1  3589            LIT     81
                          @0@                                         1  3590            LIT     81
                          @$0@                                        2  3592            LIT     81
                          @A@                                         1  3593            LIT     81
                          @-@                                         1  3594            LIT     82
       194                &PRTB                                       3  3597  C40         ADCON   82
                          @B@                                         1  3598            LIT     82
       199                &DTTB                                       3  3601  B35         ADCON   82
                          @02@                                        2  3603            LIT     82
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
					@ @		1	3604		LIT	82
					@01@		2	3606		LIT	82
					@00@		2	3608		LIT	83
					@11@		2	3610		LIT	83
		300			&EOJ		3	3613	?23	ADCON	83
					@002@		3	3616		LIT	83
					&3		1	3617		LIT	83
					&1		1	3618		LIT	83
					@000@		3	3621		LIT	83
					@100@		3	3624		LIT	84
					@$08@		3	3627		LIT	84
					@.DG@		3	3630		LIT	84
					&6		1	3631		LIT	84
					@C9D@		3	3634		LIT	84
					@G96@		3	3637		LIT	84
					@F3V@		3	3640		LIT	84
					@C9M@		3	3643		LIT	85
636	22	110	GRMK	DCW	@}@		1	3644			85
637	22	120		END	INIT				/ T50 080		86

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B02 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B02
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                            0089
 104  1 040  X2      EQU   94                                            0094
 105  1 050  X3      EQU   99                                            0099
 106  1 060  GETX    EQU   335                                           0335
 107  1 070  SUPER   EQU   351                                           0351
 108  1 080  PUTX    EQU   363                                           0363
 109  1 090  LV88SW  EQU   1304                                          1304
 110  1 100  DVALSW  EQU   1305                                          1305
 111  1 110  C       EQU   1303                                          1303
 112  1 120  ENDADR  EQU   C&8                                           1311
 113  1 130  DTADR   EQU   C&11                                          1314
 114  1 140  LTNM1   EQU   C&26                                          1329
 115  1 150  LTNM    EQU   C&29                                          1332
 116  1 160  OVSW    EQU   C&30                                          1333
 117  1 170  OVFSW   EQU   C&31                                          1334
 118  1 180  LITSW   EQU   C&36                                          1339
 119  1 190  SYSW    EQU   C&37                                          1340
 120  1 200          ORG   1350                                                1350
 121  1 210  INIT    B     GTSYM                                   4     1350  B P23               4
 122  1 220          B     PUTX                                    4     1354  B 363               4
 123  1 230          DCW   CURNT                                   3     1360  K41                 4
 124  1 240          C     CURNT,SDATA                             7     1361  C K41 K44           4
 125  1 250          BU    INIT                                    5     1368  B T50 /             4
 126  2 010          SW    GRMK                                    4     1373  , K70               4
 127  2 020          MLC   DTADR,ENDADR                           7     1377  M T14 T11           4
 128  2 030          MLC   LTNM1,LTNM                             7     1384  M T29 T32           5
 129  2 040          BCE   GTEST,LITSW,0                           8     1391  B U17 T39 0         5
 130  2 050          MLC   @N@,TEST                               7     1399  M Q54 U21           5
 131  2 060          B     GTEST                                   4     1406  B U17               5
 132  2 070  PTEST   B     PUTX                                    4     1410  B 363               5
 133  2 080          DCW   CURNT                                   3     1416  K41                 5
 134  2 090  GTEST   B     GTSYM                                   4     1417  B P23               5
 135  2 100  TEST    B     PRTEST                                  4     1421  B W71               6
 136  2 110  TEST1   NOP   LTEST                                   4     1425  N V81               6
 137  2 120          C     CURNT,SPROC                             7     1429  C K41 K47           6
 138  2 130          BU    LFDTST                                  5     1436  B U49 /             6
 139  2 140          B     PTGTSY                                  4     1441  B Q07               6
 140  2 150          B     *-7                                     4     1445  B U41               6
 141  2 160  LFDTST  BCE   LFDTS1,FDSW,1                          8     1449  B V12 K51 1         6
 142  2 170          C     CURNT,LVOP                              7     1457  C K41 K67           7
 143  2 180          BU    LFDTS3                                  5     1464  B U89 /             7
 144  2 190  LFDTS4  B     PTGTSY                                  4     1469  B Q07               7
 145  2 200          C     CURNT,@088@                             7     1473  C K41 Q57           7
 146  2 210          BU    PTEST                                   5     1480  B U10 /             7
 147  2 220          B     LFDTS5                                  4     1485  B V01               7
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230	LFDTS3	C	CURNT,FDOP		7	1489	C K41 K54	7
149	2	240		BU	LFDTS2		5	1496	B V35 /	8
150	2	250	LFDTS5	MLC	@1@,FDSW		7	1501	M Q58 K51	8
151	3	010		B	PTEST		4	1508	B U10	8
152	3	020	LFDTS1	C	CURNT,LVOP		7	1512	C K41 K67	8
153	3	030		BU	PTEST		5	1519	B U10 /	8
154	3	040		MLC	@0@,FDSW		7	1524	M Q59 K51	8
155	3	050		B	LFDTS4		4	1531	B U69	8
156	3	060	LFDTS2	C	CURNT,SVAL		7	1535	C K41 K82	9
157	3	070		BU	LTST02		5	1542	B W13 /	9
158	3	080		B	GTSYM		4	1547	B P23	9
159	3	090		C	CURNT,SPACE		7	1551	C K41 K85	9
160	3	100		BE	GTEST		5	1558	B U17 S	9
161	3	110		B	PUTX		4	1563	B 363	9
162	3	120		DCW	SVAL		3	1569	K82	9
163	3	130		MLC	@1@,DVALSW		7	1570	M Q58 T05	10
164	3	140		B	LTST02		4	1577	B W13	10
165	3	150	LTEST	C	CURNT,RPLSY		7	1581	C K41 K91	10
166	3	160		BE	LTST03		5	1588	B W05 S	10
167	3	170		C	CURNT,TLLYSY		7	1593	C K41 K88	10
168	3	180		BU	LTST02		5	1600	B W13 /	10
169	3	190	LTST03	B	PTGTSY		4	1605	B Q07	10
170	3	200		B	PTEST		4	1609	B U10	11
171	3	210	LTST02	C	CURNT,SALL		7	1613	C K41 K57	11
172	3	220		BU	LTST01		5	1620	B W36 /	11
173	3	230		B	GTSYM		4	1625	B P23	11
174	3	240		MLC	@1@,ALLSW		7	1629	M Q58 K64	11
175	3	250	LTST01	C	CURNT,AFLIT		7	1636	C K41 K60	11
176	4	010		BE	AFTRTN		5	1643	B Y18 S	11
177	4	020		C	CURNT,NLIT		7	1648	C K41 K63	12
178	4	030		BE	NLTRTN		5	1655	B Y33 S	12
179	4	040		MLC	@0@,ALLSW		7	1660	M Q59 K64	12
180	4	050		B	PTEST		4	1667	B U10	12
181	4	060	PRTEST	C	CURNT,SPROC		7	1671	C K41 K47	12
182	4	070		BU	PRLT01		5	1678	B X01 /	12
183	4	080		MLC	@N@,TEST		7	1683	M Q54 U21	13
184	4	090		MLC	@B@,TEST1		7	1690	M Q60 U25	13
185	4	100		B	PTEST		4	1697	B U10	13
186	4	110	PRLT01	C	CURNT,SPRD		7	1701	C K41 K50	13
187	4	120		BU	PRLT02		5	1708	B Y06 /	13
188	4	130		B	GTSYM		4	1713	B P23	13
189	4	140		C	CURNT,LVOP		7	1717	C K41 K67	14
190	4	150		BE	PRLT03		5	1724	B X47 S	14
191	4	160		MLC	@0@,SW88		7	1729	M Q59 K95	14
192	4	170		B	PUTX		4	1736	B 363	14
193	4	180		DCW	SPRD		3	1742	K50	14
194	4	190		B	TEST		4	1743	B U21	14
195	4	200	PRLT03	MLC	@0@,SW88		7	1747	M Q59 K95	14
196	4	210		B	GTSYM		4	1754	B P23	15
197	4	220		C	CURNT,@088@		7	1758	C K41 Q57	15

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          BU    PRLT04                                     5  1765  B X95 /             15
199  4 240          MLC   @1@,SW88                                  7  1770  M Q58 K95           15
200  4 250          MLC   @1@,LV88SW                                7  1777  M Q58 T04           15
201  5 010  PRLT05 B     PUTX                                       4  1784  B 363               15
202  5 020          DCW   LVOP                                      3  1790  K67                 15
203  5 030          B     PTEST                                      4  1791  B U10               16
204  5 040  PRLT04 B     PUTX                                       4  1795  B 363               16
205  5 050          DCW   SPRD                                      3  1801  K50                 16
206  5 060          B     PRLT05                                     4  1802  B X84               16
207  5 070  PRLT02 BCE   LTEST,SW88,1                               8  1806  B V81 K95 1         16
208  5 080          B     PTEST                                      4  1814  B U10               16
209  5 090  AFTRTN MLC   @0@,NLSW                                   7  1818  M Q59 K68           16
210  5 100          B     ENTAFT                                     4  1825  B J26               17
211  5 110          B     LKNAME                                     4  1829  B M34               17
212  5 120  NLTRTN MLC   @1@,NLSW                                   7  1833  M Q58 K68           17
213  5 130          MLC   @0@,ALLSW                                 7  1840  M Q59 K64           17
214  5 140          B     ENTFLD                                     4  1847  B N15               17
215  5 150          B     LKNAME                                     4  1851  B M34               17
216  5 160  FOUND  BCE   FND01,ALLSW,0                             8  1855  B Y77 K64 0         17
217  5 170          MZ    @-@,GCN                                    7  1863  Y Q61 K76           18
218  5 180          MLC   @0@,ALLSW                                 7  1870  M Q59 K64           18
219  5 190  FND01  B     PUTX                                       4  1877  B 363               18
220  5 200          DCW   GCN                                      3  1883  K76                 18
221  5 210          B     TEST                                       4  1884  B U21               18
222  5 220  NTFND  BCE   OUTCN,OVFSW,1                             8  1888  B Z81 T34 1         18
223  5 230          LCA   FIELD&X2,0&X3                            7  1896  L KR6 0?0           19
224  5 240          SBR   ENDADR                                     4  1903  H T11               19
225  5 250          BCE   NTFN01,ALLSW,0                           8  1907  B Z29 K64 0         19
226  6 010          MZ    @-@,GCN                                    7  1915  Y Q61 K76           19
227  6 020          MLC   @0@,ALLSW                                 7  1922  M Q59 K64           19
228  6 030  NTFN01 B     PUTX                                       4  1929  B 363               19
229  6 040          DCW   GCN                                      3  1935  K76                 20
230  6 050          MZ    @ @,GCN                                    7  1936  Y Q62 K76           20
231  6 060          MLC   GCN,LTNM1                                 7  1943  M K76 T29           20
232  6 070          BCE   NTFN02,OVCHR,|                           8  1950  B Z69 ?07 |         20
233  6 080  NTFN03 MLC   @1@,OVFSW                                 7  1958  M Q58 T34           20
234  6 090          B     TEST                                       4  1965  B U21               20
235  6 100  NTFN02 BWZ   TEST,OVCHR,1                             8  1969  V U21 ?07 1         21
236  6 110          B     NTFN03                                     4  1977  B Z58               21
237  6 120  OUTCN  MLC   @1@,OVSW                                  7  1981  M Q58 T33           21
238  6 130          BCE   OUTCN1,ALLSW,0                           8  1988  B !10 K64 0         21
239  6 140          B     PUTX                                       4  1996  B 363               21
240  6 150          DCW   SALL                                     3  2002  K57                 21
241  6 160          MLC   @0@,ALLSW                                 7  2003  M Q59 K64           22
242  6 170  OUTCN1 BCE   OUTNM,NLSW,1                             8  2010  B O02 K68 1         22
243  6 180          SW    FIELD&1&X2                               4  2018  , KR7               22
244  6 190          MLC   @000@,X2                                 7  2022  M Q65 094           22
245  6 200          B     OUTA02                                     4  2029  B !48               22
246  6 210  OUTA01 A     &1,X2                                    7  2033  A Q66 094           22
247  6 220          BWZ   OUTAXX,FIELD&X2,1                       8  2040  V J18 KR6 1         23
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  OUTA02 MLC   @   @,OUTSYM                                7  2048  M Q69 K94           23
249  6 240          BCE   OUTA04,FIELD&X2,|                         8  2055  B !96 KR6 |         23
250  6 250          BCE   OUTA05,FIELD&X2,}                         8  2063  B J07 KR6 }         23
251  7 010          MZ    FIELD&X2,OUTSYM                           7  2071  Y KR6 K94           23
252  7 020          MN    FIELD&X2,OUTSYM                           7  2078  D KR6 K94           24
253  7 030  OUTA03 B     PUTX                                      4  2085  B 363               24
254  7 040          DCW   OUTSYM                                   3  2091  K94                 24
255  7 050          B     OUTA01                                    4  2092  B !33               24
256  7 060  OUTA04 MLC   @ RM@,OUTSYM                              7  2096  M Q72 K94           24
257  7 070          B     OUTA03                                    4  2103  B !85               24
258  7 080  OUTA05 MLC   @ GM@,OUTSYM                              7  2107  M Q75 K94           24
259  7 090          B     OUTA03                                    4  2114  B !85               25
260  7 100  OUTAXX CW    FIELD&X2                                  4  2118  ) KR6               25
261  7 110          B     TEST                                      4  2122  B U21               25
262  7 120  ENTAFT SBR   ENTA01&3                                  4  2126  H K38               25
263  7 130          MLC   @000@,X2                                  7  2130  M Q65 094           25
264  7 140          B     ENTA02                                    4  2137  B K06               25
265  7 150  ENTA03 B     GTSYM                                     4  2141  B P23               25
266  7 160          A     &1,X2                                     7  2145  A Q66 094           26
267  7 170          BCE   ENTAXX,CURNT,@                           8  2152  B K24 K41 @         26
268  7 180          C     CURNT,@ RM@                               7  2160  C K41 Q72           26
269  7 190          BU    ENTA04                                    5  2167  B J83 /             26
270  7 200          MLC   @|@,FIELD&X2                             7  2172  M Q76 KR6           26
271  7 210          B     ENTA03                                    4  2179  B J41               26
272  7 220  ENTA04 C     CURNT,@ GM@                               7  2183  C K41 Q75           27
273  7 230          BU    ENTA02                                    5  2190  B K06 /             27
274  7 240          MLC   GRMK,FIELD&X2                            7  2195  M K70 KR6           27
275  7 250          B     ENTA03                                    4  2202  B J41               27
276  8 010  ENTA02 MZ    CURNT,FIELD&X2                            7  2206  Y K41 KR6           27
277  8 020          MN    CURNT,FIELD&X2                            7  2213  D K41 KR6           27
278  8 030          B     ENTA03                                    4  2220  B J41               28
279  8 040  ENTAXX MLC   @@@,FIELD&X2                             7  2224  M Q77 KR6           28
280  8 050          B     GTSYM                                     4  2231  B P23               28
281  8 060  ENTA01 B     *                                         4  2235  B K38               28
282  8 070  CURNT  DCW   #3                                        3  2241                      28
283  8 080  SDATA  DCW   @/24@                                     3  2244                      28
284  8 090  SPROC  DCW   @*01@                                     3  2247                      28
285  8 100  SPRD   DCW   @.PD@                                     3  2250                      29
286  8 110  FDSW   DCW   @0@                                       1  2251                      29
287  8 120  FDOP   DCW   @/26@                                     3  2254                      29
288  8 130  SALL   DCW   @$40@                                     3  2257                      29
289  8 140  AFLIT  DCW   @  @@                                     3  2260                      29
290  8 150  NLIT   DCW   @.NL@                                     3  2263                      29
291  8 160  ALLSW  DCW   @0@                                       1  2264                      29
292  8 170  LVOP   DCW   @.LV@                                     3  2267                      30
293  8 180  NLSW   DCW   @0@                                       1  2268                      30
294  8 190  CDSW   DCW   @0@                                       1  2269                      30
295  8 200  GRMK   DC    @}@                                       1  2270                      30
296  8 210  CDSYM  DCW   @.CD@                                     3  2273                      30
297  8 220  GCN    DCW   #3                                        3  2276                      30
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230  EOP     DCW   @.EP@                                      3  2279                      30
299  8 240  SVAL    DCW   @/13@                                      3  2282                      30
300  8 250  SPACE   DCW   @A0K@                                     3  2285                      31
301  9 010  TLLYSY  DCW   @*39@                                     3  2288                      31
302  9 020  RPLSY   DCW   @*40@                                     3  2291                      31
303  9 030  OUTSYM  DCW   #3                                        3  2294                      31
304  9 040  SW88    DCW   @0@                                       1  2295                      31
305  9 050  FIELD   DCW   @ @                                       1  2296                      31
306  9 060          DC    #50                                      50  2346                      33
307  9 070          DC    #50                                      50  2396                      35
308  9 080          DC    #22                                      22  2418                      35
309  9 090  CNRTN   SBR   CNR01&3                                   4  2419  H M33               35
310  9 100          A     &1,GCN                                     7  2423  A Q66 K76           36
311  9 110  CNR01   B     *                                         4  2430  B M33               36
312  9 120  LKNAME  MLC   LTNM,GCN                                  7  2434  M T32 K76           36
313  9 130          MLC   DTADR,X3                                  7  2441  M T14 099           36
314  9 140  LK01    C     X3,ENDADR                                  7  2448  C 099 T11           36
315  9 150          BE    NTFND                                      5  2455  B Y88 S             36
316  9 160          C     0&X3,FIELD&X2                              7  2460  C 0?0 KR6           37
317  9 170          SAR   X3                                       4  2467  Q 099               37
318  9 180          BU    LK04                                       5  2471  B N03 /             37
319  9 190          BWZ   FOUND,1&X3,1                             8  2476  V Y55 0?1 1         37
320  9 200  LK03    C     0&X3,0&X3                                  7  2484  C 0?0 0?0           37
321  9 210          SAR   X3                                       4  2491  Q 099               37
322  9 220  LK02    B     CNRTN                                      4  2495  B M19               37
323  9 230          B     LK01                                       4  2499  B M48               38
324  9 240  LK04    BWZ   LK02,1&X3,1                               8  2503  V M95 0?1 1         38
325  9 250          B     LK03                                       4  2511  B M84               38
326 10 010  ENTFLD  SBR   ENTF01&3                                  4  2515  H N83               38
327 10 020          MLC   @002@,X2                                  7  2519  M Q80 094           38
328 10 030          B     GTSYM                                      4  2526  B P23               38
329 10 040          B     ENTF03                                     4  2530  B N57               38
330 10 050  ENTF02  B     GTSYM                                      4  2534  B P23               39
331 10 060          C     CURNT,NLIT                                 7  2538  C K41 K63           39
332 10 070          BE    ENTF04                                     5  2545  B N68 S             39
333 10 080          A     &3,X2                                      7  2550  A Q81 094           39
334 10 090  ENTF03  MLC   CURNT,FIELD&X2                           7  2557  M K41 KR6           39
335 10 100          B     ENTF02                                     4  2564  B N34               39
336 10 110  ENTF04  BCE   ENTF05,FIELD&X2,                         8  2568  B N84 KR6           40
337 10 120          B     GTSYM                                      4  2576  B P23               40
338 10 130  ENTF01  B     *                                         4  2580  B N83               40
339 10 140  ENTF05  S     &1,X2                                      7  2584  S Q66 094           40
340 10 150          MZ    @ @,X2                                     7  2591  Y Q62 094           40
341 10 160          B     ENTF04                                     4  2598  B N68               40
342 10 170  OUTNM   B     PUTX                                       4  2602  B 363               40
343 10 180          DCW   NLIT                                       3  2608  K63                 41
344 10 190          SW    FIELD&1&X2                                 4  2609  , KR7               41
345 10 200          MLC   @000@,X2                                  7  2613  M Q65 094           41
346 10 210  OUTNM2  MLC   @   @,OUTSYM                              7  2620  M Q69 K94           41
347 10 220          MLC   @000@,X3                                  7  2627  M Q65 099           41
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  OUTNM3 BWZ   OUTNMX,FIELD&X2,1                          8  2634  V O93 KR6 1         41
349 10 240         MZ    FIELD&X2,OUTSYM-2&X3                      7  2642  Y KR6 KI2           42
350 10 250         MN    FIELD&X2,OUTSYM-2&X3                      7  2649  D KR6 KI2           42
351 11 010         A     &1,X2                                     7  2656  A Q66 094           42
352 11 020         A     &1,X3                                     7  2663  A Q66 099           42
353 11 030         C     X3,@003@                                  7  2670  C 099 Q84           42
354 11 040         BU    OUTNM3                                    5  2677  B O34 /             43
355 11 050         B     PUTX                                      4  2682  B 363               43
356 11 060         DCW   OUTSYM                                   3  2688  K94                 43
357 11 070         B     OUTNM2                                    4  2689  B O20               43
358 11 080  OUTNMX BCE   OUTNM4,X3,0                              8  2693  B P08 099 0         43
359 11 090         B     PUTX                                      4  2701  B 363               43
360 11 100         DCW   OUTSYM                                   3  2707  K94                 43
361 11 110  OUTNM4 B     PUTX                                      4  2708  B 363               44
362 11 120         DCW   NLIT                                      3  2714  K63                 44
363 11 130         CW    FIELD&X2                                  4  2715  ) KR6               44
364 11 140         B     TEST                                      4  2719  B U21               44
365 11 150  GTSYM  SBR   GT01&3                                   4  2723  H P52               44
366 11 160  GT08   B     GETX                                      4  2727  B 335               44
367 11 170         DCW   CURNT                                    3  2733  K41                 44
368 11 180         DCW   EOJ                                       3  2736  Q26                 45
369 11 190  GT03   C     CURNT,CDSYM                               7  2737  C K41 K73           45
370 11 200         BE    GT02                                      5  2744  B P53 S             45
371 11 210  GT01   B     *                                         4  2749  B P52               45
372 11 220  GT02   MLC   @0@,CDSW                                 7  2753  M Q59 K69           45
373 11 230  GT04   B     PUTX                                      4  2760  B 363               45
374 11 240         DCW   CURNT                                    3  2766  K41                 45
375 11 250         B     GETX                                      4  2767  B 335               46
376 12 010         DCW   CURNT                                    3  2773  K41                 46
377 12 020         DCW   EOJ                                       3  2776  Q26                 46
378 12 030         A     &1,CDSW                                   7  2777  A Q66 K69           46
379 12 040         BCE   GT03,CDSW,3                               8  2784  B P37 K69 3         46
380 12 050         B     GT04                                      4  2792  B P60               46
381 12 060  GT05   B     PUTX                                      4  2796  B 363               46
382 12 070         DCW   CURNT                                    3  2802  K41                 47
383 12 080         B     GT08                                      4  2803  B P27               47
384 12 090  PTGTSY SBR   PTGT01&3                                 4  2807  H Q25               47
385 12 100         B     PUTX                                      4  2811  B 363               47
386 12 110         DCW   CURNT                                    3  2817  K41                 47
387 12 120         B     GTSYM                                     4  2818  B P23               47
388 12 130  PTGT01 B     *                                         4  2822  B Q25               47
389 12 140  EOJ    B     PUTX                                      4  2826  B 363               48
390 12 150         DCW   EOP                                       3  2832  K79                 48
391 12 160         A     &1,LTNM1                                  7  2833  A Q66 T29           48
392 12 170         MLC   @0@,OVFSW                                7  2840  M Q59 T34           48
393 12 180         B     SUPER                                     4  2847  B 351               48
394 12 190         DCW   @B11@                                    3  2853                      48
395 12 200         LTORG                                                 2854
                   DCW   @N@                                       1  2854            LIT   48
                         @088@                                     3  2857            LIT   49
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @1@                                          1  2858              LIT     49
                          @0@                                          1  2859              LIT     49
                          @B@                                          1  2860              LIT     49
                          @-@                                          1  2861              LIT     49
                          @ @                                          1  2862              LIT     49
                          @000@                                        3  2865              LIT     49
                          &1                                           1  2866              LIT     50
                          @   @                                        3  2869              LIT     50
                          @ RM@                                        3  2872              LIT     50
                          @ GM@                                        3  2875              LIT     50
                          @|@                                          1  2876              LIT     50
                          @@@                                          1  2877              LIT     50
                          @002@                                        3  2880              LIT     50
                          &3                                           1  2881              LIT     51
                          @003@                                        3  2884              LIT     51
 396 12 210          ORG   *&122                                                 3007                 
 397 12 220  OVCHR   DCW   @|@                                          1  3007                      52
 398 12 230          DCW   @}@                                          1  3008                      52
 399 12 240          END   INIT                                                  / T50 080            53
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B11 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B11
 102  1 020          CTL   631 11
 103  1 030          ORG   1350                                                      1350
 104  1 040  X1      EQU   89                                                        0089
 105  1 050  X2      EQU   94                                                        0094
 106  1 060  X3      EQU   99                                                        0099
 107  1 070  GETX    EQU   335                                                       0335
 108  1 080  IORW    EQU   343                                                       0343
 109  1 090  SUPER   EQU   351                                                       0351
 110  1 100  DUMP    EQU   359                                                       0359
 111  1 110  PUTX    EQU   363                                                       0363
 112  1 120  CONST   EQU   188                                                       0188
 113  1 130  SCRBKT  EQU   1126                                                      1126
 114  1 140  TBLEFT  EQU   1311                                                      1311
 115  1 150  TBLRT   EQU   1314                                                      1314
 116  1 160  NAMBKT  EQU   1332          NAME OF ORIGINAL LITERAL                    1332
 117  1 170  LSTNAM  EQU   1329        NAME OF ONE PAST LAST LITERAL                 1329
 118  1 180  OVSW    EQU   1333       OVERFLOW SWITCH 1 IF ANY OVERFLOW              1333
 119  1 190  LITSW   EQU   1339       0 FOR PROLITS - 1 FOR DATA LITS               1339
 120  1 200          MLC   NAMBKT,NAME1                                        7  1350  M T32 Z12            4
 121  1 210          MLC   TBLRT,X2                                            7  1357  M T14 094            4
 122  1 220          BCE   AA1,LITSW,0                                        8  1364  B U05 T39 0          4
 123  1 230          MLC   @.LT@,LITIND       CHANGE TO DATALIT INDICATOR    7  1372  M M90 Z15            4
 124  1 240          BCE   AA2,OVSW,1                                        8  1379  B U39 T33 1          4
 125  1 250          MLC   @B03@,NXTPHS       MODIFY EXIT TO CZLL NEXT PHASE 7  1387  M M93 Z79            5
 126  2 010          MLC   @B@,EOJ2                                          7  1394  M M94 Z49            5
 127  2 020          B     AA2                                               4  1401  B U39                5
 128  2 030  AA1     C     NAMBKT,@S01@       IS THIS THEW FIRST LITERAL     7  1405  C T32 M97            5
 129  2 040          BU    *&8                                               5  1412  B U24 /              5
 130  2 050          B     PLACE                                             4  1417  B !32                5
 131  2 060          DCW   &@.DD@                                            3  1423  N00                  5
 132  2 070          BCE   AA2,OVSW,1                                        8  1424  B U39 T33 1          6
 133  2 080          MLC   @1@,LITSW                                        7  1432  M N01 T39            6
 134  2 090  AA2     MLC   @0@,OVSW                                          7  1439  M N02 T33            6
 135  2 100          C     TBLRT,TBLEFT                                      7  1446  C T14 T11            6
 136  2 110          BE    EOJ3                                              5  1453  B Z28 S              6
 137  2 120  BGN1    C     X2,TBLEFT          CHECK FOR END OF TABLE         7  1458  C 094 T11            7
 138  2 130          BE    EOJ1                                              5  1465  B Z16 S              7
 139  2 140          MLC   DUBNUL,SIZE1   INITIALIZE SIZE                    7  1470  M !30 Z09            7
 140  2 150          MLC   DUBNUL             INITIALIZE DEC AND CLASS       4  1477  M !30                7
 141  2 160          MLC                  INITIALIZE CLASS                   1  1481  M                    7
 142  2 170          MLC   @0@,DECSW          RESET DECIMAL SWITCH           7  1482  M N02 !31            7
 143  2 180          B     PLACE                                             4  1489  B !32                7
 144  2 190          DCW   LITIND                                            3  1495  Z15                  8
 145  2 200          B     PLACE                                             4  1496  B !32                8
 146  2 210          DCW   NAME1              PLACE NAME                     3  1502  Z12                  8
 147  2 220          MLC   &BGNCRD,X3         PLACE BEGIN CARD STRING        7  1503  M N05 099            8
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          B     SRPLST                                            4  1510  B V83               8
149  2 240          B     RSETUP             SETUP LETERAL FOR PLACING      4  1514  B W21               8
150  2 250  BGNCD1  B     ROUTLT             PUT OUT LITERIAL               4  1518  B X08               8
151  3 010  BGNCD2  MLC   &ENDCD,X3          PLACE CARD ENDING SYMBOLS STRING  7  1522  M N08 099           9
152  3 020          B     SRPLST                                            4  1529  B V83               9
153  3 030          B     PLACE                                             4  1533  B !32               9
154  3 040          DCW   NAME1                                             3  1539  Z12                 9
155  3 050          B     PLACE                                             4  1540  B !32               9
156  3 060          DCW   SIZE                                              3  1546  Z06                 9
157  3 070          B     PLACE                                             4  1547  B !32               9
158  3 080          DCW   SIZE1                                             3  1553  Z09                10
159  3 090          B     PLACE                                             4  1554  B !32              10
160  3 100          DCW   DECONT                                            3  1560  Z03                10
161  3 110          MLC   &DESCST,X3          PLACE DESCRIPTION STRING       7  1561  M N11 099          10
162  3 120          B     SRPLST                                            4  1568  B V83              10
163  3 130          A     @1@,NAME1                                         7  1572  A N01 Z12          10
164  3 140          B     BGN1                                              4  1579  B U58              10
165  3 150  *  PLACE STRING   RIT ADDRESS OF STRING INTO X3 AND SYMBOLS ARE
166  3 160  *      PLACED FROM RIGHT TO LEFT UNTIL WDMK
167  3 170  SRPLST SBR   XPLST&3                                            4  1583  H W20              11
168  3 180  SPLST1 MLC   0&X3,LITSYM                                        7  1587  M 0?0 N22          11
169  3 190          SAR   X3                                                4  1594  Q 099              11
170  3 200          B     PLACE                                             4  1598  B !32              11
171  3 210          DCW   LITSYM                                            3  1604  N22                11
172  3 220          BWZ   XPLST,1&X3,1      BRANCH IF END OF LITERAL        8  1605  V W17 0?1 1        11
173  3 230          B     SPLST1                                            4  1613  B V87              11
174  3 240  XPLST   B     0                                                 4  1617  B 000              12
175  3 250  *   RSETUP  PUSTS BOTH ALPHA AND NUMERIC LITS INTO SAME FORM
176  4 010  RSETUP MLC   @@@,1&X2      PUT IN DELIMITING COMAT SIGN        7  1621  M N12 0!1          12
177  4 020          SBR   X1                                                4  1628  H 089              12
178  4 030          MLC   0&X2,0&X2          FIND LEFT POSITION OF LITERIAL  7  1632  M 0!0 0!0          12
179  4 040          SBR   X2                                                4  1639  H 094              12
180  4 050          BCE   RSETAL,1&X2,@                                     8  1643  B W89 0!1 @        12
181  4 060          MLC   @  9@,CLASS                                       7  1651  M N15 Z00          13
182  4 070          BCE   *&5,1&X2,      BRANCH IF SIGN                     8  1658  B W70 0!1          13
183  4 080          B     BGNCD1       BRANCH IF NO SIGN                   4  1666  B V18              13
184  4 090          MLZS  3&X2,0&X1         PLACE SIGN OVER LOW ORDER DIGET  7  1670  Y 0!3 0|0           13
185  4 100          CW    4&X2                                              4  1677  ) 0!4              13
186  4 110          SBR   X2                SET POINTER TO FIRST SIG H/O DIGE  4  1681  H 094            13
187  4 120          B     BGNCD1                                            4  1685  B V18              13
188  4 130  RSETAL MLC   @  X@,CLASS        SET ALPHANUMERIC CLASS          7  1689  M N18 Z00          14
189  4 140  RSETSG CW    2&X2               SHIFT X2 POINTER 1 TO RIGHT     4  1696  ) 0!2              14
190  4 150          SBR   X2                                                4  1700  H 094              14
191  4 160          B     BGNCD1                                            4  1704  B V18              14
192  4 170  ROUTLT MLC   1&X2,LITCHR#1                                     7  1708  M 0!1 N19          14
193  4 180  OUTLT3 BCE   OUTGM,LITCHR,}        BRANCH IF GROUP MARK        8  1715  B Y40 N19 }        14
194  4 190          BCE   OUTRM,LITCHR,|     BRANCH IF RECORD MARK          8  1723  B Y51 N19 |        15
195  4 200          BCE   DCIML,LITCHR,.                                    8  1731  B Y21 N19 .        15
196  4 210  OUTLT2 MLC   LITCHR,LITSYM#3                                   7  1739  M N19 N22          15
197  4 220          B     PLACE                                             4  1746  B !32              15
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          DCW   LITSYM                                        3  1752  N22                 15
199  4 240          BCE   OUTLT1,LITSYM,@    BRANCH IF END OF LIT       8  1753  B X80 N22 @         15
200  4 250          B     RSIZE              COUNT SIZE AND DECIMAL     4  1761  B X95               16
201  5 010  OUTLT4  MLC   2&X2,LITCHR                                    7  1765  M 0!2 N19           16
202  5 020          SAR   X2                                            4  1772  Q 094               16
203  5 030          B     OUTLT3                                        4  1776  B X15               16
204  5 040  OUTLT1  MLC   0&X2,0&X2          RESET X2 FOR NEXT LITERAL  7  1780  M 0!0 0!0           16
205  5 050          SBR   X2                                            4  1787  H 094               16
206  5 060          B     BGNCD2                                        4  1791  B V22               16
207  5 070  RSIZE   A     @1@,SIZE1                                     7  1795  A N01 Z09           17
208  5 080          BCE   OUTLT4,DECSW,0     SKIP IF NO DECIMAL         8  1802  B X65 !31 0         17
209  5 090          A     @1@,DECONT                                    7  1810  A N01 Z03           17
210  5 100          B     OUTLT4                                        4  1817  B X65               17
211  5 110  DCIML   BCE   OUTLT2,CLASS,X     IGNORE . IF ALPHANUMERIC CLASS 8  1821  B X39 Z00 X       17
212  5 120          MLC   @1@,DECSW                                     7  1829  M N01 !31           18
213  5 130          B     OUTLT4                                        4  1836  B X65               18
214  5 140  OUTGM   B     PLACE                                         4  1840  B !32               18
215  5 150          DCW   &@ GM@                                       3  1846  N25                 18
216  5 160          B     RSIZE                                         4  1847  B X95               18
217  5 170  OUTRM   B     PLACE                                         4  1851  B !32               18
218  5 180          DCW   &@ RM@                                       3  1857  N28                 18
219  5 190          B     RSIZE                                         4  1858  B X95               19
220  5 200          DCW   @  @.OPDCW.LC@     BEGIN CARD STRING        ########    12  1873              19
221  5 210  BGNCRD  EQU   *                  ######                        1873
222  5 220          DCW   @.DS.DE.MC@        END OF CARD W/ DELIMITERS    ####     9  1882              19
223  5 230  ENDCD   EQU   *                  ######                        1882
224  5 240          DCW   @.DS@              ######                        3  1885              19
225  5 250          DC    @.KK  K  E001@     ######                       12  1897              20
226  6 010  CLASS   DC    @000@              ######                        3  1900              20
227  6 020  DESCST  EQU   *                  DESCRIPTION STRING     #######      1900
228  6 030  DECONT  DCW   @000@             #####                         3  1903              20
229  6 040  SIZE    DCW   @000@      #####                                 3  1906              20
230  6 050  SIZE1   DC    @000@      #####                                 3  1909              20
231  6 060  NAME1   DCW   @000@             #####                         3  1912              20
232  6 070  LITIND  DCW   @.LL@              PROCEDURE LIT                 3  1915              20
233  6 080  EOJ1    C     NAME1,LSTNAM                                     7  1916  C Z12 T29           21
234  6 090          BU    ERR015             NAMES OUT OF SEQUENCE      5  1923  B Z80 /             21
235  6 100  EOJ3    B     PLACE                                         4  1928  B !32               21
236  6 110          DCW   LITIND                                        3  1934  Z15                 21
237  6 120          B     PLACE                                         4  1935  B !32               21
238  6 130          DCW   &@.DE@                                       3  1941  N31                 21
239  6 140          B     PLACE                                         4  1942  B !32               21
240  6 150          DCW   &@.EB@                                       3  1948  N34                 22
241  6 160  EOJ2    NOP   EOJ2A     SWITCH                              4  1949  N Z73               22
242  6 170          BSP   1                                             5  1953  U %U1 B             22
243  6 180          BSP   1                                             5  1958  U %U1 B             22
244  6 190          BSP   1                                             5  1963  U %U1 B             22
245  6 200          BSP   1                                             5  1968  U %U1 B             22
246  6 210  EOJ2A   B     SUPER                                         4  1973  B 351               22
247  6 220  NXTPHS  DCW   @B02@                                         3  1979                      23
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  ERR015 CS    320              NAMES OUT OF SYNC             4  1980  / 320              23
249  6 240         CS                                                  1  1984  /                  23
250  6 250         CC    1                                             2  1985  F 1                23
251  7 010         MLC   DIAG,260                                      7  1987  M !24 260          23
252  7 020         W                                                   1  1994  2                  23
253  7 030         CC    1                                             2  1995  F 1                23
254  7 040         B     DUMP                                          4  1997  B 359              24
255  7 050  DIAG   DCW   @SYSTEM FAILURE PHASE B11@                   24  2024                     24
256  7 060  DUBNUL DCW   @0000000@                                     6  2030                     24
257  7 070  DECSW  DCW   @0@              1 IF DECIMAL SHOULD BE COUNTED 1  2031                     24
258  7 080  PLACE  SBR   X1                                            4  2032  H 089              24
259  7 090         SBR   PLC2&3,3&X1                                   7  2036  H J06 0|3          25
260  7 100         MLC   2&X1,PLC1&3                                   7  2043  M 0|2 !53          25
261  7 110  PLC1   MLC   0,PLCSY                                       7  2050  M 000 J86          25
262  7 120  PLC1A  MLC   PLCSY,PLCB                                    7  2057  M J86 J89          25
263  7 130         C     PLCSY,@.EB@                                   7  2064  C J86 N34          25
264  7 140         BE    PLC3                                          5  2071  B J07 S            26
265  7 150         C     PLC1A&6,&PLCMAX                               7  2076  C !63 N37          26
266  7 160         BE    PLC3                                          5  2083  B J07 S            26
267  7 170         MA    @003@,PLC1A&6                                                 MACRO
268               SW    PLC1A&6-2                                     4  2088  , !61       GEN    26
269               A     @003@,PLC1A&6                                 7  2092  A N40 !63   GEN    26
270               CW    PLC1A&6-2                                     4  2099  ) !61       GEN    26
271  7 180  PLC2   B     0                                             4  2103  B 000              26
272  7 190  PLC3   SW    PLC5&1                                        4  2107  , J83              27
273  7 200         B     IORW                                          4  2111  B 343              27
274  7 210         RT    4,PLC5                                        8  2115  M %U4 J82 R        27
275  7 220         DCW   PLC4                                          3  2125  J30                27
276  7 230         B     PLC3                                          4  2126  B J07              27
277  7 240  PLC4   BSP   4                                             5  2130  U %U4 B            27
278  7 250         SW    PLCMAX&1                                      4  2135  , M87              27
279  8 010         B     IORW                                          4  2139  B 343              28
280  8 020         WT    4,PLCA                                        8  2143  M %U4 J87 W        28
281  8 030         DCW   *&1                                           3  2153  J54                28
282  8 040         WTM   4                                             5  2154  U %U4 M            28
283  8 050         BSP   4                                             5  2159  U %U4 B            28
284  8 060         MLC   &PLCB,PLC1A&6                                 7  2164  M N43 !63          28
285  8 070         ZA    @0@,PLCMAX                                    7  2171  ? N02 M86          28
286  8 080         B     PLC2                                          4  2178  B J03              29
287  8 090  PLC5   EQU   *&1                                             2182
288  8 100         DCW   @ }@                                          2  2183                     29
289  8 110  PLCSY  DCW   #3                                            3  2186                     29
290  8 120         DA    1X300                                           2187   2486              29
291  8 130  PLCA         1                                               2187              SBFLD
292  8 140  PLCB         3                                               2189              SBFLD
293  8 150  PLCMAX EQU   *                                               2486
294  8 160         DC    @}@                                           1  2487                     30
295  8 170         LTORG                                                     2488
                   DCW   @.LT@                                         3  2490              LIT    30
                         @B03@                                         3  2493              LIT    30
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @B@                                            1  2494              LIT     30
                         @S01@                                          3  2497              LIT     30
                         @.DD@                                          3  2500              LIT     31
                         @1@                                            1  2501              LIT     31
                         @0@                                            1  2502              LIT     31
       147               &BGNCRD                                        3  2505  Y73         ADCON   31
       151               &ENDCD                                         3  2508  Y82         ADCON   31
       161               &DESCST                                        3  2511  Z00         ADCON   31
                         @@@                                            1  2512              LIT     31
                         @  9@                                          3  2515              LIT     32
                         @  X@                                          3  2518              LIT     32
       192  LITCHR       #01                                            1  2519              AREA    32
       196  LITSYM       #03                                            3  2522              AREA    32
                         @ GM@                                          3  2525              LIT     32
                         @ RM@                                          3  2528              LIT     32
                         @.DE@                                          3  2531              LIT     32
                         @.EB@                                          3  2534              LIT     33
       265               &PLCMAX                                        3  2537  M86         ADCON   33
                         @003@                                          3  2540              LIT     33
       284               &PLCB                                          3  2543  J89         ADCON   33
296  8 180         DCW   @}@                GMWM                        1  2544                      33
297  8 190         END                                                           / 000 080           34
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B03 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B03
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                                  0089
 104  1 040  X2      EQU   94                                                  0094
 105  1 050  X3      EQU   99                                                  0099
 106  1 060  GETX    EQU   335                                                 0335
 107  1 070  SUPER   EQU   351                                                 0351
 108  1 080  DUMP    EQU   359                                                 0359
 109  1 090  PUTX    EQU   363                                                 0363
 110  1 100  DTCN1   EQU   1302                                                1302
 111  1 110  C       EQU   1303                                                1303
 112  1 120  DTCN    EQU   C&5                                                 1308
 113  1 130  DTEND   EQU   C&8                                                 1311
 114  1 140  ENDADR  EQU   C&8                                                 1311
 115  1 150  DTADR   EQU   C&11                                                1314
 116  1 160  PRCN1   EQU   C&14                                                1317
 117  1 170  PRCN    EQU   C&17                                                1320
 118  1 180  PREND   EQU   C&20                                                1323
 119  1 190  PRADR   EQU   C&23                                                1326
 120  1 200  LTNM1   EQU   C&26                                                1329
 121  1 210  LTNM    EQU   C&29                                                1332
 122  1 220  OVSW    EQU   C&30                                                1333
 123  1 230  OVFSW   EQU   C&31                                                1334
 124  1 240  DOVSW   EQU   C&32                                                1335
 125  1 250  POVSW   EQU   C&33                                                1336
 126  2 010  DQSW    EQU   C&34                                                1337
 127  2 020  PQSW    EQU   C&35                                                1338
 128  2 030  LITSW   EQU   C&36                                                1339
 129  2 040  SYSW    EQU   C&37                                                1340
 130  2 050          ORG   1350                                                      1350
 131  2 060  INIT    MLC   DTADR,ENDADR                                 7  1350  M T14 T11           4
 132  2 070          MLC   PRCN1,PRCN                                   7  1357  M T17 T20           4
 133  2 080          MLC   PRCN1,TBGCN                                  7  1364  M T17 P45           4
 134  2 090          B     GTSYM                                        4  1371  B M53               4
 135  2 100          B     PUTX                                         4  1375  B 363               4
 136  2 110          DCW   CURNT                                        3  1381  O81                 4
 137  2 120          C     CURNT,SENV                                   7  1382  C O81 P10           4
 138  2 130          BU    INIT                                         5  1389  B T50 /             5
 139  2 140          B     GTEST                                        4  1394  B U05               5
 140  2 150  PTEST   B     PUTX                                         4  1398  B 363               5
 141  2 160          DCW   CURNT                                        3  1404  O81                 5
 142  2 170  GTEST   B     GTSYM                                        4  1405  B M53               5
 143  2 180  TEST    MLC   @0@,QSW1                                    7  1409  M P81 P36           5
 144  2 190          C     CURNT,LSTOP                                  7  1416  C O81 P18           5
 145  2 200          BU    TEST3                                        5  1423  B U36 /             6
 146  2 210          B     PTGTSY                                       4  1428  B O19               6
 147  2 220          B     PSNAME                                       4  1432  B N37               6
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230  TEST3   B     ENVTST                                     4  1436  B V10               6
149  2 240          C     CURNT,PNOP                                 7  1440  C O81 P21           6
150  2 250          BE    ENTDN                                      5  1447  B Z32 S             6
151  3 010          C     CURNT,LBOP                                 7  1452  C O81 O74           6
152  3 020          BU    PRTST1                                     5  1459  B W33 /             7
153  3 030          B     SAVFLD                                     4  1464  B Y98               7
154  3 040          MLC   @1@,BPYSW                                  7  1468  M P82 P14           7
155  3 050          B     LKNAME                                     4  1475  B W87               7
156  3 060          BCE   TEST,LKSW,0                                8  1479  B U09 P15 0         7
157  3 070          BWZ   TEST4,0&X1,K                               8  1487  V U99 0|0 K         7
158  3 080          B     TEST                                       4  1495  B U09               8
159  3 090  TEST4   MZ    @&@,0&X1                                   7  1499  Y P83 0|0           8
160  3 100          B     TEST                                       4  1506  B U09               8
161  3 110  ENVTST  C     CURNT,SDATA                                7  1510  C O81 P13           8
162  3 120          BU    ENV01                                      5  1517  B V56 /             8
163  3 130          MLC   @N@,TEST3                                  7  1522  M P84 U36           8
164  3 140          MLC   LBOP,CNOP                                  7  1529  M O74 O84           9
165  3 150  ENV02   B     PTGTSY                                     4  1536  B O19               9
166  3 160          C     CURNT,SPROC                                7  1540  C O81 O71           9
167  3 170          BU    ENV02                                      5  1547  B V36 /             9
168  3 180          B     PTEST                                      4  1552  B T98               9
169  3 190  ENV01   C     CURNT,ANOP                                 7  1556  C O81 P32           9
170  3 200          BU    PTEST                                      5  1563  B T98 /             9
171  3 210          B     PTGTSY                                     4  1568  B O19              10
172  3 220          C     CURNT,CNOP                                 7  1572  C O81 O84          10
173  3 230          BU    PTEST                                      5  1579  B T98 /            10
174  3 240          MLC   @1@,ATNMSW                                 7  1584  M P82 P28          10
175  3 250          B     SAVFLD                                     4  1591  B Y98              10
176  4 010          MLC   @1@,ENTSW                                  7  1595  M P82 P38          10
177  4 020          MLC   @-@,CHR                                    7  1602  M P85 P07          11
178  4 030          B     LKNAME                                     4  1609  B W87              11
179  4 040          BCE   TEST,LKSW,1                                8  1613  B U09 P15 1        11
180  4 041          BCE   TEST,OVFSW,1                               8  1621  B U09 T34 1        11
181  4 042          B     NTFND                                      4  1629  B J39              11
182  4 050  PRTST1  C     CURNT-1,QDIGIT                             7  1633  C O80 P06          11
183  4 060          BU    PRTST2                                     5  1640  B W67 /            12
184  4 070          MLC   CURNT,CHR                                  7  1645  M O81 P07          12
185  4 080          MLC   @1@,QSW1                                   7  1652  M P82 P36          12
186  4 090          B     GTSYM                                      4  1659  B M53              12
187  4 100          B     ENTDN                                      4  1663  B Z32              12
188  4 110  PRTST2  C     CURNT,TBOP                                 7  1667  C O81 O68          12
189  4 120          BU    PTEST                                      5  1674  B T98 /            12
190  4 130  PRTST3  B     PTGTSY                                     4  1679  B O19              13
191  4 140          B     PRTST3                                     4  1683  B W79              13
192  4 150  LKNAME  SBR   LK05&3                                    4  1687  H Y29              13
193  4 160          ZA    FIELD&1,X3                                 7  1691  ? P49 099          13
194  4 170          A     X3                                         4  1698  A 099              13
195  4 180          A     FIELD&1,X3                                 7  1702  A P49 099          13
196  4 190          MZ    @ @,X3                                     7  1709  Y P86 099          13
197  4 200          BCE   LK09,INTAB&X3,                            8  1716  B Y71 Q?4          14
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 210         MLC   INTAB&X3,X1                               7  1724  M Q?4 089           14
199  4 220  LK03   C     0&X1,FIELD&X2                             7  1731  C 0|0 PM8           14
200  4 230         SAR   X1                                        4  1738  Q 089               14
201  4 240         BU    LK01                                      5  1742  B X92 /             14
202  4 250         BWZ   LK07,1&X1,1                              8  1747  V Y04 0|1 1         14
203  5 010  LK04   C     0&X1                                      4  1755  C 0|0               15
204  5 020         SAR   X1                                        4  1759  Q 089               15
205  5 030  LK02   C     0&X1                                      4  1763  C 0|0               15
206  5 040         C                                               1  1767  C                   15
207  5 050         C                                               1  1768  C                   15
208  5 060         SAR   X1                                        4  1769  Q 089               15
209  5 070         BCE   LK06,3&X1,*                             8  1773  B Y30 0|3 *         15
210  5 080         MLC   3&X1,X1                                   7  1781  M 0|3 089           16
211  5 090         B     LK03                                      4  1788  B X31               16
212  5 100  LK01   BWZ   LK02,1&X1,1                              8  1792  V X63 0|1 1         16
213  5 110         B     LK04                                      4  1800  B X55               16
214  5 120  LK07   C     0&X1,GCN&2                                7  1804  C 0|0 O98           16
215  5 130         MLC                                             1  1811  M                   16
216  5 140         MLC   @1@,LKSW                                  7  1812  M P82 P15           16
217  5 150  LK11   MLC   @0@,BPYSW                                7  1819  M P81 P14           17
218  5 160  LK05   B     *                                         4  1826  B Y29               17
219  5 170  LK06   BCE   LK08,OVFSW,1                            8  1830  B Y60 T34 1         17
220  5 180         BCE   LK08,BPYSW,1                            8  1838  B Y60 P14 1         17
221  5 190         MLC   ENDADR,3&X1                             7  1846  M T11 0|3           17
222  5 200  LK10   MLC   ENDADR,X1                               7  1853  M T11 089           18
223  5 210  LK08   MLC   @0@,LKSW                                7  1860  M P81 P15           18
224  5 220         B     LK11                                      4  1867  B Y19               18
225  5 230  LK09   BCE   LK08,OVFSW,1                            8  1871  B Y60 T34 1         18
226  5 240         BCE   LK08,BPYSW,1                            8  1879  B Y60 P14 1         18
227  5 250         MLC   ENDADR,INTAB&X3                         7  1887  M T11 Q?4           19
228  6 010         B     LK10                                      4  1894  B Y53               19
229  6 020  SAVFLD SBR   SAV01&3                                  4  1898  H Z31               19
230  6 030         BCE   PSNAME,ATNMSW,0                           8  1902  B N37 P28 0         19
231  6 040         MLC   @1@,PTGTSW                                7  1910  M P82 P39           19
232  6 050         B     ENTFLD                                    4  1917  B K09               19
233  6 060         MLC   @0@,PTGTSW                                7  1921  M P81 P39           20
234  6 070  SAV01  B     *                                         4  1928  B Z31               20
235  6 080  ENTDN  B     ENTFLD                                    4  1932  B K09               20
236  6 090         BCE   QUALFY,QSW1,1                           8  1936  B N80 P36 1         20
237  6 100         BCE   QULTST,QSW,1                            8  1944  B !12 P37 1         20
238  6 110         C     CURNT,QUAL                                7  1952  C O81 O90           20
239  6 120         BE    QUL02                                     5  1959  B Z87 S             21
240  6 130         MLC   @&@,CHR                                  7  1964  M P83 P07           21
241  6 140  ENTDN2 B     LKNAME                                    4  1971  B W87               21
242  6 150  ENTDN1 BCE   NTFND,LKSW,0                            8  1975  B J39 P15 0         21
243  6 160         B     FOUND                                     4  1983  B !53               21
244  6 170  QUL02  MLC   @1@,QSW                                  7  1987  M P82 P37           21
245  6 180         MLC   @1@,PQSW                                 7  1994  M P82 T38           22
246  6 190         MLC   EQNM,CHR                                 7  2001  M P00 P07           22
247  6 200         B     QUALFY                                    4  2008  B N80               22
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 210  QULTST C     CURNT,QUAL                                 7  2012  C O81 O90           22
249  6 220         BE    QUL01                                      5  2019  B !42 S             22
250  6 230         MLC   HQNM,CHR                                  7  2024  M P02 P07           22
251  6 240         MLC   @0@,QSW                                   7  2031  M P81 P37           23
252  6 250         B     QUALFY                                     4  2038  B N80               23
253  7 010  QUL01  MLC   IQNM,CHR                                  7  2042  M P04 P07           23
254  7 020         B     QUALFY                                     4  2049  B N80               23
255  7 030  FOUND  BCE   FND01,QSW1,0                              8  2053  B J02 P36 0         23
256  7 040         MN    0&X1,TSTCHR                                7  2061  D 0|0 P29           23
257  7 050         BCE   FND04,TSTCHR,                             8  2068  B !84 P29           24
258  7 060         BCE   FND02,CHR,1                              8  2076  B !91 P07 1         24
259  7 070  FND04  MN    CHR,0&X1                                   7  2084  D P07 0|0           24
260  7 080  FND02  B     PUTX                                       4  2091  B 363               24
261  7 090         DCW   GCN                                        3  2097  O96                 24
262  7 100         B     TEST                                       4  2098  B U09               24
263  7 110  FND01  BCE   NOCN,ENTSW,1                              8  2102  B J28 P38 1         25
264  7 120         MZ    @&@,0&X1                                   7  2110  Y P83 0|0           25
265  7 130  FND03  B     PUTX                                       4  2117  B 363               25
266  7 140         DCW   GCN                                        3  2123  O96                 25
267  7 150         B     TEST                                       4  2124  B U09               25
268  7 160  NOCN   MLC   @0@,ENTSW                                 7  2128  M P81 P38           25
269  7 170         B     TEST                                       4  2135  B U09               25
270  7 180  NTFND  BCE   OUTCN,OVFSW,1                            8  2139  B L10 T34 1         26
271  7 190         MLC   CHR,TAG                                   7  2147  M P07 P47           26
272  7 200         MLC   TBGCN,GCN                                 7  2154  M P45 O96           26
273  7 210         LCA   FIELD&X2,0&X1                             7  2161  L PM8 0|0           26
274  7 220         LCA                                              1  2168  L                   26
275  7 230         LCA                                              1  2169  L                   26
276  7 240         LCA                                              1  2170  L                   26
277  7 250         SBR   ENDADR                                    4  2171  H T11               27
278  8 010         A     &1,TBGCN                                   7  2175  A P87 P45           27
279  8 020         BCE   NTFND2,OVCHR,|                            8  2182  B J97 A34 |         27
280  8 030         MLC   @1@,OVFSW                                 7  2190  M P82 T34           27
281  8 040  NTFND2 BCE   NOCN,ENTSW,1                              8  2197  B J28 P38 1         27
282  8 050         B     FND03                                      4  2205  B J17               27
283  8 060  ENTFLD SBR   ENTF01&3                                  4  2209  H K91               28
284  8 070         MLC   CURNT,SYM                                 7  2213  M O81 O87           28
285  8 080         MLC   @002@,X2                                  7  2220  M P90 094           28
286  8 090         B     ENTGT                                      4  2227  B O38               28
287  8 100         B     ENTF03                                     4  2231  B K58               28
288  8 110  ENTF02 B     ENTGT                                      4  2235  B O38               28
289  8 120         C     CURNT,SYM                                  7  2239  C O81 O87           28
290  8 130         BE    ENTF04                                     5  2246  B K69 S             29
291  8 140         A     &3,X2                                      7  2251  A P91 094           29
292  8 150  ENTF03 MLC   CURNT,FIELD&X2                            7  2258  M O81 PM8           29
293  8 160         B     ENTF02                                     4  2265  B K35               29
294  8 170  ENTF04 BCE   ENTF05,FIELD&X2,                          8  2269  B K92 PM8           29
295  8 180         MLC   @|@,FIELD&1&X2                           7  2277  M P92 PM9           29
296  8 190         B     ENTGT                                      4  2284  B O38               30
297  8 200  ENTF01 B     *                                          4  2288  B K91               30
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 210  ENTF05 S     &1,X2                                     7  2292  S P87 094           30
299  8 220         MZ    @ @,X2                                    7  2299  Y P86 094           30
300  8 230         B     ENTF04                                    4  2306  B K69               30
301  8 240  OUTCN  MLC   @1@,OVSW                                  7  2310  M P82 T33           30
302  8 250         BCE   OUTCN1,QSW1,0                            8  2317  B L40 P36 0         31
303  9 010         MLC   CHR,OUTSYM                                7  2325  M P07 O93           31
304  9 020         MLC                                           1  2332  M                   31
305  9 030         B     PUTX                                      4  2333  B 363               31
306  9 040         DCW   OUTSYM                                   3  2339  O93                 31
307  9 050  OUTCN1 B     PUTX                                      4  2340  B 363               31
308  9 060         DCW   SYM                                       3  2346  O87                 31
309  9 070         MLC   @000@,X2                                  7  2347  M P95 094           32
310  9 080  OUTCN2 MLC   @000@,X3                                  7  2354  M P95 099           32
311  9 090         MLC   @   @,OUTSYM                             7  2361  M P98 O93           32
312  9 100  OUTCN3 BCE   OUTCNX,FIELD&X2,|                        8  2368  B M27 PM8 |         32
313  9 110         MZ    FIELD&X2,OUTSYM-2&X3                      7  2376  Y PM8 OI1           32
314  9 120         MN    FIELD&X2,OUTSYM-2&X3                      7  2383  D PM8 OI1           33
315  9 130         A     &1,X2                                     7  2390  A P87 094           33
316  9 140         A     &1,X3                                     7  2397  A P87 099           33
317  9 150         C     X3,@003@                                  7  2404  C 099 Q01           33
318  9 160         BU    OUTCN3                                    5  2411  B L68 /             33
319  9 170         B     PUTX                                      4  2416  B 363               33
320  9 180         DCW   OUTSYM                                   3  2422  O93                 34
321  9 190         B     OUTCN2                                    4  2423  B L54               34
322  9 200  OUTCNX BCE   OUTCN4,X3,0                              8  2427  B M42 099 0         34
323  9 210         B     PUTX                                      4  2435  B 363               34
324  9 220         DCW   OUTSYM                                   3  2441  O93                 34
325  9 230  OUTCN4 B     PUTX                                      4  2442  B 363               34
326  9 240         DCW   SYM                                       3  2448  O87                 34
327  9 250         B     TEST                                      4  2449  B U09               35
328 10 010  GTSYM  SBR   GT01&3                                   4  2453  H M82               35
329 10 020  GT08   B     GETX                                      4  2457  B 335               35
330 10 030         DCW   CURNT                                     3  2463  O81                 35
331 10 040         DCW   EOJ                                       3  2466  N98                 35
332 10 050  GT03   C     CURNT,CDSYM                               7  2467  C O81 O78           35
333 10 060         BE    GT02                                      5  2474  B M83 S             35
334 10 070  GT01   B     *                                         4  2479  B M82               36
335 10 080  GT02   MLC   @0@,CDSW                                 7  2483  M P81 O75           36
336 10 090  GT04   B     PUTX                                      4  2490  B 363               36
337 10 100         DCW   CURNT                                     3  2496  O81                 36
338 10 110         B     GETX                                      4  2497  B 335               36
339 10 120         DCW   CURNT                                     3  2503  O81                 36
340 10 130         DCW   EOJ                                       3  2506  N98                 36
341 10 140         A     &1,CDSW                                   7  2507  A P87 O75           37
342 10 150         BCE   GT03,CDSW,3                               8  2514  B M67 O75 3         37
343 10 160         B     GT04                                      4  2522  B M90               37
344 10 170  GT05   B     PUTX                                      4  2526  B 363               37
345 10 180         DCW   CURNT                                     3  2532  O81                 37
346 10 190         B     GT08                                      4  2533  B M57               37
347 10 200  PSNAME B     PASSSY                                    4  2537  B N45               37
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 210          B     TEST                                      4  2541  B U09               38
349 10 220  PASSSY  SBR   PASS01&3                                  4  2545  H N79               38
350 10 230          MLC   CURNT,OUTSYM                              7  2549  M O81 O93           38
351 10 240  PASS02  B     PTGTSY                                    4  2556  B O19               38
352 10 250          C     CURNT,OUTSYM                              7  2560  C O81 O93           38
353 11 010          BU    PASS02                                    5  2567  B N56 /             38
354 11 020          B     PTGTSY                                    4  2572  B O19               38
355 11 030  PASS01 B     *                                         4  2576  B N79               39
356 11 040  QUALFY MLC   CHR,TAG                                   7  2580  M P07 P47           39
357 11 050          MLC   @1@,QSW1                                 7  2587  M P82 P36           39
358 11 060          B     ENTDN2                                    4  2594  B Z71               39
359 11 070  EOJ     B     PUTX                                      4  2598  B 363               39
360 11 080          DCW   EOP                                       3  2604  P35                 39
361 11 090          MLC   TBGCN,PRCN1                              7  2605  M P45 T17           39
362 11 100          B     SUPER                                     4  2612  B 351               40
363 11 110          DCW   @B04@                                     3  2618                      40
364 11 120  PTGTSY SBR   PTGT01&3                                  4  2619  H O37               40
365 11 130          B     PUTX                                      4  2623  B 363               40
366 11 140          DCW   CURNT                                     3  2629  O81                 40
367 11 150          B     GTSYM                                     4  2630  B M53               40
368 11 160  PTGT01 B     *                                         4  2634  B O37               40
369 11 170  ENTGT   SBR   ENTGT1&3                                 4  2638  H O57               41
370 11 180          BCE   ENTGT2,PTGTSW,1                           8  2642  B O58 P39 1         41
371 11 190          B     GTSYM                                     4  2650  B M53               41
372 11 200  ENTGT1 B     *                                         4  2654  B O57               41
373 11 210  ENTGT2 B     PTGTSY                                    4  2658  B O19               41
374 11 220          B     ENTGT1                                    4  2662  B O54               41
375 11 230  TBOP    DCW   @.TO@                                    3  2668                      41
376 11 240  SPROC   DCW   @*01@                                    3  2671                      42
377 11 250  LBOP    DCW   @.LB@                                    3  2674                      42
378 12 010  CDSW    DCW   @0@                                      1  2675                      42
379 12 020  CDSYM   DCW   @.CD@                                    3  2678                      42
380 12 030  CURNT   DCW   #3                                       3  2681                      42
381 12 040  CNOP    DCW   @.NM@                                    3  2684                      42
382 12 050  SYM     DCW   #3                                       3  2687                      42
383 12 060  QUAL    DCW   @*32@                                    3  2690                      43
384 12 070  OUTSYM  DCW   #3                                       3  2693                      43
385 12 080  GCN     DCW   @A10@                                    3  2696                      43
386 12 090          DCW   @  @                                     2  2698                      43
387 12 100  EQNM    DCW   @ 3@                                     2  2700                      43
388 12 110  HQNM    DCW   @ 1@                                     2  2702                      43
389 12 120  IQNM    DCW   @ 1@                                     2  2704                      43
390 12 130  QDIGIT  DCW   @.Q@                                     2  2706                      44
391 12 140  CHR     DCW   @ @                                      1  2707                      44
392 12 150  SENV    DCW   @*91@                                    3  2710                      44
393 12 160  SDATA   DCW   @/24@                                    3  2713                      44
394 12 170  BPYSW   DCW   @0@                                      1  2714                      44
395 12 180  LKSW    DCW   @0@                                      1  2715                      44
396 12 190  LSTOP   DCW   @.LT@                                    3  2718                      44
397 12 200  PNOP    DCW   @.PN@                                    3  2721                      45
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 210  SPEND  DCW   #3                                        3  2724                      45
399 12 220  SAVE   DCW   #3                                        3  2727                      45
400 12 230  ATNMSW DCW   @0@                                       1  2728                      45
401 12 240  TSTCHR DCW   #1                                        1  2729                      45
402 12 250  ANOP   DCW   @.AN@                                     3  2732                      45
403 13 010  EOP    DCW   @.EP@                                     3  2735                      45
404 13 020  QSW1   DCW   @0@                                       1  2736                      46
405 13 030  QSW    DCW   @0@                                       1  2737                      46
406 13 040  ENTSW  DCW   @0@                                       1  2738                      46
407 13 050  PTGTSW DCW   @0@                                       1  2739                      46
408 13 060         DCW   @***@                                     3  2742                      46
409 13 070  TBGCN  DCW   #3                                        3  2745                      46
410 13 080  TAG    DCW   @  @                                      2  2747                      46
411 13 090  FIELD  DCW   @ @                                       1  2748                      47
412 13 100         DC    #32                                      32  2780                      47
413 13 110         LTORG                                              2781
                   DCW   @0@                                       1  2781             LIT      47
                         @1@                                       1  2782             LIT      47
                         @&@                                       1  2783             LIT      47
                         @N@                                       1  2784             LIT      47
                         @-@                                       1  2785             LIT      47
                         @ @                                       1  2786             LIT      47
                         &1                                        1  2787             LIT      48
                         @002@                                     3  2790             LIT      48
                         &3                                        1  2791             LIT      48
                         @|@                                       1  2792             LIT      48
                         @000@                                     3  2795             LIT      48
                         @   @                                     3  2798             LIT      48
                         @003@                                     3  2801             LIT      48
414 13 120  INTAB  DCW   #3                                        3  2804                      49
415 13 130         DC    #50                                      50  2854                      51
416 13 140         DC    #50                                      50  2904                      53
417 13 150         DC    #50                                      50  2954                      55
418 13 160         DC    #50                                      50  3004                      57
419 13 170         DC    #50                                      50  3054                      59
420 13 180         DC    #47                                      47  3101                      61
421 13 190         DC    #32                                      32  3133                      62
422 13 200  OVCHR  DC    @|@                                       1  3134                      62
423 13 210  GRMK   DCW   @}@                                       1  3135                      62
424 13 220         END   INIT                                           / T50 080               63
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - B04
 102  1 020         CTL   631 11
 103  1 030  X1     EQU   89                                                0089
 104  1 040  X2     EQU   94                                                0094
 105  1 050  X3     EQU   99                                                0099
 106  1 060  GETX   EQU   335                                               0335
 107  1 070  SUPER  EQU   351                                               0351
 108  1 080  PUTX   EQU   363                                               0363
 109  1 090  DTCN1  EQU   1302                                              1302
 110  1 100  C      EQU   1303                                              1303
 111  1 110  DTCN   EQU   C&5                                               1308
 112  1 120  DTEND  EQU   C&8                                               1311
 113  1 130  ENDADR EQU   C&8                                               1311
 114  1 140  DTADR  EQU   C&11                                              1314
 115  1 150  PRCN1  EQU   C&14                                              1317
 116  1 160  PRCN   EQU   C&17                                              1320
 117  1 170  PREND  EQU   C&20                                              1323
 118  1 180  PRADR  EQU   C&23                                              1326
 119  1 190  LTNM1  EQU   C&26                                              1329
 120  1 200  LTNM   EQU   C&29                                              1332
 121  1 210  OVSW   EQU   C&30                                              1333
 122  1 220  OVFSW  EQU   C&31                                              1334
 123  1 230  DOVSW  EQU   C&32                                              1335
 124  1 240  POVSW  EQU   C&33                                              1336
 125  1 250  DQSW   EQU   C&34                                              1337
 126  2 010  PQSW   EQU   C&35                                              1338
 127  2 020  LITSW  EQU   C&36                                              1339
 128  2 030  SYSW   EQU   C&37                                              1340
 129  2 040  TBSW   EQU   C&38                                              1341
 130  2 050  UNSW   EQU   C&39                                              1342
 131  2 060  INTAB  EQU   2804                                              2804
 132  2 070         ORG   1350                                                    1350
 133  2 080  INIT   B     GTSYM                                     4  1350  B J90                4
 134  2 090         B     PUTX                                      4  1354  B 363                4
 135  2 100         DCW   CURNT                                     3  1360  O79                  4
 136  2 110         C     CURNT,SENV                                7  1361  C O79 P03            4
 137  2 120         BU    INIT                                      5  1368  B T50 /              4
 138  2 130         B     GTEST                                     4  1373  B T84                4
 139  2 140  PTEST  B     PUTX                                      4  1377  B 363                4
 140  2 150         DCW   CURNT                                     3  1383  O79                  5
 141  2 160  GTEST  B     GTSYM                                     4  1384  B J90                5
 142  2 170  TEST   B     ENVTST                                    4  1388  B U52                5
 143  2 180         C     CURNT,LBOP                                7  1392  C O79 O40            5
 144  2 190         BE    TEST1                                     5  1399  B U32 S              5
 145  2 200         C     CURNT,LBFOP                               7  1404  C O79 O46            5
 146  2 210         BU    PTEST                                     5  1411  B T77 /              5
 147  2 220         B     PTGTSY                                    4  1416  B K74                6
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     PTGTSY                                     4  1420  B K74               6
149  2 240         B     PTGTSY                                     4  1424  B K74               6
150  2 250         B     PSNAME                                     4  1428  B K93               6
151  3 010  TEST1  B     ENTFLD                                     4  1432  B Z64               6
152  3 020         B     LKNAME                                     4  1436  B Y17               6
153  3 030         BCE   NTFND,LKSW,0                               8  1440  B X69 O50 0         6
154  3 040         B     FOUND                                      4  1448  B W01               7
155  3 050  ENVTST C     CURNT,SDATA                                7  1452  C O79 P09           7
156  3 060         BU    ENV01                                      5  1459  B U91 /             7
157  3 070         MLC   @N@,TEST                                  7  1464  M P53 T88           7
158  3 080         B     PTGTSY                                     4  1471  B K74               7
159  3 090         C     CURNT,SPROC                                7  1475  C O79 O66           7
160  3 100         BU    ENV01                                      5  1482  B U91 /             7
161  3 110         B     PTEST                                      4  1487  B T77               8
162  3 120  ENV01  C     CURNT,ANOP                                 7  1491  C O79 O57           8
163  3 130         BU    PTEST                                      5  1498  B T77 /             8
164  3 140         B     PTGTSY                                     4  1503  B K74               8
165  3 150         C     CURNT,CNOP                                 7  1507  C O79 O82           8
166  3 160         BE    ENV02                                      5  1514  B V43 S             8
167  3 170         C     CURNT,ANNTSY                               7  1519  C O79 O37           8
168  3 180         BU    PTEST                                      5  1526  B T77 /             9
169  3 190         BCE   PTEST,OVSW,1                               8  1531  B T77 T33 1         9
170  3 200         B     GTEST                                      4  1539  B T84               9
171  3 210  ENV02  B     ENTFLD                                     4  1543  B Z64               9
172  3 220         B     LKNAME                                     4  1547  B Y17               9
173  3 230         BCE   OUTCN,LKSW,0                               8  1551  B !65 O50 0         9
174  3 240         BWZ   SPNTFN,0&X3,K                              8  1559  V V78 0?0 K        10
175  3 250         B     PUTX                                       4  1567  B 363              10
176  4 010         DCW   GCN                                        3  1573  O94                10
177  4 020         B     TEST                                       4  1574  B T88              10
178  4 030  SPNTFN BCE   OUTCN,OVSW,0                               8  1578  B !65 T33 0        10
179  4 040         B     PUTX                                       4  1586  B 363              10
180  4 050         DCW   ANNTSY                                    3  1592  O37                10
181  4 060         B     OUTNM                                      4  1593  B !73              11
182  4 070         B     TEST                                       4  1597  B T88              11
183  4 080  FOUND  MN    0&X3,NMCHR                                 7  1601  D 0?0 O99          11
184  4 090         BCE   FND01,NMCHR,                               8  1608  B W61 O99          11
185  4 100         BWZ   FND07,0&X3,B                              8  1616  V X40 0?0 B        11
186  4 110         BCE   FND06,NMCHR,3                             8  1624  B W39 O99 3        11
187  4 120         MLC   @1@,NMCHR                                 7  1632  M P54 O99          12
188  4 130  FND06  MLC   NMCHR,OUTSYM                              7  1639  M O99 O91          12
189  4 140         MLC                                            1  1646  M                  12
190  4 150         B     PUTX                                       4  1647  B 363              12
191  4 160         DCW   OUTSYM                                    3  1653  O91                12
192  4 170         MLC   @1@,PQSW                                 7  1654  M P54 T38          12
193  4 180  FND01  C     @ @,0&X3                                   7  1661  C P55 0?0          12
194  4 190         SBR   X3                                         4  1668  H 099              13
195  4 200         BCE   FND09,0&X3,*                              8  1672  B X51 0?0 *        13
196  4 210         BCE   FND09,0&X3,]                              8  1680  B X51 0?0 ]        13
197  4 220         MLC   @]@,0&X3                                 7  1688  M P56 0?0          13
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  FND02   B     PUTX                                     4  1695  B 363              13
199  4 240          DCW   LBFOP                                   3  1701  O46                13
200  4 250          B     PUTX                                     4  1702  B 363              13
201  5 010          DCW   GCN                                      3  1708  O94                14
202  5 020  LST01   C     CURNT,SSCT                               7  1709  C O79 O63          14
203  5 030          BU    LSTOUT                                   5  1716  B X25 /            14
204  5 040          B     PTGTSY                                   4  1721  B K74              14
205  5 050  LSTOUT  B     PUTX                                     4  1725  B 363              14
206  5 060          DCW   LSTOP                                   3  1731  O49                14
207  5 070          B     OUTNM                                    4  1732  B !73              14
208  5 080          B     TEST                                     4  1736  B T88              15
209  5 090  FND07   MLC   @2@,NMCHR                               7  1740  M P57 O99          15
210  5 100          B     FND06                                    4  1747  B W39              15
211  5 110  FND09   B     PUTX                                     4  1751  B 363              15
212  5 120          DCW   MLTSYM                                   3  1757  O43                15
213  5 130          MLC   @*@,0&X3                                 7  1758  M P58 0?0          15
214  5 140          B     FND02                                    4  1765  B W95              15
215  5 150  NTFND   BCE   OUTCN,OVSW,1                            8  1769  B !65 T33 1        16
216  5 160          B     PUTX                                     4  1777  B 363              16
217  5 170          DCW   LBFOP                                   3  1783  O46                16
218  5 180          B     PUTX                                     4  1784  B 363              16
219  5 190          DCW   PRCN1                                   3  1790  T17                16
220  5 200          A     &1,PRCN1                                 7  1791  A P59 T17          16
221  5 210          B     LST01                                    4  1798  B X09              16
222  5 220  CNRTN   SBR   CNR01&3                                 4  1802  H Y16              17
223  5 230          A     &1,GCN                                   7  1806  A P59 O94          17
224  5 240  CNR01   B     *                                        4  1813  B Y16              17
225  5 250  LKNAME  SBR   LK05&3                                  4  1817  H Z63              17
226  6 010          ZA    FIELD&1,X3                               7  1821  ? P19 099          17
227  6 020          A     X3                                       4  1828  A 099              17
228  6 030          A     FIELD&1,X3                               7  1832  A P19 099          17
229  6 040          MZ    @ @,X3                                   7  1839  Y P55 099          18
230  6 050          BCE   LK06,INTAB&X3,                          8  1846  B Z34 Q?4          18
231  6 060          MLC   INTAB&X3,X3                             7  1854  M Q?4 099          18
232  6 070  LK03    C     0&X3,FIELD&X2                            7  1861  C 0?0 PJ8          18
233  6 080          SAR   X3                                       4  1868  Q 099              18
234  6 090          BU    LK01                                     5  1872  B Z22 /            18
235  6 100          BWZ   LK07,1&X3,1                            8  1877  V Z45 0?1 1        19
236  6 110  LK04    C     0&X3                                     4  1885  C 0?0              19
237  6 120          SAR   X3                                       4  1889  Q 099              19
238  6 130  LK02    C     0&X3                                     4  1893  C 0?0              19
239  6 140          C                                              1  1897  C                  19
240  6 150          C                                              1  1898  C                  19
241  6 160          SAR   X3                                       4  1899  Q 099              19
242  6 170          BCE   LK06,3&X3,*                            8  1903  B Z34 0?3 *        20
243  6 180          MLC   3&X3,X3                                 7  1911  M 0?3 099          20
244  6 190          B     LK03                                     4  1918  B Y61              20
245  6 200  LK01    BWZ   LK02,1&X3,1                            8  1922  V Y93 0?1 1        20
246  6 210          B     LK04                                     4  1930  B Y85              20
247  6 220  LK06    MLC   @0@,LKSW                                7  1934  M P60 O50          20
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          B     LK05                                        4  1941  B Z60               21
249  6 240  LK07    C     0&X3,GCN&2                                  7  1945  C 0?0 O96           21
250  6 250          MLC                                               1  1952  M                   21
251  7 010          MLC   @1@,LKSW                                    7  1953  M P54 O50           21
252  7 020  LK05    B     *                                           4  1960  B Z63               21
253  7 030  ENTFLD  SBR   ENTF01&3                                    4  1964  H !46               21
254  7 040          MLC   CURNT,SYM                                   7  1968  M O79 O85           21
255  7 050          MLC   @002@,X2                                   7  1975  M P63 094           22
256  7 060          B     GTSYM                                       4  1982  B J90               22
257  7 070          B     ENTF03                                      4  1986  B !13               22
258  7 080  ENTF02  B     GTSYM                                       4  1990  B J90               22
259  7 090          C     CURNT,SYM                                   7  1994  C O79 O85           22
260  7 100          BE    ENTF04                                      5  2001  B !24 S             22
261  7 110          A     &3,X2                                       7  2006  A P64 094           22
262  7 120  ENTF03  MLC   CURNT,FIELD&X2                             7  2013  M O79 PJ8           23
263  7 130          B     ENTF02                                      4  2020  B Z90               23
264  7 140  ENTF04  BCE   ENTF05,FIELD&X2,                           8  2024  B !47 PJ8           23
265  7 150          MLC   @|@,FIELD&1&X2                            7  2032  M P65 PJ9           23
266  7 160          B     GTSYM                                       4  2039  B J90               23
267  7 170  ENTF01  B     *                                           4  2043  B !46               23
268  7 180  ENTF05  S     &1,X2                                       7  2047  S P59 094           24
269  7 190          MZ    @ @,X2                                      7  2054  Y P55 094           24
270  7 200          B     ENTF04                                      4  2061  B !24               24
271  7 210  OUTCN   B     OUTNM                                       4  2065  B !73               24
272  7 220          B     TEST                                        4  2069  B T88               24
273  7 230  OUTNM   SBR   OUTNM1&3                                   4  2073  H J89               24
274  7 240          B     PUTX                                        4  2077  B 363               24
275  7 250          DCW   SYM                                         3  2083  O85                 25
276  8 010          MLC   @000@,X2                                   7  2084  M P68 094           25
277  8 020  OUTCN2  MLC   @   @,OUTSYM                               7  2091  M P71 O91           25
278  8 030          MLC   @000@,X3                                   7  2098  M P68 099           25
279  8 040  OUTCN3  BCE   OUTCNX,FIELD&X2,|                          8  2105  B J64 PJ8 |         25
280  8 050          MZ    FIELD&X2,OUTSYM-2&X3                        7  2113  Y PJ8 OH9           25
281  8 060          MN    FIELD&X2,OUTSYM-2&X3                        7  2120  D PJ8 OH9           26
282  8 070          A     &1,X2                                       7  2127  A P59 094           26
283  8 080          A     &1,X3                                       7  2134  A P59 099           26
284  8 090          C     X3,@003@                                    7  2141  C 099 P74           26
285  8 100          BU    OUTCN3                                      5  2148  B J05 /             26
286  8 110          B     PUTX                                        4  2153  B 363               26
287  8 120          DCW   OUTSYM                                     3  2159  O91                 27
288  8 130          B     OUTCN2                                      4  2160  B !91               27
289  8 140  OUTCNX  BCE   OUTCN4,X3,0                                8  2164  B J79 099 0         27
290  8 150          B     PUTX                                        4  2172  B 363               27
291  8 160          DCW   OUTSYM                                     3  2178  O91                 27
292  8 170  OUTCN4  B     PUTX                                        4  2179  B 363               27
293  8 180          DCW   SYM                                         3  2185  O85                 27
294  8 190  OUTNM1  B     *                                           4  2186  B J89               28
295  8 200  GTSYM   SBR   GT01&3                                     4  2190  H K19               28
296  8 210  GT08    B     GETX                                        4  2194  B 335               28
297  8 220          DCW   CURNT                                       3  2200  O79                 28
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230         DCW   EOJ                                           3  2203  L24                 28
299  8 240  GT03   C     CURNT,CDSYM                                   7  2204  C O79 O73           28
300  8 250         BE    GT02                                          5  2211  B K20 S             28
301  9 010  GT01   B     *                                             4  2216  B K19               29
302  9 020  GT02   MLC   @0@,CDSW                                      7  2220  M P60 O70           29
303  9 030  GT04   B     PUTX                                          4  2227  B 363               29
304  9 040         DCW   CURNT                                         3  2233  O79                 29
305  9 050         B     GETX                                          4  2234  B 335               29
306  9 060         DCW   CURNT                                         3  2240  O79                 29
307  9 070         DCW   EOJ                                           3  2243  L24                 29
308  9 080         A     &1,CDSW                                       7  2244  A P59 O70           30
309  9 090         BCE   GT03,CDSW,3                                   8  2251  B K04 O70 3         30
310  9 100         B     GT04                                          4  2259  B K27               30
311  9 110  GT05   B     PUTX                                          4  2263  B 363               30
312  9 120         DCW   CURNT                                         3  2269  O79                 30
313  9 130         B     GT08                                          4  2270  B J94               30
314  9 140  PTGTSY SBR   PTGT01&3                                      4  2274  H K92               30
315  9 150         B     PUTX                                          4  2278  B 363               31
316  9 160         DCW   CURNT                                         3  2284  O79                 31
317  9 170         B     GTSYM                                         4  2285  B J90               31
318  9 180  PTGT01 B     *                                             4  2289  B K92               31
319  9 190  PSNAME MLC   CURNT,SYM                                     7  2293  M O79 O85           31
320  9 200  PSNM02 B     PTGTSY                                        4  2300  B K74               31
321  9 210         C     CURNT,SYM                                     7  2304  C O79 O85           31
322  9 220         BU    PSNM02                                        5  2311  B L00 /             32
323  9 230         B     PTGTSY                                        4  2316  B K74               32
324  9 240         B     TEST                                          4  2320  B T88               32
325  9 250  EOJ    SW    GRMK                                          4  2324  , P52               32
326 10 010         MLC   PRCN,GCN                                      7  2328  M T20 O94           32
327 10 020         MLC   PNOP,SYM                                      7  2335  M O53 O85           32
328 10 030         MLC   DTADR,X3                                      7  2342  M T14 099           32
329 10 040  EOJ1   C     ENDADR,X3                                     7  2349  C T11 099           33
330 10 050         BE    EOJ3                                          5  2356  B N42 S             33
331 10 060         MLC   @|@,1&X3                                      7  2361  M P65 0?1           33
332 10 070         C     0&X3,0&X3                                     7  2368  C 0?0 0?0           33
333 10 080         C                                                   1  2375  C                   33
334 10 090         SAR   X3                                            4  2376  Q 099               33
335 10 100         MCM   3&X3,FIELD                                    7  2380  P 0?3 P18           33
336 10 110         BWZ   QLNAME,2&X3,2                                 8  2387  V N27 0?2 2         34
337 10 120         BCE   UNDEF,1&X3,                                   8  2395  B M50 0?1           34
338 10 130         BCE   MLTDEF,1&X3,*                                 8  2403  B N05 0?1 *         34
339 10 140         MN    2&X3,TSTCHR                                   7  2411  D 0?2 O54           34
340 10 150         BCE   EOJ2,TSTCHR,                                  8  2418  B M30 O54           34
341 10 160         B     QLNAME                                        4  2426  B N27               35
342 10 170  EOJ2   A     &1,GCN                                        7  2430  A P59 O94           35
343 10 180         C     0&X3                                          4  2437  C 0?0               35
344 10 190         C                                                   1  2441  C                   35
345 10 200         SAR   X3                                            4  2442  Q 099               35
346 10 210         B     EOJ1                                          4  2446  B L49               35
347 10 220  UNDEF  BWZ   EOJ2,2&X3,K                                   8  2450  V M30 0?2 K         35
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          B     TBRTN                               4  2458  B O05               36
349 10 240          MLC   @1@,SYSW                            7  2462  M P54 T40           36
350 10 250          B     PUTX                                4  2469  B 363               36
351 11 010          DCW   UNSYM                               3  2475  O60                 36
352 11 020  UNDEF1  B     PUTX                                4  2476  B 363               36
353 11 030          DCW   GCN                                 3  2482  O94                 36
354 11 040          MLC   X3,SAVE                            7  2483  M 099 O76           36
355 11 050          B     OUTNM                               4  2490  B !73               37
356 11 060          MLC   SAVE,X3                            7  2494  M O76 099           37
357 11 070          B     EOJ2                                4  2501  B M30               37
358 11 080  MLTDEF  B     TBRTN                               4  2505  B O05               37
359 11 090          B     PUTX                                4  2509  B 363               37
360 11 100          DCW   MLTSYM                              3  2515  O43                 37
361 11 110          MLC   @1@,SYSW                            7  2516  M P54 T40           37
362 11 120          B     UNDEF1                              4  2523  B M76               38
363 11 130  QLNAME  B     TBRTN                               4  2527  B O05               38
364 11 140          B     PUTX                                4  2531  B 363               38
365 11 150          DCW   QLSYM                               3  2537  O69                 38
366 11 160          B     UNDEF1                              4  2538  B M76               38
367 11 170  EOJ3    B     PUTX                                4  2542  B 363               38
368 11 180          DCW   EOP                                 3  2548  P12                 38
369 11 190          MLC   @0@,OVFSW                           7  2549  M P60 T34           39
370 11 200          BCE   EOJ4,OVSW,0                         8  2556  B N98 T33 0         39
371 11 210          MLC   @0@,OVSW                            7  2564  M P60 T33           39
372 11 220          BSP   1                                   5  2571  U %U1 B             39
373 11 230          BSP   1                                   5  2576  U %U1 B             39
374 11 240          BSP   1                                   5  2581  U %U1 B             39
375 11 250          BSP   1                                   5  2586  U %U1 B             40
376 12 010          B     SUPER                               4  2591  B 351               40
377 12 020          DCW   @B03@                              3  2597                      40
378 12 030  EOJ4    B     SUPER                               4  2598  B 351               40
379 12 040          DCW   @B05@                              3  2604                      40
380 12 050  TBRTN   SBR   TBRTN1&3                           4  2605  H O34               40
381 12 060          BCE   TBRTN1,TBSW,1                       8  2609  B O31 T41 1         40
382 12 070          B     PUTX                                4  2617  B 363               41
383 12 080          DCW   TBOP                                3  2623  P06                 41
384 12 090          MLC   @1@,TBSW                            7  2624  M P54 T41           41
385 12 100  TBRTN1  B     *                                   4  2631  B O34               41
386 12 110  ANNTSY  DCW   @.NA@                              3  2637                      41
387 12 120  LBOP    DCW   @.LB@                              3  2640                      41
388 12 130  MLTSYM  DCW   @.MT@                              3  2643                      41
389 12 140  LBFOP   DCW   @.LF@                              3  2646                      42
390 12 150  LSTOP   DCW   @.LT@                              3  2649                      42
391 12 160  LKSW    DCW   @0@                                1  2650                      42
392 12 170  PNOP    DCW   @.PN@                              3  2653                      42
393 12 180  TSTCHR  DCW   @ @                                1  2654                      42
394 12 190  ANOP    DCW   @.AN@                              3  2657                      42
395 12 200  UNSYM   DCW   @.UN@                              3  2660                      42
396 12 210  SSCT    DCW   @*09@                              3  2663                      43
397 12 220  SPROC   DCW   @*01@                              3  2666                      43
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 398 12 230  QLSYM  DCW   @.QN@                                        3  2669                      43
 399 12 240  CDSW   DCW   @0@                                          1  2670                      43
 400 12 250  CDSYM  DCW   @.CD@                                        3  2673                      43
 401 13 010  SAVE   DCW   #3                                           3  2676                      43
 402 13 020  CURNT  DCW   @   @                                       3  2679                      43
 403 13 030  CNOP   DCW   @.NM@                                       3  2682                      44
 404 13 040  SYM    DCW   #3                                           3  2685                      44
 405 13 050  QUAL   DCW   @*32@                                       3  2688                      44
 406 13 060  OUTSYM DCW   #3                                           3  2691                      44
 407 13 070  GCN    DCW   #3                                           3  2694                      44
 408 13 080         DCW   @  @                                        2  2696                      44
 409 13 090  QDIGIT DCW   @.T@                                       2  2698                      44
 410 13 100  NMCHR  DCW   @ @                                        1  2699                      45
 411 13 110  CHR    DCW   @ @                                        1  2700                      45
 412 13 120  SENV   DCW   @*91@                                      3  2703                      45
 413 13 130  TBOP   DCW   @.TO@                                      3  2706                      45
 414 13 140  SDATA  DCW   @/24@                                      3  2709                      45
 415 13 150  EOP    DCW   @.EP@                                      3  2712                      45
 416 13 160  FDOP   DCW   @/26@                                      3  2715                      45
 417 13 170  FILSW  DCW   @0@                                        1  2716                      46
 418 13 180  ENTSW  DCW   @0@                                        1  2717                      46
 419 13 190  FIELD  DCW   @ @                                        1  2718                      46
 420 13 200         DC    #32                                       32  2750                      46
 421 13 210  NAME   DC    @ @                                        1  2751                      46
 422 13 220  GRMK   DC    @}@                                        1  2752                      46
 423 13 230         LTORG                                                  2753
                    DCW   @N@                                        1  2753             LIT      46
                          @1@                                        1  2754             LIT      46
                          @ @                                        1  2755             LIT      47
                          @]@                                        1  2756             LIT      47
                          @2@                                        1  2757             LIT      47
                          @*@                                        1  2758             LIT      47
                          &1                                         1  2759             LIT      47
                          @0@                                        1  2760             LIT      47
                          @002@                                      3  2763             LIT      47
                          &3                                         1  2764             LIT      48
                          @|@                                        1  2765             LIT      48
                          @000@                                      3  2768             LIT      48
                          @   @                                      3  2771             LIT      48
                          @003@                                      3  2774             LIT      48
 424 13 240         DCW   @}@                                        1  2775                      48
 425 13 250         END                                                    / 000 080                 49
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B05 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B05
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                            0089
 104  1 040  X2      EQU   94                                            0094
 105  1 050  X3      EQU   99                                            0099
 106  1 060  GETX    EQU   335                                           0335
 107  1 070  SUPER   EQU   351                                           0351
 108  1 080  PUTX    EQU   363                                           0363
 109  1 090  DTCN1   EQU   1302                                          1302
 110  1 100  C       EQU   1303                                          1303
 111  1 110  DTCN    EQU   C&5                                           1308
 112  1 120  DTEND   EQU   C&8                                           1311
 113  1 130  ENDADR  EQU   C&8                                           1311
 114  1 140  DTADR   EQU   C&11                                          1314
 115  1 150  OVSW    EQU   C&30                                          1333
 116  1 160  OVFSW   EQU   C&31                                          1334
 117  1 170          ORG   1350                                                 1350
 118  1 180  INIT    MLC   DTADR,ENDADR                              7   1350  M T14 T11          4
 119  1 190          MLC   DTCN1,DTCN                                7   1357  M T02 T08          4
 120  1 200          MLC   DTCN1,TBGCN                               7   1364  M T02 Q70          4
 121  1 210          B     GTSYM                                     4   1371  B N55              4
 122  1 220          B     PUTX                                      4   1375  B 363              4
 123  1 230          DCW   CURNT                                     3   1381  P91                4
 124  1 240          C     CURNT,SENV                                7   1382  C P91 Q23          4
 125  1 250          BU    INIT                                      5   1389  B T50 /            5
 126  2 010          B     GTEST                                     4   1394  B U05              5
 127  2 020  PTEST   B     PUTX                                      4   1398  B 363              5
 128  2 030          DCW   CURNT                                     3   1404  P91                5
 129  2 040  GTEST   B     GTSYM                                     4   1405  B N55              5
 130  2 050  TEST    MLC   @0@,QSW1                                 7   1409  M R06 Q60          5
 131  2 060          C     CURNT,LSTOP                               7   1416  C P91 Q50          5
 132  2 070          BU    TEST3                                     5   1423  B U36 /            6
 133  2 080          B     PTGTSY                                    4   1428  B P29              6
 134  2 090          B     PSNAME                                    4   1432  B O47              6
 135  2 100  TEST3   B     ENVTST                                    4   1436  B V10              6
 136  2 110  TEST1   B     DTTST                                     4   1440  B W14              6
 137  2 120  TEST2   C     CURNT,CNOP                                7   1444  C P91 P94          6
 138  2 130          BE    ENTDN                                     5   1451  B !26 S            6
 139  2 140          C     CURNT-1,QDIGIT                            7   1456  C P90 Q16          7
 140  2 150          BU    TEST4                                     5   1463  B U90 /            7
 141  2 160          MLC   CURNT,CHR                                 7   1468  M P91 Q17          7
 142  2 170          MLC   @1@,QSW1                                 7   1475  M R07 Q60          7
 143  2 180          B     GTSYM                                     4   1482  B N55              7
 144  2 190          B     ENTDN                                     4   1486  B !26              7
 145  2 200  TEST4   C     CURNT,TBOP                                7   1490  C P91 P81          8
 146  2 210          BU    PTEST                                     5   1497  B T98 /            8
 147  2 220  TEST5   B     PTGTSY                                    4   1502  B P29              8
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         B     TEST5                                        4  1506  B V02                8
149  2 240  ENVTST C     CURNT,SDATA                                  7  1510  C P91 Q26            8
150  2 250         BU    ENV01                                        5  1517  B V40 /              8
151  3 010         MLC   @N@,TEST3                                    7  1522  M R08 U36            8
152  3 020         MLC   @N@,FOUND                                    7  1529  M R08 J55            9
153  3 030         B     PTEST                                        4  1536  B T98                9
154  3 040  ENV01  C     CURNT,SSLCT                                  7  1540  C P91 Q20            9
155  3 050         BU    ENV02                                        5  1547  B V60 /              9
156  3 060         B     PTGTSY                                       4  1552  B P29                9
157  3 070         B     TEST2                                        4  1556  B U44                9
158  3 080  ENV02  C     CURNT,ANOP                                   7  1560  C P91 Q53            9
159  3 090         BU    PTEST                                        5  1567  B T98 /             10
160  3 100         B     PTGTSY                                       4  1572  B P29               10
161  3 110         C     CURNT,CNOP                                   7  1576  C P91 P94           10
162  3 120         BU    PTEST                                        5  1583  B T98 /             10
163  3 130         MLC   @1@,ATNMSW                                   7  1588  M R07 Q47           10
164  3 140         B     ENTFLD                                       4  1595  B L11               10
165  3 150         MLC   @-@,CHR                                      7  1599  M R09 Q17           10
166  3 160         B     LKNAME                                       4  1606  B X81               11
167  3 170         B     ENTDN1                                       4  1610  B !69               11
168  3 180  DTTST  C     CURNT,SPROC                                  7  1614  C P91 P78           11
169  3 190         BU    DTT01                                        5  1621  B W44 /             11
170  3 200         MLC   @N@,TEST1                                    7  1626  M R08 U40           11
171  3 210         MLC   @B@,FOUND                                    7  1633  M R10 J55           11
172  3 220         B     PTEST                                        4  1640  B T98               11
173  3 230  DTT01  C     CURNT,SFD                                    7  1644  C P91 Q38           12
174  3 240         BU    DTT02                                        5  1651  B W76 /             12
175  3 250         B     PTGTSY                                       4  1656  B P29               12
176  4 010         C     CURNT,CNOP                                   7  1660  C P91 P94           12
177  4 020         BU    PTEST                                        5  1667  B T98 /             12
178  4 030         B     PSNAME                                       4  1672  B O47               12
179  4 040  DTT02  C     CURNT,LVOP                                   7  1676  C P91 Q29           12
180  4 050         BU    TEST2                                        5  1683  B U44 /             13
181  4 060         B     PTGTSY                                       4  1688  B P29               13
182  4 070         B     PTGTSY                                       4  1692  B P29               13
183  4 080         C     CURNT,CNOP                                   7  1696  C P91 P94           13
184  4 090         BU    DTT03                                        5  1703  B X54 /             13
185  4 100         B     SAVFLD                                       4  1708  B Z92               13
186  4 110         MLC   @1@,BPYSW                                    7  1712  M R07 Q45           13
187  4 120         B     LKNAME                                       4  1719  B X81               14
188  4 130         BCE   TEST,LKSW,0                                  8  1723  B U09 Q46 0         14
189  4 140         BWZ   DTT04,0&X1,K                                 8  1731  V X43 0|0 K         14
190  4 150         B     TEST                                         4  1739  B U09               14
191  4 160  DTT04  MZ    @&@,0&X1                                     7  1743  Y R11 0|0           14
192  4 170         B     TEST                                         4  1750  B U09               14
193  4 180  DTT03  C     CURNT,SFILL                                  7  1754  C P91 Q44           15
194  4 190         BU    PTEST                                        5  1761  B T98 /             15
195  4 200         B     PUTX                                         4  1766  B 363               15
196  4 210         DCW   BLK                                          3  1772  P84                 15
197  4 220         B     GTSYM                                        4  1773  B N55               15
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          B     TEST                                       4  1777  B U09               15
199  4 240  LKNAME  SBR   LK05&3                                     4  1781  H Z23               15
200  4 250          ZA    FIELD&1,X3                                 7  1785  ? Q74 099           16
201  5 010          A     X3                                         4  1792  A 099               16
202  5 020          A     FIELD&1,X3                                 7  1796  A Q74 099           16
203  5 030          MZ    @ @,X3                                     7  1803  Y R12 099           16
204  5 040          BCE   LK09,INTAB&X3,                           8  1810  B Z65 RC0           16
205  5 050          MLC   INTAB&X3,X1                               7  1818  M RC0 089           17
206  5 060  LK03    C     0&X1,FIELD&X2                              7  1825  C 0|0 QP3           17
207  5 070          SAR   X1                                         4  1832  Q 089               17
208  5 080          BU    LK01                                       5  1836  B Y86 /             17
209  5 090          BWZ   LK07,1&X1,1                              8  1841  V Y98 0|1 1         17
210  5 100  LK04    C     0&X1                                       4  1849  C 0|0               17
211  5 110          SAR   X1                                         4  1853  Q 089               17
212  5 120  LK02    C     0&X1                                       4  1857  C 0|0               18
213  5 130          C                                                1  1861  C                   18
214  5 140          C                                                1  1862  C                   18
215  5 150          SAR   X1                                         4  1863  Q 089               18
216  5 160          BCE   LK06,3&X1,*                              8  1867  B Z24 0|3 *         18
217  5 170          MLC   3&X1,X1                                   7  1875  M 0|3 089           18
218  5 180          B     LK03                                       4  1882  B Y25               18
219  5 190  LK01    BWZ   LK02,1&X1,1                              8  1886  V Y57 0|1 1         19
220  5 200          B     LK04                                       4  1894  B Y49               19
221  5 210  LK07    C     0&X1,GCN&2                                 7  1898  C 0|0 Q08           19
222  5 220          MLC                                              1  1905  M                   19
223  5 230          MLC   @1@,LKSW                                  7  1906  M R07 Q46           19
224  5 240  LK11    MLC   @0@,BPYSW                                 7  1913  M R06 Q45           19
225  5 250  LK05    B     *                                          4  1920  B Z23               19
226  6 010  LK06    BCE   LK08,OVFSW,1                             8  1924  B Z54 T34 1         20
227  6 020          BCE   LK08,BPYSW,1                             8  1932  B Z54 Q45 1         20
228  6 030          MLC   ENDADR,3&X1                              7  1940  M T11 0|3           20
229  6 040  LK10    MLC   ENDADR,X1                                7  1947  M T11 089           20
230  6 050  LK08    MLC   @0@,LKSW                                 7  1954  M R06 Q46           20
231  6 060          B     LK11                                       4  1961  B Z13               21
232  6 070  LK09    BCE   LK08,OVFSW,1                             8  1965  B Z54 T34 1         21
233  6 080          BCE   LK08,BPYSW,1                             8  1973  B Z54 Q45 1         21
234  6 090          MLC   ENDADR,INTAB&X3                          7  1981  M T11 RC0           21
235  6 100          B     LK10                                       4  1988  B Z47               21
236  6 110  SAVFLD  SBR   SAV01&3                                   4  1992  H !25               21
237  6 120          BCE   PSNAME,ATNMSW,0                          8  1996  B O47 Q47 0         22
238  6 130          MLC   @1@,PTGTSW                               7  2004  M R07 Q64           22
239  6 140          B     ENTFLD                                     4  2011  B L11               22
240  6 150          MLC   @0@,PTGTSW                               7  2015  M R06 Q64           22
241  6 160  SAV01   B     *                                          4  2022  B !25               22
242  6 170  ENTDN   B     ENTFLD                                     4  2026  B L11               22
243  6 180          BCE   QUALFY,QSW1,1                            8  2030  B O90 Q60 1         23
244  6 190          BCE   QULTST,QSW,1                             8  2038  B !99 Q61 1         23
245  6 200          C     CURNT,QUAL                               7  2046  C P91 Q00           23
246  6 210          BE    QUL02                                      5  2053  B !81 S             23
247  6 220          MLC   @&@,CHR                                  7  2058  M R11 Q17           23
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  ENTDN2  B     LKNAME                                     4  2065  B X81               23
249  6 240  ENTDN1  BCE   NTFND,LKSW,0                              8  2069  B K49 Q46 0         24
250  6 250          B     FOUND                                      4  2077  B J55               24
251  7 010  QUL02   MLC   @1@,QSW                                   7  2081  M R07 Q61           24
252  7 020          MLC   EQNM,CHR                                   7  2088  M Q10 Q17           24
253  7 030          B     QUALFY                                     4  2095  B O90               24
254  7 040  QULTST  C     CURNT,QUAL                                 7  2099  C P91 Q00           24
255  7 050          BE    QUL01                                      5  2106  B J29 S             25
256  7 060          MLC   HQNM,CHR                                  7  2111  M Q12 Q17           25
257  7 070          MLC   @0@,QSW                                   7  2118  M R06 Q61           25
258  7 080          B     QUALFY                                     4  2125  B O90               25
259  7 090  QUL01   MLC   IQNM,CHR                                  7  2129  M Q14 Q17           25
260  7 100          B     QUALFY                                     4  2136  B O90               25
261  7 110  CNRTN   SBR   CNR01&3                                   4  2140  H J54               25
262  7 120          A     &1,GCN                                     7  2144  A R13 Q06           26
263  7 130  CNR01   B     *                                          4  2151  B J54               26
264  7 140  FOUND   BWZ   LK02,0&X1,K                               8  2155  V Y57 0|0 K         26
265  7 150          BCE   FND01,QSW1,0                             8  2163  B K12 Q60 0         26
266  7 160          MN    0&X1,TSTCHR                                7  2171  D 0|0 Q59           26
267  7 170          BCE   FND04,TSTCHR,                            8  2178  B J94 Q59           27
268  7 180          BCE   FND02,CHR,1                              8  2186  B K01 Q17 1         27
269  7 190  FND04   MN    CHR,0&X1                                   7  2194  D Q17 0|0           27
270  7 200  FND02   B     PUTX                                       4  2201  B 363               27
271  7 210          DCW   GCN                                      3  2207  Q06                 27
272  7 220          B     TEST                                       4  2208  B U09               27
273  7 230  FND01   BCE   FND03,ENTSW,1                            8  2212  B K27 Q63 1         28
274  7 240          MZ    @&@,0&X1                                   7  2220  Y R11 0|0           28
275  7 250  FND03   B     PUTX                                       4  2227  B 363               28
276  8 010          DCW   GCN                                      3  2233  Q06                 28
277  8 020          B     TEST                                       4  2234  B U09               28
278  8 030  NOCN    MLC   @0@,ENTSW                                 7  2238  M R06 Q63           28
279  8 040          B     TEST                                       4  2245  B U09               28
280  8 050  NTFND   BCE   OUTCN,OVFSW,1                            8  2249  B M12 T34 1         29
281  8 060          MLC   CHR,TAG                                    7  2257  M Q17 Q72           29
282  8 070          MLC   TBGCN,GCN                                  7  2264  M Q70 Q06           29
283  8 080          LCA   FIELD&X2,0&X1                              7  2271  L QP3 0|0           29
284  8 090          LCA                                              1  2278  L                   29
285  8 100          LCA                                              1  2279  L                   29
286  8 110          LCA                                              1  2280  L                   29
287  8 120          SBR   ENDADR                                    4  2281  H T11               30
288  8 130          A     &1,TBGCN                                   7  2285  A R13 Q70           30
289  8 140          BCE   FND03,OVCHR,|                            8  2292  B K27 B63 |         30
290  8 150          MLC   @1@,OVFSW                                 7  2300  M R07 T34           30
291  8 160          B     FND03                                      4  2307  B K27               30
292  8 170  ENTFLD  SBR   ENTF01&3                                  4  2311  H L93               30
293  8 180          MLC   CURNT,SYM                                 7  2315  M P91 P97           31
294  8 190          MLC   @002@,X2                                  7  2322  M R16 094           31
295  8 200          B     ENTGT                                      4  2329  B P48               31
296  8 210          B     ENTF03                                     4  2333  B L60               31
297  8 220  ENTF02  B     ENTGT                                      4  2337  B P48               31
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230         C     CURNT,SYM                                  7  2341  C P91 P97           31
299  8 240         BE    ENTF04                                     5  2348  B L71 S             31
300  8 250         A     &3,X2                                      7  2353  A R17 094           32
301  9 010  ENTF03 MLC   CURNT,FIELD&X2                            7  2360  M P91 QP3           32
302  9 020         B     ENTF02                                     4  2367  B L37               32
303  9 030  ENTF04 BCE   ENTF05,FIELD&X2,                          8  2371  B L94 QP3           32
304  9 040         MLC   @|@,FIELD&1&X2                           7  2379  M R18 QP4           32
305  9 050         B     ENTGT                                      4  2386  B P48               32
306  9 060  ENTF01 B     *                                          4  2390  B L93               33
307  9 070  ENTF05 S     &1,X2                                      7  2394  S R13 094           33
308  9 080         MZ    @ @,X2                                     7  2401  Y R12 094           33
309  9 090         B     ENTF04                                     4  2408  B L71               33
310  9 100  OUTCN  MLC   @1@,OVSW                                  7  2412  M R07 T33           33
311  9 110         BCE   OUTCN1,QSW1,0                            8  2419  B M42 Q60 0         33
312  9 120         MLC   CHR,OUTSYM                               7  2427  M Q17 Q03           34
313  9 130         MLC                                            1  2434  M                   34
314  9 140         B     PUTX                                       4  2435  B 363               34
315  9 150         DCW   OUTSYM                                    3  2441  Q03                 34
316  9 160  OUTCN1 B     PUTX                                       4  2442  B 363               34
317  9 170         DCW   SYM                                      3  2448  P97                 34
318  9 180         MLC   @000@,X2                                 7  2449  M R21 094           34
319  9 190  OUTCN2 MLC   @000@,X3                                 7  2456  M R21 099           35
320  9 200         MLC   @   @,OUTSYM                             7  2463  M R24 Q03           35
321  9 210  OUTCN3 BCE   OUTCNX,FIELD&X2,|                       8  2470  B N29 QP3 |         35
322  9 220         MZ    FIELD&X2,OUTSYM-2&X3                     7  2478  Y QP3 Q?1           35
323  9 230         MN    FIELD&X2,OUTSYM-2&X3                     7  2485  D QP3 Q?1           35
324  9 240         A     &1,X2                                    7  2492  A R13 094           36
325  9 250         A     &1,X3                                    7  2499  A R13 099           36
326 10 010         C     X3,@003@                                 7  2506  C 099 R27           36
327 10 020         BU    OUTCN3                                   5  2513  B M70 /             36
328 10 030         B     PUTX                                       4  2518  B 363               36
329 10 040         DCW   OUTSYM                                    3  2524  Q03                 36
330 10 050         B     OUTCN2                                     4  2525  B M56               36
331 10 060  OUTCNX BCE   OUTCN4,X3,0                              8  2529  B N44 099 0         37
332 10 070         B     PUTX                                       4  2537  B 363               37
333 10 080         DCW   OUTSYM                                    3  2543  Q03                 37
334 10 090  OUTCN4 B     PUTX                                       4  2544  B 363               37
335 10 100         DCW   SYM                                      3  2550  P97                 37
336 10 110         B     TEST                                       4  2551  B U09               37
337 10 120  GTSYM  SBR   GT01&3                                    4  2555  H N92               37
338 10 130  GT08   B     GETX                                       4  2559  B 335               38
339 10 140         DCW   CURNT                                    3  2565  P91                 38
340 10 150         DCW   EOJ                                      3  2568  P08                 38
341 10 160  GT03   C     CURNT,CDSYM                              7  2569  C P91 P88           38
342 10 170         BE    GT02                                       5  2576  B N93 S             38
343 10 180         BCE   GT05,CURNT-2,]                           8  2581  B O36 P89 ]         38
344 10 190  GT01   B     *                                          4  2589  B N92               38
345 10 200  GT02   MLC   @0@,CDSW                                 7  2593  M R06 P85           39
346 10 210  GT04   B     PUTX                                       4  2600  B 363               39
347 10 220         DCW   CURNT                                    3  2606  P91                 39
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          B     GETX                                 4  2607  B 335               39
349 10 240          DCW   CURNT                                3  2613  P91                 39
350 10 250          DCW   EOJ                                  3  2616  P08                 39
351 11 010          A     &1,CDSW                              7  2617  A R13 P85           39
352 11 020          BCE   GT03,CDSW,3                          8  2624  B N69 P85 3         40
353 11 030          B     GT04                                 4  2632  B O00               40
354 11 040  GT05    B     PUTX                                 4  2636  B 363               40
355 11 050          DCW   CURNT                                3  2642  P91                 40
356 11 060          B     GT08                                 4  2643  B N59               40
357 11 070  PSNAME  B     PASSSY                               4  2647  B O55               40
358 11 080          B     TEST                                 4  2651  B U09               40
359 11 090  PASSSY  SBR   PASS01&3                            4  2655  H O89               41
360 11 100          MLC   CURNT,OUTSYM                         7  2659  M P91 Q03           41
361 11 110  PASS02  B     PTGTSY                               4  2666  B P29               41
362 11 120          C     CURNT,OUTSYM                         7  2670  C P91 Q03           41
363 11 130          BU    PASS02                               5  2677  B O66 /             41
364 11 140          B     PTGTSY                               4  2682  B P29               41
365 11 150  PASS01  B     *                                    4  2686  B O89               41
366 11 160  QUALFY  MLC   CHR,TAG                             7  2690  M Q17 Q72           42
367 11 170          MLC   @1@,QSW1                            7  2697  M R07 Q60           42
368 11 180          B     ENTDN2                               4  2704  B !65               42
369 11 190  EOJ     B     PUTX                                 4  2708  B 363               42
370 11 200          DCW   EOP                                  3  2714  Q35                 42
371 11 210          MLC   TBGCN,DTCN1                          7  2715  M Q70 T02           42
372 11 220          B     SUPER                                4  2722  B 351               42
373 11 230          DCW   @B06@                               3  2728                      43
374 11 240  PTGTSY  SBR   PTGT01&3                            4  2729  H P47               43
375 11 250          B     PUTX                                 4  2733  B 363               43
376 12 010          DCW   CURNT                                3  2739  P91                 43
377 12 020          B     GTSYM                                4  2740  B N55               43
378 12 030  PTGT01  B     *                                    4  2744  B P47               43
379 12 040  ENTGT   SBR   ENTGT1&3                            4  2748  H P67               43
380 12 050          BCE   ENTGT2,PTGTSW,1                      8  2752  B P68 Q64 1         44
381 12 060          B     GTSYM                                4  2760  B N55               44
382 12 070  ENTGT1  B     *                                    4  2764  B P67               44
383 12 080  ENTGT2  B     PTGTSY                               4  2768  B P29               44
384 12 090          B     ENTGT1                               4  2772  B P64               44
385 12 100  SPROC   DCW   @*01@                               3  2778                      44
386 12 110  TBOP    DCW   @.TO@                               3  2781                      44
387 12 120  BLK     DCW   @   @                               3  2784                      45
388 12 130  CDSW    DCW   @0@                                 1  2785                      45
389 12 140  CDSYM   DCW   @.CD@                               3  2788                      45
390 12 150  CURNT   DCW   #3                                  3  2791                      45
391 12 160  CNOP    DCW   @.NM@                               3  2794                      45
392 12 170  SYM     DCW   #3                                  3  2797                      45
393 12 180  QUAL    DCW   @*32@                               3  2800                      45
394 12 190  OUTSYM  DCW   #3                                  3  2803                      46
395 12 200  GCN     DCW   @A10@                               3  2806                      46
396 12 210          DCW   @  @                                2  2808                      46
397 12 220  EQNM    DCW   @ 3@                                2  2810                      46
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230  HQNM    DCW   @ 1@                                      2  2812                      46
399 12 240  IQNM    DCW   @ 1@                                      2  2814                      46
400 12 250  QDIGIT DCW   @.Q@                                      2  2816                      46
401 13 010  CHR     DCW   @ @                                       1  2817                      47
402 13 020  SSLCT   DCW   @*77@                                     3  2820                      47
403 13 030  SENV    DCW   @*91@                                     3  2823                      47
404 13 040  SDATA   DCW   @/24@                                     3  2826                      47
405 13 050  LVOP    DCW   @.LV@                                     3  2829                      47
406 13 060  SVAL    DCW   @/13@                                     3  2832                      47
407 13 070  EOP     DCW   @.EP@                                     3  2835                      47
408 13 080  SFD     DCW   @/26@                                     3  2838                      48
409 13 090  SFIL    DCW   @/23@                                     3  2841                      48
410 13 100  SFILL   DCW   @/23@                                     3  2844                      48
411 13 110  BPYSW   DCW   @0@                                       1  2845                      48
412 13 120  LKSW    DCW   @0@                                       1  2846                      48
413 13 130  ATNMSW DCW   @0@                                       1  2847                      48
414 13 140  LSTOP   DCW   @.LT@                                     3  2850                      48
415 13 150  ANOP    DCW   @.AN@                                     3  2853                      49
416 13 160  FILCNT  DCW   @000@                                     3  2856                      49
417 13 170  FILSW   DCW   @0@                                       1  2857                      49
418 13 180  VALSW   DC    @0@                                       1  2858                      49
419 13 190  TSTCHR  DCW   @ @                                       1  2859                      49
420 13 200  QSW1    DCW   @0@                                       1  2860                      49
421 13 210  QSW     DCW   @0@                                       1  2861                      49
422 13 220  SVSW    DCW   @0@                                       1  2862                      49
423 13 230  ENTSW   DCW   @0@                                       1  2863                      50
424 13 240  PTGTSW  DCW   @0@                                       1  2864                      50
425 13 250          DCW   @***@                                     3  2867                      50
426 14 010  TBGCN   DCW   #3                                        3  2870                      50
427 14 020  TAG     DCW   @  @                                      2  2872                      50
428 14 030  FIELD   DCW   @ @                                       1  2873                      50
429 14 040          DC    #32                                      32  2905                      51
430 14 050          LTORG                                                  2906
                    DCW   @0@                                       1  2906          LIT       51
                          @1@                                       1  2907          LIT       51
                          @N@                                       1  2908          LIT       51
                          @-@                                       1  2909          LIT       51
                          @B@                                       1  2910          LIT       52
                          @&@                                       1  2911          LIT       52
                          @ @                                       1  2912          LIT       52
                          &1                                        1  2913          LIT       52
                          @002@                                     3  2916          LIT       52
                          &3                                        1  2917          LIT       52
                          @|@                                       1  2918          LIT       52
                          @000@                                     3  2921          LIT       53
                          @   @                                     3  2924          LIT       53
                          @003@                                     3  2927          LIT       53
431 14 060  INTAB   DCW   #3                                        3  2930                      53
432 14 070          DC    #50                                      50  2980                      55
433 14 080          DC    #50                                      50  3030                      57
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
434	14	090		DC	#50		50	3080		59
435	14	100		DC	#50		50	3130		61
436	14	110		DC	#50		50	3180		63
437	14	120		DC	#47		47	3227		65
438	14	130		DC	#35		35	3262		66
439	14	140	OVCHR	DC	@|@		1	3263		66
440	14	150	GRMK	DCW	@}@		1	3264		66
441	14	160		END	INIT				/ T50 080	67

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - B06						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89			0089			
104	1	040	X2	EQU	94			0094			
105	1	050	X3	EQU	99			0099			
106	1	060	GETX	EQU	335			0335			
107	1	070	SUPER	EQU	351			0351			
108	1	080	PUTX	EQU	363			0363			
109	1	090	DTCN1	EQU	1302			1302			
110	1	100	C	EQU	1303			1303			
111	1	110	DTCN	EQU	C&5			1308			
112	1	120	DTEND	EQU	C&8			1311			
113	1	130	ENDADR	EQU	C&8			1311			
114	1	140	DTADR	EQU	C&11			1314			
115	1	150	PRCN1	EQU	C&14			1317			
116	1	160	PRCN	EQU	C&17			1320			
117	1	170	PREND	EQU	C&20			1323			
118	1	180	PRADR	EQU	C&23			1326			
119	1	190	DOVSW	EQU	C&32			1335			
120	1	200	POVSW	EQU	C&33			1336			
121	1	210	DQSW	EQU	C&34			1337			
122	1	220	PQSW	EQU	C&35			1338			
123	1	230	OVFSW	EQU	C&31			1334			
124	1	240	OVSW	EQU	C&30			1333			
125	1	250	TBSW	EQU	C&38			1341			
126	2	010	INTAB	EQU	2930			2930			
127	2	020		ORG	1350				1350		
128	2	030	SYSW	EQU	C&37			1340			
129	2	040	INIT	B	GTSYM		4	1350	B K08		4
130	2	050		B	PUTX		4	1354	B 363		4
131	2	060		DCW	CURNT		3	1360	P42		4
132	2	070		C	CURNT,SENV		7	1361	C P42 P76		4
133	2	080		BU	INIT		5	1368	B T50 /		4
134	2	090		B	GTEST		4	1373	B T84		4
135	2	100	PTEST	B	PUTX		4	1377	B 363		4
136	2	110		DCW	CURNT		3	1383	P42		5
137	2	120	GTEST	B	GTSYM		4	1384	B K08		5
138	2	130	TEST	B	ENVTST		4	1388	B U16		5
139	2	140		B	DTTST		4	1392	B V66		5
140	2	150	TBLKUP	B	ENTFLD		4	1396	B Z78		5
141	2	160	TBLK1	B	LKNAME		4	1400	B Y31		5
142	2	170		BCE	NTFND,LKSW,0		8	1404	B Y01 P93 0		5
143	2	180		B	FOUND		4	1412	B W44		6
144	2	190	ENVTST	C	CURNT,SSLCT		7	1416	C P42 P70		6
145	2	200		BU	ENV01		5	1423	B U48 /		6
146	2	210		B	PTGTSY		4	1428	B K92		6
147	2	220	ENV02	C	CURNT,CNOP		7	1432	C P42 P45		6

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		BE	PSNAME		5	1439	B L90 S	6
149	2	240		B	PTEST		4	1444	B T77	6
150	2	250	ENV01	C	CURNT,SDATA		7	1448	C P42 P79	7
151	3	010		BU	CNCHKE		5	1455	B U78 /	7
152	3	020		MLC	@N@,TEST		7	1460	M Q66 T88	7
153	3	030		MLC	@N@,PTLV01		7	1467	M Q66 L15	7
154	3	040		B	PTEST		4	1474	B T77	7
155	3	050	CNCHKE	C	CURNT,CNOP		7	1478	C P42 P45	7
156	3	060		BE	CNCHK1		5	1485	B V10 S	8
157	3	070		C	CURNT,LSTOP		7	1490	C P42 Q05	8
158	3	080		BU	PTEST		5	1497	B T77 /	8
159	3	090		B	PTGTSY		4	1502	B K92	8
160	3	100		B	PSNAME		4	1506	B L90	8
161	3	110	CNCHK1	B	ENTFLD		4	1510	B Z78	8
162	3	120		C	CURNT,ANOP		7	1514	C P42 Q14	8
163	3	130		BU	TBLK1		5	1521	B U00 /	9
164	3	140		B	OUTNM		4	1526	B !91	9
165	3	150		BCE	GTEST,OVSW,0		8	1530	B T84 T33 0	9
166	3	160		B	PTGTSY		4	1538	B K92	9
167	3	170		B	ENV02		4	1542	B U32	9
168	3	180	CNCHK	C	CURNT,CNOP		7	1546	C P42 P45	9
169	3	190		BE	TBLKUP		5	1553	B T96 S	9
170	3	200		B	PUTLEV		4	1558	B L11	10
171	3	210		B	PTEST		4	1562	B T77	10
172	3	220	DTTST	C	CURNT,FDOP		7	1566	C P42 P88	10
173	3	230		BU	DTT01		5	1573	B V86 /	10
174	3	240		B	GTSYM		4	1578	B K08	10
175	3	250		B	CNCHK		4	1582	B V46	10
176	4	010	DTT01	C	CURNT,LVOP		7	1586	C P42 P82	10
177	4	020		BU	DTT02		5	1593	B W24 /	11
178	4	030		B	GTSYM		4	1598	B K08	11
179	4	040		MLC	CURNT,LEVNO		7	1602	M P42 P91	11
180	4	050		MLC	@1@,LEVSW		7	1609	M Q67 P92	11
181	4	060		B	GTSYM		4	1616	B K08	11
182	4	070		B	CNCHK		4	1620	B V46	11
183	4	080	DTT02	C	CURNT,SPROC		7	1624	C P42 P35	11
184	4	090		BU	PTEST		5	1631	B T77 /	12
185	4	100	PR01	B	PTGTSY		4	1636	B K92	12
186	4	110		B	PR01		4	1640	B W36	12
187	4	120	FOUND	BWZ	LK02,0&X3,K		8	1644	V Z07 0?0 K	12
188	4	130		MN	0&X3,NMCHR		7	1652	D 0?0 P66	12
189	4	140		BCE	FND01,NMCHR,		8	1659	B X12 P66	12
190	4	150		BWZ	FND07,0&X3,B		8	1667	V X72 0?0 B	13
191	4	160		BCE	FND06,NMCHR,3		8	1675	B W90 P66 3	13
192	4	170		MLC	@1@,NMCHR		7	1683	M Q67 P66	13
193	4	180	FND06	MLC	NMCHR,OUTSYM		7	1690	M P66 P58	13
194	4	190		MLC			1	1697	M	13
195	4	200		B	PUTX		4	1698	B 363	13
196	4	210		DCW	OUTSYM		3	1704	P58	13
197	4	220		MLC	@1@,DQSW		7	1705	M Q67 T37	14

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  FND01   C     @ @,0&X3                                   7  1712  C Q68 0?0           14
199  4 240          SBR   X3                                         4  1719  H 099               14
200  4 250          BCE   FND09,0&X3,*                              8  1723  B X83 0?0 *         14
201  5 010          BCE   FND09,0&X3,]                              8  1731  B X83 0?0 ]         14
202  5 020          MLC   @]@,0&X3                                  7  1739  M Q69 0?0           15
203  5 030  FND02   B     PUTLEV                                     4  1746  B L11               15
204  5 040          B     PUTX                                       4  1750  B 363               15
205  5 050          DCW   GCN                                        3  1756  P61                 15
206  5 060  LSTOUT  B     PUTX                                       4  1757  B 363               15
207  5 070          DCW   LSTOP                                      3  1763  Q05                 15
208  5 080          B     OUTNM                                      4  1764  B !91               15
209  5 090          B     TEST                                       4  1768  B T88               16
210  5 100  FND07   MLC   @2@,NMCHR                                 7  1772  M Q70 P66           16
211  5 110          B     FND06                                      4  1779  B W90               16
212  5 120  FND09   B     PUTX                                       4  1783  B 363               16
213  5 130          DCW   MLTSYM                                    3  1789  Q08                 16
214  5 140          MLC   @*@,0&X3                                  7  1790  M Q71 0?0           16
215  5 150          B     FND02                                      4  1797  B X46               16
216  5 160  NTFND   BCE   OUTCN,OVSW,1                              8  1801  B !79 T33 1         17
217  5 170          MLC   @0@,FILSW                                 7  1809  M Q72 Q18           17
218  5 180          B     PUTLEV                                     4  1816  B L11               17
219  5 190          B     PUTX                                       4  1820  B 363               17
220  5 200          DCW   BLK                                        3  1826  Q24                 17
221  5 210          B     TEST                                       4  1827  B T88               17
222  5 220  LKNAME  SBR   LK05&3                                    4  1831  H Z77               17
223  5 230          ZA    FIELD&1,X3                                 7  1835  ? Q32 099           18
224  5 240          A     X3                                         4  1842  A 099               18
225  5 250          A     FIELD&1,X3                                 7  1846  A Q32 099           18
226  6 010          MZ    @ @,X3                                     7  1853  Y Q68 099           18
227  6 020          BCE   LK06,INTAB&X3,                            8  1860  B Z48 RC0           18
228  6 030          MLC   INTAB&X3,X3                               7  1868  M RC0 099           19
229  6 040  LK03    C     0&X3,FIELD&X2                              7  1875  C 0?0 QL1           19
230  6 050          SAR   X3                                         4  1882  Q 099               19
231  6 060          BU    LK01                                       5  1886  B Z36 /             19
232  6 070          BWZ   LK07,1&X3,1                              8  1891  V Z59 0?1 1         19
233  6 080  LK04    C     0&X3                                       4  1899  C 0?0               19
234  6 090          SAR   X3                                         4  1903  Q 099               19
235  6 100  LK02    C     0&X3                                       4  1907  C 0?0               20
236  6 110          C                                                1  1911  C                   20
237  6 120          C                                                1  1912  C                   20
238  6 130          SAR   X3                                         4  1913  Q 099               20
239  6 140          BCE   LK06,3&X3,*                              8  1917  B Z48 0?3 *         20
240  6 150          MLC   3&X3,X3                                  7  1925  M 0?3 099           20
241  6 160          B     LK03                                       4  1932  B Y75               20
242  6 170  LK01    BWZ   LK02,1&X3,1                              8  1936  V Z07 0?1 1         21
243  6 180          B     LK04                                       4  1944  B Y99               21
244  6 190  LK06    MLC   @0@,LKSW                                  7  1948  M Q72 P93           21
245  6 200          B     LK05                                       4  1955  B Z74               21
246  6 210  LK07    C     0&X3,GCN&2                                 7  1959  C 0?0 P63           21
247  6 220          MLC                                              1  1966  M                   21
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230          MLC   @1@,LKSW                                 7  1967  M Q67 P93           21
249  6 240  LK05    B     *                                        4  1974  B Z77               22
250  6 250  ENTFLD  SBR   ENTF01&3                                 4  1978  H !60               22
251  7 010          MLC   CURNT,SYM                                 7  1982  M P42 P48           22
252  7 020          MLC   @002@,X2                                 7  1989  M Q75 094           22
253  7 030          B     GTSYM                                    4  1996  B K08               22
254  7 040          B     ENTF03                                   4  2000  B !27               22
255  7 050  ENTF02  B     GTSYM                                    4  2004  B K08               22
256  7 060          C     CURNT,SYM                                7  2008  C P42 P48           23
257  7 070          BE    ENTF04                                   5  2015  B !38 S             23
258  7 080          A     &3,X2                                    7  2020  A Q76 094           23
259  7 090  ENTF03  MLC   CURNT,FIELD&X2                           7  2027  M P42 QL1           23
260  7 100          B     ENTF02                                   4  2034  B !04               23
261  7 110  ENTF04  BCE   ENTF05,FIELD&X2,                        8  2038  B !61 QL1           23
262  7 120          MLC   @|@,FIELD&1&X2                          7  2046  M Q77 QL2           24
263  7 130          B     GTSYM                                    4  2053  B K08               24
264  7 140  ENTF01  B     *                                        4  2057  B !60               24
265  7 150  ENTF05  S     &1,X2                                    7  2061  S Q78 094           24
266  7 160          MZ    @ @,X2                                   7  2068  Y Q68 094           24
267  7 170          B     ENTF04                                   4  2075  B !38               24
268  7 180  OUTCN   B     PUTLEV                                   4  2079  B L11               24
269  7 190          B     OUTNM                                    4  2083  B !91               25
270  7 200          B     TEST                                     4  2087  B T88               25
271  7 210  OUTNM   SBR   OUTNM1&3                                 4  2091  H K07               25
272  7 220          B     PUTX                                     4  2095  B 363               25
273  7 230          DCW   SYM                                      3  2101  P48                 25
274  7 240          MLC   @000@,X2                                 7  2102  M Q81 094           25
275  7 250  OUTCN2  MLC   @   @,OUTSYM                            7  2109  M Q84 P58           25
276  8 010          MLC   @000@,X3                                 7  2116  M Q81 099           26
277  8 020  OUTCN3  BCE   OUTCNX,FIELD&X2,|                       8  2123  B J82 QL1 |         26
278  8 030          MZ    FIELD&X2,OUTSYM-2&X3                     7  2131  Y QL1 PE6           26
279  8 040          MN    FIELD&X2,OUTSYM-2&X3                     7  2138  D QL1 PE6           26
280  8 050          A     &1,X2                                    7  2145  A Q78 094           26
281  8 060          A     &1,X3                                    7  2152  A Q78 099           27
282  8 070          C     X3,@003@                                 7  2159  C 099 Q87           27
283  8 080          BU    OUTCN3                                   5  2166  B J23 /             27
284  8 090          B     PUTX                                     4  2171  B 363               27
285  8 100          DCW   OUTSYM                                   3  2177  P58                 27
286  8 110          B     OUTCN2                                   4  2178  B J09               27
287  8 120  OUTCNX  BCE   OUTCN4,X3,0                             8  2182  B J97 099 0         27
288  8 130          B     PUTX                                     4  2190  B 363               28
289  8 140          DCW   OUTSYM                                   3  2196  P58                 28
290  8 150  OUTCN4  B     PUTX                                     4  2197  B 363               28
291  8 160          DCW   SYM                                      3  2203  P48                 28
292  8 170  OUTNM1  B     *                                        4  2204  B K07               28
293  8 180  GTSYM   SBR   GT01&3                                  4  2208  H K37               28
294  8 190  GT08    B     GETX                                     4  2212  B 335               28
295  8 200          DCW   CURNT                                    3  2218  P42                 29
296  8 210          DCW   EOJ                                      3  2221  M21                 29
297  8 220  GT03    C     CURNT,CDSYM                              7  2222  C P42 P39           29
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         BE    GT02                                       5  2229  B K38 S             29
299  8 240  GT01   B     *                                          4  2234  B K37               29
300  8 250  GT02   MLC   @0@,CDSW                                  7  2238  M Q72 P36           29
301  9 010  GT04   B     PUTX                                       4  2245  B 363               29
302  9 020         DCW   CURNT                                    3  2251  P42                 30
303  9 030         B     GETX                                       4  2252  B 335               30
304  9 040         DCW   CURNT                                    3  2258  P42                 30
305  9 050         DCW   EOJ                                      3  2261  M21                 30
306  9 060         A     &1,CDSW                                    7  2262  A Q78 P36           30
307  9 070         BCE   GT03,CDSW,3                                8  2269  B K22 P36 3         30
308  9 080         B     GT04                                       4  2277  B K45               30
309  9 090  GT05   B     PUTX                                       4  2281  B 363               31
310  9 100         DCW   CURNT                                    3  2287  P42                 31
311  9 110         B     GT08                                       4  2288  B K12               31
312  9 120  PTGTSY SBR   PTGT01&3                                  4  2292  H L10               31
313  9 130         B     PUTX                                       4  2296  B 363               31
314  9 140         DCW   CURNT                                    3  2302  P42                 31
315  9 150         B     GTSYM                                      4  2303  B K08               31
316  9 160  PTGT01 B     *                                          4  2307  B L10               32
317  9 170  PUTLEV SBR   PUTL01&3                                  4  2311  H L51               32
318  9 180  PTLV01 B     PUTL02                                     4  2315  B L52               32
319  9 190         BCE   PUTL03,LEVSW,0                             8  2319  B L79 P92 0         32
320  9 200         B     PUTX                                       4  2327  B 363               32
321  9 210         DCW   LVOP                                     3  2333  P82                 32
322  9 220         B     PUTX                                       4  2334  B 363               32
323  9 230         DCW   LEVNO                                    3  2340  P91                 33
324  9 240         MLC   @0@,LEVSW                                7  2341  M Q72 P92           33
325  9 250  PUTL01 B     *                                          4  2348  B L51               33
326 10 010  PUTL02 BCE   PUTL04,LKSW,1                             8  2352  B L68 P93 1         33
327 10 020         BCE   PUTL01,OVSW,1                             8  2360  B L48 T33 1         33
328 10 030  PUTL04 B     PUTX                                       4  2368  B 363               33
329 10 040         DCW   SPNOP                                    3  2374  Q11                 33
330 10 050         B     PUTL01                                     4  2375  B L48               34
331 10 060  PUTL03 B     PUTX                                       4  2379  B 363               34
332 10 070         DCW   FDOP                                     3  2385  P88                 34
333 10 080         B     PUTL01                                     4  2386  B L48               34
334 10 090  PSNAME MLC   CURNT,SYM                                 7  2390  M P42 P48           34
335 10 100  PSNM02 B     PTGTSY                                     4  2397  B K92               34
336 10 110         C     CURNT,SYM                                  7  2401  C P42 P48           34
337 10 120         BU    PSNM02                                     5  2408  B L97 /             35
338 10 130         B     PTGTSY                                     4  2413  B K92               35
339 10 140         B     TEST                                       4  2417  B T88               35
340 10 150  EOJ    SW    GRMK                                       4  2421  , Q65               35
341 10 160         MLC   DTCN,GCN                                   7  2425  M T08 P61           35
342 10 170         MLC   DTADR,X3                                   7  2432  M T14 099           35
343 10 180  EOJ1   C     ENDADR,X3                                  7  2439  C T11 099           35
344 10 190         BE    EOJ3                                       5  2446  B O24 S             36
345 10 200         MLC   @|@,1&X3                                   7  2451  M Q77 0?1           36
346 10 210         C     0&X3,0&X3                                  7  2458  C 0?0 0?0           36
347 10 220         C                                                1  2465  C                   36
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          SAR   X3                                    4  2466  Q 099               36
349 10 240          MCM   3&X3,FIELD                            7  2470  P 0?3 Q31           36
350 10 250          BWZ   QLNAME,2&X3,2                         8  2477  V O09 0?2 2         36
351 11 010          BCE   UNDEF,1&X3,                           8  2485  B N40 0?1           37
352 11 020          BCE   MLTDEF,1&X3,*                         8  2493  B N87 0?1 *         37
353 11 030          MN    2&X3,TSTCHR                           7  2501  D 0?2 P52           37
354 11 040          BCE   EOJ2,TSTCHR,                          8  2508  B N20 P52           37
355 11 050          B     QLNAME                                4  2516  B O09               37
356 11 060  EOJ2    A     &1,GCN                                7  2520  A Q78 P61           38
357 11 070          C     0&X3                                  4  2527  C 0?0               38
358 11 080          C                                           1  2531  C                   38
359 11 090          SAR   X3                                    4  2532  Q 099               38
360 11 100          B     EOJ1                                  4  2536  B M39               38
361 11 110  UNDEF   B     TBRTN                                 4  2540  B P03               38
362 11 120          MLC   @1@,SYSW                              7  2544  M Q67 T40           38
363 11 130          B     PUTX                                  4  2551  B 363               39
364 11 140          DCW   UNSYM                                 3  2557  P99                 39
365 11 150  UNDEF1  B     PUTX                                  4  2558  B 363               39
366 11 160          DCW   GCN                                   3  2564  P61                 39
367 11 170          MLC   X3,SAVE                              7  2565  M 099 P73           39
368 11 180          B     OUTNM                                 4  2572  B !91               39
369 11 190          MLC   SAVE,X3                              7  2576  M P73 099           39
370 11 200          B     EOJ2                                  4  2583  B N20               40
371 11 210  MLTDEF  B     TBRTN                                 4  2587  B P03               40
372 11 220          B     PUTX                                  4  2591  B 363               40
373 11 230          DCW   MLTSYM                                3  2597  Q08                 40
374 11 240          MLC   @1@,SYSW                              7  2598  M Q67 T40           40
375 11 250          B     UNDEF1                                4  2605  B N58               40
376 12 010  QLNAME  B     TBRTN                                 4  2609  B P03               40
377 12 020          B     PUTX                                  4  2613  B 363               41
378 12 030          DCW   QLSYM                                 3  2619  Q02                 41
379 12 040          B     UNDEF1                                4  2620  B N58               41
380 12 050  EOJ3    B     PUTX                                  4  2624  B 363               41
381 12 060          DCW   EOP                                   3  2630  P85                 41
382 12 070          BCE   EOJ4,OVSW,0                           8  2631  B O73 T33 0         41
383 12 080          MLC   @00@,OVFSW                           7  2639  M Q89 T34           41
384 12 090          BSP   1                                     5  2646  U %U1 B             42
385 12 100          BSP   1                                     5  2651  U %U1 B             42
386 12 110          BSP   1                                     5  2656  U %U1 B             42
387 12 120          BSP   1                                     5  2661  U %U1 B             42
388 12 130          B     SUPER                                 4  2666  B 351               42
389 12 140          DCW   @B05@                                 3  2672                      42
390 12 150  EOJ4    BCE   EOJ5,PQSW,1                          8  2673  B O96 T38 1         42
391 12 160          BCE   EOJ5,DQSW,1                          8  2681  B O96 T37 1         43
392 12 170          B     SUPER                                 4  2689  B 351               43
393 12 180          DCW   @B09@                                 3  2695                      43
394 12 190  EOJ5    B     SUPER                                 4  2696  B 351               43
395 12 200          DCW   @B07@                                 3  2702                      43
396 12 210  TBRTN   SBR   TBRTN1&3                             4  2703  H P32               43
397 12 220          BCE   TBRTN1,TBSW,1                         8  2707  B P29 T41 1         43
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230          B     PUTX                                      4  2715  B 363               44
399 12 240          DCW   TBOP                                      3  2721  P51                 44
400 12 250          MLC   @1@,TBSW                                  7  2722  M Q67 T41           44
401 13 010  TBRTN1  B     *                                         4  2729  B P32               44
402 13 020  SPROC   DCW   @*01@                                     3  2735                      44
403 13 030  CDSW    DCW   @0@                                       1  2736                      44
404 13 040  CDSYM   DCW   @.CD@                                     3  2739                      44
405 13 050  CURNT   DCW   @   @                                     3  2742                      45
406 13 060  CNOP    DCW   @.NM@                                     3  2745                      45
407 13 070  SYM     DCW   #3                                        3  2748                      45
408 13 080  TBOP    DCW   @.TO@                                     3  2751                      45
409 13 090  TSTCHR  DCW   @ @                                       1  2752                      45
410 13 100  QUAL    DCW   @*32@                                     3  2755                      45
411 13 110  OUTSYM  DCW   #3                                        3  2758                      45
412 13 120  GCN     DCW   #3                                        3  2761                      46
413 13 130          DCW   @  @                                      2  2763                      46
414 13 140  QDIGIT  DCW   @.T@                                      2  2765                      46
415 13 150  NMCHR   DCW   @ @                                       1  2766                      46
416 13 160  CHR     DCW   @ @                                       1  2767                      46
417 13 170  SSLCT   DCW   @*77@                                     3  2770                      46
418 13 180  SAVE    DCW   #3                                        3  2773                      46
419 13 190  SENV    DCW   @*91@                                     3  2776                      47
420 13 200  SDATA   DCW   @/24@                                     3  2779                      47
421 13 210  LVOP    DCW   @.LV@                                     3  2782                      47
422 13 220  EOP     DCW   @.EP@                                     3  2785                      47
423 13 230  FDOP    DCW   @/26@                                     3  2788                      47
424 13 240  LEVNO   DCW   #3                                        3  2791                      47
425 13 250  LEVSW   DCW   @0@                                       1  2792                      47
426 14 010  LKSW    DCW   @0@                                       1  2793                      48
427 14 020  SFILL   DCW   @/23@                                     3  2796                      48
428 14 030  UNSYM   DCW   @.UN@                                     3  2799                      48
429 14 040  QLSYM   DCW   @.QN@                                     3  2802                      48
430 14 050  LSTOP   DCW   @.LT@                                     3  2805                      48
431 14 060  MLTSYM  DCW   @.MT@                                     3  2808                      48
432 14 070  SPNOP   DCW   @.SP@                                     3  2811                      48
433 14 080  ANOP    DCW   @.AN@                                     3  2814                      49
434 14 090  AUTO    DCW   @.AN@                                     3  2817                      49
435 14 100  FILSW   DCW   @0@                                       1  2818                      49
436 14 110  UOP     DCW   @.UU@                                     3  2821                      49
437 14 120  BLK     DCW   @   @                                     3  2824                      49
438 14 130  FILCNT  DCW   @000@                                     3  2827                      49
439 14 140  ENTSW   DCW   @0@                                       1  2828                      49
440 14 150  TAG     DCW   @  @                                      2  2830                      50
441 14 160  FIELD   DCW   @ @                                       1  2831                      50
442 14 170          DC    #32                                      32  2863                      50
443 14 180  NAME    DC    @ @                                       1  2864                      50
444 14 190  GRMK    DC    @}@                                       1  2865                      50
445 14 200          LTORG                                                   2866
                    DCW   @N@                                       1  2866              LIT     50
                          @1@                                       1  2867              LIT     50
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @ @                                          1  2868              LIT     51
                          @]@                                          1  2869              LIT     51
                          @2@                                          1  2870              LIT     51
                          @*@                                          1  2871              LIT     51
                          @0@                                          1  2872              LIT     51
                          @002@                                        3  2875              LIT     51
                          &3                                           1  2876              LIT     51
                          @|@                                          1  2877              LIT     52
                          &1                                           1  2878              LIT     52
                          @000@                                        3  2881              LIT     52
                          @   @                                        3  2884              LIT     52
                          @003@                                        3  2887              LIT     52
                          @00@                                         2  2889              LIT     52
 446 14 210          DCW  @}@                                          1  2890                      52
 447 14 220          END                                                    / 000 080                53
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B07 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B07
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                                0089
 104  1 040  X2      EQU   94                                                0094
 105  1 050  X3      EQU   99                                                0099
 106  1 060  GETX    EQU   335                                               0335
 107  1 070  SUPER   EQU   351                                               0351
 108  1 080  PUTX    EQU   363                                               0363
 109  1 090  DTCN1   EQU   1302                                              1302
 110  1 100  C       EQU   1303                                              1303
 111  1 110  DTCN    EQU   C&5                                               1308
 112  1 120  DTEND   EQU   C&8                                               1311
 113  1 130  ENDADR  EQU   C&8                                               1311
 114  1 140  DTADR   EQU   C&11                                              1314
 115  1 150  PRCN1   EQU   C&14                                              1317
 116  1 160  PRCN    EQU   C&17                                              1320
 117  1 170  PREND   EQU   C&20                                              1323
 118  1 180  PRADR   EQU   C&23                                              1326
 119  1 190  LTNM1   EQU   C&26                                              1329
 120  1 200  LTNM    EQU   C&29                                              1332
 121  1 210  OVSW    EQU   C&30                                              1333
 122  1 220  OVFSW   EQU   C&31                                              1334
 123  1 230  DOVSW   EQU   C&32                                              1335
 124  1 240  POVSW   EQU   C&33                                              1336
 125  1 250  DQSW    EQU   C&34                                              1337
 126  2 010  PQSW    EQU   C&35                                              1338
 127  2 020  LITSW   EQU   C&36                                              1339
 128  2 030  PENTSW  EQU   C&36                                              1339
 129  2 040  SYSW    EQU   C&37                                              1340
 130  2 050          ORG   1350                                                    1350
 131  2 060  START   CS    332                                         4   1350  / 332                4
 132  2 070          CS                                                1   1354  /                    4
 133  2 080          MLC   DTCN1,GCN                                   7   1355  M T02 R40            4
 134  2 090          MLC   @0@,OVSW                                    7   1362  M R69 T33            4
 135  2 100          MLC   DTCN1,DTCN                                  7   1369  M T02 T08            4
 136  2 110          MLC   @0@,PENTSW                                  7   1376  M R69 T39            4
 137  2 120          MLC   @00@,POVSW                                  7   1383  M R71 T36            5
 138  2 130          MLC                                               1   1390  M                    5
 139  2 140  INIT    B     GTSYM                                       4   1391  B O26                5
 140  2 150          B     PUTX                                        4   1395  B 363                5
 141  2 160          DCW   CURNT                                       3   1401  R25                  5
 142  2 170          C     CURNT,SDATA                                 7   1402  C R25 R13            5
 143  2 180          BU    INIT                                        5   1409  B T91 /              5
 144  2 190          MLC   DTADR,X3                                    7   1414  M T14 099            6
 145  2 200          BCE   DTPTGT,DQSW,0                               8   1421  B N73 T37 0          6
 146  2 210          MLC   DTADR,TEMP                                  7   1429  M T14 R62            6
 147  2 220          B     GTEST                                       4   1436  B U47                6
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  PTEST  B     PUTX                                        4  1440  B 363               6
149  2 240         DCW   CURNT                                       3  1446  R25                 6
150  2 250  GTEST  B     GTSYM                                       4  1447  B O26               6
151  3 010  TEST   B     DTTST                                       4  1451  B Y50               7
152  3 020         BCE   PR08,PQSW,0                                8  1455  B Y34 T38 0         7
153  3 030         C     CURNT,TBOP                                  7  1463  C R25 R68           7
154  3 040         BE    PROEXT                                      5  1470  B X93 S             7
155  3 050         C     CURNT-1,@.T@                                7  1475  C R24 R73           7
156  3 060         BU    PTEST                                       5  1482  B U40 /             7
157  3 070  PROENT MLC   @B@,PSW1                                   7  1487  M R74 W39           8
158  3 080         MLC   @N@,PSW2                                   7  1494  M R75 V87           8
159  3 090         MLC   @ @,TAG                                    7  1501  M R76 R28           8
160  3 100         BCE   PR11,CURNT,1                               8  1508  B V49 R25 1         8
161  3 110         BCE   PR12,CURNT,2                               8  1516  B V42 R25 2         8
162  3 120         MZ    @&@,TAG                                    7  1524  Y R77 R28           9
163  3 130         MLC   @N@,PSW1                                   7  1531  M R75 W39           9
164  3 140         B     PR11                                       4  1538  B V49               9
165  3 150  PR12   MZ    @-@,TAG                                    7  1542  Y R78 R28           9
166  3 160  PR11   B     GTSYM                                      4  1549  B O26               9
167  3 170         C     CURNT,MLTSYM                               7  1553  C R25 R65           9
168  3 180         BU    PR01                                       5  1560  B V83 /            10
169  3 190         MN    @1@,TAG                                    7  1565  D R79 R28          10
170  3 200         MLC   @B@,PSW2                                   7  1572  M R74 V87          10
171  3 210         B     GTSYM                                      4  1579  B O26              10
172  3 220  PR01   B     PTGTSY                                     4  1583  B O99              10
173  3 230  PSW2   B     LKNAME                                     4  1587  B Q42              10
174  3 240         MLC   CURNT,FIELD                                7  1591  M R25 R31          10
175  3 250         B     GTSYM                                      4  1598  B O26              11
176  4 010         C     CURNT,SSCT                                 7  1602  C R25 R37          11
177  4 020         MLC   @ )@,TLEV                                  7  1609  M R81 R27          11
178  4 030         BU    PSW1                                       5  1616  B W39 /            11
179  4 040         MLC   @1@,SCTSW                                  7  1621  M R79 R41          11
180  4 050         MLC   @   @,TLEV                                 7  1628  M R84 R27          11
181  4 060         B     GTSYM                                      4  1635  B O26              12
182  4 070  PSW1   B     PR02                                       4  1639  B W58              12
183  4 080         B     PUTX                                       4  1643  B 363              12
184  4 090         DCW   GCN                                        3  1649  R40                12
185  4 100         B     CNRTN                                      4  1650  B N97              12
186  4 110         B     PR03                                       4  1654  B W65              12
187  4 120  PR02   B     PUTX                                       4  1658  B 363              12
188  4 130         DCW   FIELD                                      3  1664  R31                13
189  4 140  PR03   BCE   PR04,SCTSW,0                               8  1665  B W87 R41 0        13
190  4 150         B     PUTX                                       4  1673  B 363              13
191  4 160         DCW   SSCT                                       3  1679  R37                13
192  4 170         MLC   @0@,SCTSW                                  7  1680  M R69 R41          13
193  4 180  PR04   LCA   FIELD,0&X3                                 7  1687  L R31 0?0          13
194  4 190         LCA                                              1  1694  L                  13
195  4 200         SBR   X3                                         4  1695  H 099              14
196  4 210         MLC   @1@,PENTSW                                 7  1699  M R79 T39          14
197  4 220         BCE   TEST,OVCHR,|                               8  1706  B U51 B50 |        14
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230  PR10    C     CURNT-1,@.T@                              7  1714  C R24 R73           14
199  4 240          BU    PR07                                      5  1721  B X73 /             14
200  4 250          MLC   @1@,POVSW                                7  1726  M R79 T36           14
201  5 010          B     PTGTSY                                    4  1733  B O99               15
202  5 020          C     CURNT,MLTSYM                              7  1737  C R25 R65           15
203  5 030          BU    PR15                                      5  1744  B X65 /             15
204  5 040          B     PTGTSY                                    4  1749  B O99               15
205  5 050          B     PTGTSY                                    4  1753  B O99               15
206  5 060          B     LKNAME                                    4  1757  B Q42               15
207  5 070          B     PR16                                      4  1761  B X69               15
208  5 080  PR15    B     PTGTSY                                    4  1765  B O99               16
209  5 090  PR16    B     PTGTSY                                    4  1769  B O99               16
210  5 100  PR07    C     CURNT,TBOP                                7  1773  C R25 R68           16
211  5 110          BU    PR09                                      5  1780  B Y42 /             16
212  5 120          BCE   PR20,POVSW,1                             8  1785  B Y20 T36 1         16
213  5 130  PROEXT  C     3&X3,@   @                                7  1793  C 0?3 R84           16
214  5 140          BE    PR20                                      5  1800  B Y20 S             17
215  5 150          LCA   @   @,0&X3                               7  1805  L R84 0?0           17
216  5 160          LCA   @   @                                     4  1812  L R84               17
217  5 170          SBR   X3                                        4  1816  H 099               17
218  5 180  PR20    MLC   X3,PREND                                  7  1820  M 099 T23           17
219  5 190          MLC   GCN,PRCN1                                 7  1827  M R40 T17           17
220  5 200  PR08    B     PTGTSY                                    4  1834  B O99               17
221  5 210          B     PR08                                      4  1838  B Y34               18
222  5 220  PR09    B     PTGTSY                                    4  1842  B O99               18
223  5 230          B     PR10                                      4  1846  B X14               18
224  5 240  DTTST   C     CURNT-1,@.T@                              7  1850  C R24 R73           18
225  5 250          BE    DTENT                                     5  1857  B !13 S             18
226  6 010  DSW4    B     DTT01                                     4  1862  B Z26               18
227  6 020          C     CURNT,SFLSCT                              7  1866  C R25 R16           18
228  6 030          BE    DTLVT1                                    5  1873  B N39 S             19
229  6 040          C     CURNT,WRKSCT                              7  1878  C R25 R19           19
230  6 050          BE    DTLVT1                                    5  1885  B N39 S             19
231  6 060          C     CURNT,CNSSCT                              7  1890  C R25 R22           19
232  6 070          BE    DTLVT1                                    5  1897  B N39 S             19
233  6 080          C     CURNT,FDOP                                7  1902  C R25 R34           19
234  6 090          BE    DTLVT1                                    5  1909  B N39 S             20
235  6 100          C     CURNT,LVOP                                7  1914  C R25 R47           20
236  6 110          BE    DTLVT                                     5  1921  B N19 S             20
237  6 120  DTT01   C     CURNT,SPROC                               7  1926  C R25 R50           20
238  6 130          BU    PTEST                                     5  1933  B U40 /             20
239  6 140  DTTRTN  LCA   @   @,0&X3                               7  1938  L R84 0?0           20
240  6 150          LCA   @   @                                     4  1945  L R84               21
241  6 160          SBR   X3                                        4  1949  H 099               21
242  6 170          MLC   @0@,DQSW                                  7  1953  M R69 T37           21
243  6 180  DTTRT2  MLC   X3,DTEND                                  7  1960  M 099 T11           21
244  6 190          MLC   GCN,DTCN1                                 7  1967  M R40 T02           21
245  6 200  DTTRT1  MLC   X3,PRADR                                  7  1974  M 099 T26           21
246  6 210          MLC   PRCN1,GCN                                 7  1981  M T17 R40           22
247  6 220          MLC   PRCN1,PRCN                                7  1988  M T17 T20           22
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         MLC   @N@,TEST                                    7  1995  M R75 U51           22
249  6 240         MLC   PRADR,TEMP                                  7  2002  M T26 R62           22
250  6 250         B     PTEST                                       4  2009  B U40               22
251  7 010  DTENT  MLC   @N@,DSW1                                    7  2013  M R75 J98           22
252  7 020         MLC   @N@,DSW2                                    7  2020  M R75 K25           23
253  7 030         MLC   @B@,DSW3                                    7  2027  M R74 K06           23
254  7 040         MLC   @N@,DSW4                                    7  2034  M R75 Y62           23
255  7 050         MLC   @ @,TAG                                     7  2041  M R76 R28           23
256  7 060         BCE   DTT02,CURNT,1                               8  2048  B !96 R25 1         23
257  7 070         BCE   DTT03,CURNT,2                               8  2056  B !82 R25 2         24
258  7 080         MZ    @&@,TAG                                     7  2064  Y R77 R28           24
259  7 090         MLC   @N@,DSW3                                    7  2071  M R75 K06           24
260  7 100         B     DTT02                                       4  2078  B !96               24
261  7 110  DTT03  MZ    @-@,TAG                                     7  2082  Y R78 R28           24
262  7 120         MLC   @B@,DSW2                                    7  2089  M R74 K25           25
263  7 130  DTT02  B     GTSYM                                       4  2096  B O26               25
264  7 140         C     CURNT,MLTSYM                                7  2100  C R25 R65           25
265  7 150         BU    DTT04                                       5  2107  B J30 /             25
266  7 160         B     GTSYM                                       4  2112  B O26               25
267  7 170         MLC   @B@,DSW1                                    7  2116  M R74 J98           25
268  7 180         MN    @1@,TAG                                     7  2123  D R79 R28           26
269  7 190  DTT04  C     CURNT,FDOP                                  7  2130  C R25 R34           26
270  7 200         BU    DTT15                                       5  2137  B J57 /             26
271  7 210         B     PTGTSY                                      4  2142  B O99               26
272  7 220         MLC   @  @,TLEV                                   7  2146  M R86 R27           26
273  7 230         B     DTT16                                       4  2153  B J91               26
274  7 240  DTT15  B     PTGTSY                                      4  2157  B O99               26
275  7 250         MLC   CURNT,TLEV                                  7  2161  M R25 R27           27
276  8 010         B     PTGTSY                                      4  2168  B O99               27
277  8 020         C     TLEV,@77@                                   7  2172  C R27 R88           27
278  8 030         BU    DTT16                                       5  2179  B J91 /             27
279  8 040         MLC   @01@,TLEV                                   7  2184  M R90 R27           27
280  8 050  DTT16  MLC   CURNT,FIELD                                 7  2191  M R25 R31           27
281  8 060  DSW1   B     LKNAME                                      4  2198  B Q42               28
282  8 070         B     GTSYM                                       4  2202  B O26               28
283  8 080  DSW3   B     DSW2                                        4  2206  B K25               28
284  8 090         B     PUTX                                        4  2210  B 363               28
285  8 100         DCW   GCN                                         3  2216  R40                 28
286  8 110         B     CNRTN                                       4  2217  B N97               28
287  8 120         B     DTT05                                       4  2221  B K47               28
288  8 130  DSW2   B     DTT06                                       4  2225  B K40               29
289  8 140         B     PUTX                                        4  2229  B 363               29
290  8 150         DCW   BLK                                         3  2235  R54                 29
291  8 160         B     DTT05                                       4  2236  B K47               29
292  8 170  DTT06  B     PUTX                                        4  2240  B 363               29
293  8 180         DCW   FIELD                                       3  2246  R31                 29
294  8 190  DTT05  LCA   FIELD,0&X3                                 7  2247  L R31 0?0           29
295  8 200         LCA                                               1  2254  L                   30
296  8 210         SBR   X3                                          4  2255  H 099               30
297  8 220         BCE   TEST,OVCHR,|                                8  2259  B U51 B50 |         30
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  DTTOVF C     CURNT-1,@.T@                        7  2267  C R24 R73           30
299  8 240         BU    DTLVSW                              5  2274  B L32 /             30
300  8 250         MLC   @B@,DTLVSW                          7  2279  M R74 L32           30
301  9 010         MLC   @1@,DOVSW                           7  2286  M R79 T35           30
302  9 020         B     PTGTSY                              4  2293  B O99               31
303  9 030         C     CURNT,MLTSYM                        7  2297  C R25 R65           31
304  9 040         BU    DTLVSW                              5  2304  B L32 /             31
305  9 050         B     PTGTSY                              4  2309  B O99               31
306  9 060         B     PTGTSY                              4  2313  B O99               31
307  9 070         B     PTGTSY                              4  2317  B O99               31
308  9 080         MLC   CURNT,FIELD                        7  2321  M R25 R31           31
309  9 090         B     LKNAME                              4  2328  B Q42               32
310  9 100  DTLVSW NOP   DTT10                             4  2332  N M36               32
311  9 110         C     CURNT,LVOP                          7  2336  C R25 R47           32
312  9 120         BU    DTT17                               5  2343  B M02 /             32
313  9 130         B     PTGTSY                              4  2348  B O99               32
314  9 140         B     DTLVRT                              4  2352  B P18               32
315  9 150         BCE   DTT11,LOADSW,1                      8  2356  B L72 R59 1         32
316  9 160  DTT12  B     PTGTSY                              4  2364  B O99               33
317  9 170         B     DTTOVF                              4  2368  B K67               33
318  9 180  DTT11  MLC   @   @,FIELD                        7  2372  M R84 R31           33
319  9 190         MLC   @ @,TAG                             7  2379  M R76 R28           33
320  9 200         LCA   FIELD,0&X3                          7  2386  L R31 0?0           33
321  9 210         LCA                                       1  2393  L                   33
322  9 220         SBR   X3                                  4  2394  H 099               33
323  9 230         B     DTT13                               4  2398  B N11               34
324  9 240  DTT17  C     CURNT,FDOP                          7  2402  C R25 R34           34
325  9 250         BU    DTT10                               5  2409  B M36 /             34
326 10 010         MLC   @  @,TLEV                          7  2414  M R86 R27           34
327 10 020         MLC   @B@,DTLVSW                         7  2421  M R74 L32           34
328 10 030         B     PTGTSY                              4  2428  B O99               34
329 10 040         B     DTT11                               4  2432  B L72               34
330 10 050  DTT10  C     CURNT,SPROC                         7  2436  C R25 R50           35
331 10 060         BU    DTT13                               5  2443  B N11 /             35
332 10 070         BCE   DTT18,DOVSW,1                      8  2448  B M93 T35 1         35
333 10 080         BCE   DTT19,PQSW,0                       8  2456  B M78 T38 0         35
334 10 090         MLC   @0@,DQSW                           7  2464  M R69 T37           35
335 10 100         MLC   @1@,POVSW                          7  2471  M R79 T36           36
336 10 110  DTT19  LCA   @   @,0&X3                        7  2478  L R84 0?0           36
337 10 120         LCA   @   @                             4  2485  L R84               36
338 10 130         SBR   X3                                4  2489  H 099               36
339 10 140  DTT18  MLC   X3,DTEND                          7  2493  M 099 T11           36
340 10 150         MLC   GCN,DTCN1                         7  2500  M R40 T02           36
341 10 160         B     PR08                              4  2507  B Y34               37
342 10 170  DTT13  B     PTGTSY                              4  2511  B O99               37
343 10 180         B     DTTOVF                              4  2515  B K67               37
344 10 190  DTLVT  B     PTGTSY                              4  2519  B O99               37
345 10 200         B     DTLVRT                              4  2523  B P18               37
346 10 210         BCE   DTLVT2,LOADSW,1                     8  2527  B N58 R59 1         37
347 10 220         B     PTEST                               4  2535  B U40               37
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230  DTLVT1 C     3&X3,@   @                                7  2539  C 0?3 R84           38
349 10 240         BE    PTEST                                    5  2546  B U40 S             38
350 10 250         MLC   @   @,TAG                                7  2551  M R84 R28           38
351 11 010  DTLVT2 MLC   @   @,FIELD                              7  2558  M R84 R31           38
352 11 020         B     PTGTSY                                   4  2565  B O99               38
353 11 030         B     DTT05                                    4  2569  B K47               38
354 11 040  DTPTGT B     GTSYM                                    4  2573  B O26               38
355 11 050  DTPT01 B     PTGTSY                                   4  2577  B O99               39
356 11 060         C     CURNT,SPROC                              7  2581  C R25 R50           39
357 11 070         BU    DTPT01                                   5  2588  B N77 /             39
358 11 080         B     DTTRT1                                   4  2593  B Z74               39
359 11 090  CNRTN  SBR   CNR01&3                                  4  2597  H O11               39
360 11 100         A     &1,GCN                                   7  2601  A R91 R40           39
361 11 110  CNR01  B     *                                        4  2608  B O11               39
362 11 120  EOJ    B     PUTX                                     4  2612  B 363               40
363 11 130         DCW   EOP                                      3  2618  R44                 40
364 11 140         B     SUPER                                    4  2619  B 351               40
365 11 150         DCW   @B08@                                   3  2625                      40
366 11 160  GTSYM  SBR   GT01&3                                  4  2626  H O55               40
367 11 170  GT08   B     GETX                                     4  2630  B 335               40
368 11 180         DCW   CURNT                                    3  2636  R25                 40
369 11 190         DCW   EOJ                                      3  2639  O12                 41
370 11 200  GT03   C     CURNT,CDSYM                              7  2640  C R25 R57           41
371 11 210         BE    GT02                                     5  2647  B O56 S             41
372 11 220  GT01   B     *                                        4  2652  B O55               41
373 11 230  GT02   MLC   @0@,CDSW                                7  2656  M R69 R58           41
374 11 240  GT04   B     PUTX                                     4  2663  B 363               41
375 11 250         DCW   CURNT                                    3  2669  R25                 41
376 12 010         B     GETX                                     4  2670  B 335               42
377 12 020         DCW   CURNT                                    3  2676  R25                 42
378 12 030         DCW   EOJ                                      3  2679  O12                 42
379 12 040         A     &1,CDSW                                  7  2680  A R91 R58           42
380 12 050         BCE   GT03,CDSW,3                              8  2687  B O40 R58 3         42
381 12 060         B     GT04                                     4  2695  B O63               42
382 12 070  PTGTSY SBR   PTGT01&3                                 4  2699  H P17               42
383 12 080         B     PUTX                                     4  2703  B 363               43
384 12 090         DCW   CURNT                                    3  2709  R25                 43
385 12 100         B     GTSYM                                    4  2710  B O26               43
386 12 110  PTGT01 B     *                                        4  2714  B P17               43
387 12 120  DTLVRT SBR   DTLV01&3                                 4  2718  H P89               43
388 12 130         MLC   @0@,LOADSW                               7  2722  M R69 R59           43
389 12 140         MLC   CURNT,TLEV                               7  2729  M R25 R27           43
390 12 150         C     TLEV,@77@                                7  2736  C R27 R88           44
391 12 160         BU    DTLV05                                   5  2743  B P55 /             44
392 12 170         MLC   @01@,TLEV                               7  2748  M R90 R27           44
393 12 180  DTLV05 C     6&X3,@   @                               7  2755  C 0?6 R84           44
394 12 190         BU    DTLV02                                   5  2762  B P90 /             44
395 12 200         C     TLEV,2&X3                                7  2767  C R27 0?2           44
396 12 210         BL    DTLV04                                   5  2774  B Q24 T             45
397 12 220         MLC   TLEV,2&X3                                7  2779  M R27 0?2           45
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  DTLV01  B     *                                         4  2786  B P89               45
399 12 240  DTLV02  C     TLEV,2&X3                                 7  2790  C R27 0?2           45
400 12 250          BH    DTLV03                                    5  2797  B Q06 U             45
401 13 010          B     DTLV01                                    4  2802  B P86               45
402 13 020  DTLV03  MLC   @ @,TAG                                  7  2806  M R76 R28           45
403 13 030          MLC   @1@,LOADSW                               7  2813  M R79 R59           46
404 13 040          B     DTLV01                                    4  2820  B P86               46
405 13 050  DTLV04  MLC   @B@,DTLVSW                              7  2824  M R74 L32           46
406 13 060          MLC   @B@,DSW4                                 7  2831  M R74 Y62           46
407 13 070          B     DTLV01                                    4  2838  B P86               46
408 13 080  LKNAME  SBR   LK01&3                                   4  2842  H R10               46
409 13 090          MLC   TEMP,X1                                  7  2846  M R62 089           47
410 13 100  LK02    C     X1,X3                                     7  2853  C 089 099           47
411 13 110          BE    LK01                                      5  2860  B R07 S             47
412 13 120          C     0&X1,CURNT                                7  2865  C 0|0 R25           47
413 13 130          SAR   X1                                        4  2872  Q 089               47
414 13 140          BU    LK03                                      5  2876  B Q92 /             47
415 13 150          MN    @1@,0&X1                                  7  2881  D R79 0|0           48
416 13 160          B     LK01                                      4  2888  B R07               48
417 13 170  LK03    C     0&X1,0&X1                                 7  2892  C 0|0 0|0           48
418 13 180          SAR   X1                                        4  2899  Q 089               48
419 13 190          B     LK02                                      4  2903  B Q53               48
420 13 200  LK01    B     *                                         4  2907  B R10               48
421 13 210  SDATA   DCW   @/24@                                     3  2913                      48
422 13 220  SFLSCT  DCW   @*29@                                     3  2916                      49
423 13 230  WRKSCT  DCW   @/01@                                     3  2919                      49
424 13 240  CNSSCT  DCW   @/09@                                     3  2922                      49
425 13 250  CURNT   DCW   #3                                       3  2925                      49
426 14 010  TLEV    DCW   #2                                       2  2927                      49
427 14 020  TAG     DC    #1                                       1  2928                      49
428 14 030  FIELD   DCW   #3                                       3  2931                      49
429 14 040  FDOP    DCW   @/26@                                     3  2934                      49
430 14 050  SSCT    DCW   @*09@                                     3  2937                      50
431 14 060  GCN     DCW   #3                                       3  2940                      50
432 14 070  SCTSW   DCW   @0@                                      1  2941                      50
433 14 080  EOP     DCW   @.EP@                                     3  2944                      50
434 14 090  LVOP    DCW   @.LV@                                     3  2947                      50
435 14 100  SPROC   DCW   @*01@                                     3  2950                      50
436 14 110  TSTCHR  DCW   #1                                       1  2951                      50
437 14 120  BLK     DCW   @   @                                     3  2954                      51
438 14 130  CDSYM   DCW   @.CD@                                     3  2957                      51
439 14 140  CDSW    DCW   @0@                                      1  2958                      51
440 14 150  LOADSW  DCW   @0@                                      1  2959                      51
441 14 160  TEMP    DCW   #3                                       3  2962                      51
442 14 170  MLTSYM  DCW   @.MT@                                     3  2965                      51
443 14 180  TBOP    DCW   @.TO@                                     3  2968                      51
444 14 190          LTORG                                                  2969
                    DCW   @0@                                      1  2969            LIT     52
                          @00@                                     2  2971            LIT     52
                          @.T@                                     2  2973            LIT     52
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
					@B@		1	2974		LIT	52
					@N@		1	2975		LIT	52
					@ @		1	2976		LIT	52
					@&@		1	2977		LIT	52
					@-@		1	2978		LIT	53
					@1@		1	2979		LIT	53
					@)@		2	2981		LIT	53
					@ @		3	2984		LIT	53
					@ @		2	2986		LIT	53
					@77@		2	2988		LIT	53
					@01@		2	2990		LIT	53
					&1		1	2991		LIT	54
445	14	200		ORG	3250				3250		
446	14	210	OVCHR	DC	@|@		1	3250			55
447	14	220		DCW	@}@		1	3251			55
448	14	230		END	INIT				/ T91 080		56

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B08 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - B08					
102	1	020		CTL	631 11					
103	1	030	X1	EQU	89			0089		
104	1	040	X2	EQU	94			0094		
105	1	050	X3	EQU	99			0099		
106	1	060	GETX	EQU	335			0335		
107	1	070	SUPER	EQU	351			0351		
108	1	080	PUTX	EQU	363			0363		
109	1	090	C	EQU	1303			1303		
110	1	100	DTCN	EQU	C&5			1308		
111	1	110	DTEND	EQU	C&8			1311		
112	1	120	DTADR	EQU	C&11			1314		
113	1	130	PRCN	EQU	C&17			1320		
114	1	140	PREND	EQU	C&20			1323		
115	1	150	PRADR	EQU	C&23			1326		
116	1	160	DOVSW	EQU	C&32			1335		
117	1	170	POVSW	EQU	C&33			1336		
118	1	180	DQSW	EQU	C&34			1337		
119	1	190	PQSW	EQU	C&35			1338		
120	1	200	PENTSW	EQU	C&36			1339		
121	1	210	DSW	EQU	C&39			1342		
122	1	220		ORG	1350				1350	
123	1	230	INIT	B	GTSYM		4	1350	B O19	4
124	1	240		B	PUTX		4	1354	B 363	4
125	1	250		DCW	CURNT		3	1360	Q32	4
126	2	010		C	CURNT,SENV		7	1361	C Q32 Q38	4
127	2	020		BU	INIT		5	1368	B T50 /	4
128	2	030		B	GTEST		4	1373	B T84	4
129	2	040	PTEST	B	PUTX		4	1377	B 363	4
130	2	050		DCW	CURNT		3	1383	Q32	5
131	2	060	GTEST	B	GTSYM		4	1384	B O19	5
132	2	070	TEST	C	CURNT-2,@A@		7	1388	C Q30 R09	5
133	2	080		BH	TEST1		5	1395	B U62 U	5
134	2	090		C	CURNT-2,@R@		7	1400	C Q30 R10	5
135	2	100		BL	TEST1		5	1407	B U62 T	5
136	2	110		MLC	CURNT,SVNM		7	1412	M Q32 Q64	5
137	2	120		B	GTSYM		4	1419	B O19	6
138	2	130		BWZ	TEST2,SVNM-2,B		8	1423	V U39 Q62 B	6
139	2	140		BCE	TEST3,PENTSW,0		8	1431	B U51 T39 0	6
140	2	150	TEST2	C	CURNT,QUAL		7	1439	C Q32 Q58	6
141	2	160		BE	ENTCN		5	1446	B W22 S	6
142	2	170	TEST3	B	PUTX		4	1451	B 363	6
143	2	180		DCW	SVNM		3	1457	Q64	6
144	2	190		B	TEST		4	1458	B T88	7
145	2	200	TEST1	C	CURNT,TABSYM		7	1462	C Q32 Q86	7
146	2	210		BE	TABBTB		5	1469	B V13 S	7
147	2	220	TEST4	C	CURNT-1,@.D@		7	1474	C Q31 R12	7

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          BU    PTEST                                     5  1481  B T77 /             7
149  2 240  TEST5   B     PUTX                                      4  1486  B 363               7
150  2 250          DCW   CURNT                                     3  1492  Q32                 7
151  3 010          B     GTSYM                                     4  1493  B O19               8
152  3 020          C     CURNT-1,@.D@                              7  1497  C Q31 R12           8
153  3 030          BU    TEST5                                     5  1504  B U86 /             8
154  3 040          B     PTEST                                     4  1509  B T77               8
155  3 050  TABBTB  B     GTSYM                                     4  1513  B O19               8
156  3 060          MLC   CURNT,SVNM                                7  1517  M Q32 Q64           8
157  3 070          B     GTSYM                                     4  1524  B O19               8
158  3 080          B     ENTRTN                                    4  1528  B M16               9
159  3 090          MLC   GCN,NXGCN                                 7  1532  M Q61 Q50           9
160  3 100          MLC   @1@,TBSW                                  7  1539  M R13 Q67           9
161  3 110          MLC   CURNT,LKSW                                7  1546  M Q32 Q71           9
162  3 120          B     GTSYM                                     4  1553  B O19               9
163  3 130          MLC   CURNT,CNAME                               7  1557  M Q32 Q80           9
164  3 140          B     GTSYM                                     4  1564  B O19              10
165  3 150  TABB1   MLC   CURNT,LEVNO&1                              7  1568  M Q32 Q77          10
166  3 160          B     GTSYM                                     4  1575  B O19              10
167  3 170          MN    LEVNO&1,TSTCHR                            7  1579  D Q77 Q87          10
168  3 180          BCE   TBTST,CURNT,*                             8  1586  B W06 Q32 *        10
169  3 190          B     FOUND                                     4  1594  B W50              10
170  3 200          B     NXNAME                                    4  1598  B Z15              10
171  3 210          B     TABB1                                     4  1602  B V68              11
172  3 220  TBTST   BCE   TBSRTB,LKSW,0                            8  1606  B W38 Q71 0        11
173  3 230          B     FOUND                                     4  1614  B W50              11
174  3 240          B     CNOUT                                     4  1618  B X94              11
175  3 250  ENTCN   B     ENTRTN                                    4  1622  B M16              11
176  4 010  TBSRCH  B     LKNAME                                    4  1626  B J08              11
177  4 020          BCE   NTFND,LKSW,0                              8  1630  B Y05 Q71 0        11
178  4 030  TBSRTB  B     FOUND                                     4  1638  B W50              12
179  4 040          B     NXNAME                                    4  1642  B Z15              12
180  4 050          B     TBSRCH                                    4  1646  B W26              12
181  4 060  FOUND   SBR   FND01&3                                  4  1650  H X16              12
182  4 070          BCE   UNIQUE,TSTCHR,                            8  1654  B X53 Q87          12
183  4 080          MLC   @1@,SVSW                                  7  1662  M R13 Q70          12
184  4 090  DUPRTN  MLC   @1@,ENTSYM                                7  1669  M R13 Q23          12
185  4 100          C     TQSW,@01@                                 7  1676  C Q55 R15          13
186  4 110          BU    DPLSNM                                    5  1683  B X17 /            13
187  4 120          B     SEGMNT                                    4  1688  B L02              13
188  4 130          B     OCCSEG                                    4  1692  B K47              13
189  4 140          MLC   @1@,SVSW1                                 7  1696  M R13 Q69          13
190  4 150          MLC   TQSW,SVTQSW                               7  1703  M Q55 R08          13
191  4 160          MLC                                             1  1710  M                  13
192  4 170          MLC                                             1  1711  M                  14
193  4 180          MLC                                             1  1712  M                  14
194  4 190  FND01   B     *                                         4  1713  B X16              14
195  4 200  DPLSNM  B     OCCSEG                                    4  1717  B K47              14
196  4 210          C     TQSW,QSW                                  7  1721  C Q55 Q20          14
197  4 220          BU    DUPRT1                                    5  1728  B X86 /            14
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  DPLSN1 BCE   MLTDEF,USW,0                              8  1733  B P49 Q66 0         14
199  4 240          BCE   OUTTAB,OVFSW,1                           8  1741  B Y99 Q68 1         15
200  4 250          B     CNOUT                                    4  1749  B X94               15
201  5 010  UNIQUE MLC   @ @,ENTSYM                               7  1753  M R16 Q23           15
202  5 020          MLC   @1@,USW                                  7  1760  M R13 Q66           15
203  5 030          MLC   @00@,SVSW                               7  1767  M R18 Q70           15
204  5 040          C     TQSW,QSW                                 7  1774  C Q55 Q20           16
205  5 050          BE    CNOUT                                    5  1781  B X94 S             16
206  5 060  DUPRT1 B     SEGMNT                                   4  1786  B L02               16
207  5 070          B     FND01                                    4  1790  B X13               16
208  5 080  CNOUT  B     PUTX                                     4  1794  B 363               16
209  5 090          DCW   CNAME                                    3  1800  Q80                 16
210  5 100          B     RTEST                                    4  1801  B P92               16
211  5 110  NTFND  BCE   NTFND1,SVSW1,1                           8  1805  B Y29 Q69 1         17
212  5 120          C     TQSW,@01@                                7  1813  C Q55 R15           17
213  5 130          BE    NTFND2                                   5  1820  B Y67 S             17
214  5 140          B     NTFND3                                   4  1825  B Y83               17
215  5 150  NTFND1 C     ENDADR,X1                                7  1829  C Q97 089           17
216  5 160          BE    NTFND3                                   5  1836  B Y83 S             17
217  5 170          MLC   @00@,SVSW                               7  1841  M R18 Q70           18
218  5 180          MLC   SVTQSW,TQSW                             7  1848  M R08 Q55           18
219  5 190          MLC                                            1  1855  M                   18
220  5 200          MLC                                            1  1856  M                   18
221  5 210          MLC                                            1  1857  M                   18
222  5 220          MLC                                            1  1858  M                   18
223  5 230          B     NXNMTB                                   4  1859  B Z07               18
224  5 240          B     TBSRCH                                   4  1863  B W26               19
225  5 250  NTFND2 BCE   UNDEF,OVSW,0                            8  1867  B P60 Q65 0         19
226  6 010          B     OUTCNS                                   4  1875  B !31               19
227  6 020          B     RTEST                                    4  1879  B P92               19
228  6 030  NTFND3 BCE   UNDEF,OVSW,0                            8  1883  B P60 Q65 0         19
229  6 040          BCE   UNDEF,OVFSW,0                          8  1891  B P60 Q68 0         19
230  6 050  OUTTAB B     OUTRTN                                   4  1899  B Z65               20
231  6 060          B     RTEST                                    4  1903  B P92               20
232  6 070  NXNMTB SBR   NXNM1&3                                  4  1907  H Z64               20
233  6 080          B     NXNM2                                    4  1911  B Z40               20
234  6 090  NXNAME SBR   NXNM1&3                                  4  1915  H Z64               20
235  6 100          A     &1,TQSW                                  7  1919  A R19 Q55           20
236  6 110          S     &3,NMADR                                 7  1926  S R20 Q53           20
237  6 120          MZ    @ @,NMADR                                7  1933  Y R16 Q53           21
238  6 130  NXNM2  MLC   NMADR,X2                                 7  1940  M Q53 094           21
239  6 140          MLC   NM&X2,QNAME                             7  1947  M RL6 Q74           21
240  6 150          MLC   NXGCN,GCN                               7  1954  M Q50 Q61           21
241  6 160  NXNM1  B     *                                        4  1961  B Z64               21
242  6 170  OUTRTN SBR   OUTR02&3                                 4  1965  H !30               21
243  6 180          B     PUTX                                     4  1969  B 363               22
244  6 190          DCW   TABSYM                                  3  1975  Q86                 22
245  6 200          B     OUTCNS                                   4  1976  B !31               22
246  6 210          B     PUTX                                     4  1980  B 363               22
247  6 220          DCW   LKSW                                     3  1986  Q71                 22
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          B     PUTX                                       4  1987  B 363              22
249  6 240          DCW   CNAME                                    3  1993  Q80                22
250  6 250          MLC   @000@,X2                                 7  1994  M R23 094          23
251  7 010  OUTR01  A     &3,X2                                    7  2001  A R20 094          23
252  7 020          B     PUTX                                       4  2008  B 363              23
253  7 030          DCW   OUTFLD&X2                                3  2014  ?Q6                23
254  7 040          C     OUTFLD&X2,@***@                          7  2015  C ?Q6 R26          23
255  7 050          BU    OUTR01                                   5  2022  B !01 /            23
256  7 060  OUTR02  B     *                                          4  2027  B !30              23
257  7 070  OUTCNS  SBR   OUTC01&3                                  4  2031  H J07              24
258  7 080          MLC   @00@,TQSW                                7  2035  M R18 Q55          24
259  7 090          MLC   @003@,X2                                 7  2042  M R29 094          24
260  7 100          B     OUTC02                                   4  2049  B !72              24
261  7 110  OUTC03  C     TQSW,QSW                                 7  2053  C Q55 Q20          24
262  7 120          BE    OUTC01                                   5  2060  B J04 S            24
263  7 130          B     PUTX                                       4  2065  B 363              24
264  7 140          DCW   QUAL                                     3  2071  Q58                25
265  7 150  OUTC02  MLC   NM&X2,OUTSYM                             7  2072  M RL6 Q29          25
266  7 160          A     &3,X2                                    7  2079  A R20 094          25
267  7 170          A     &1,TQSW                                  7  2086  A R19 Q55          25
268  7 180          B     PUTX                                       4  2093  B 363              25
269  7 190          DCW   OUTSYM                                   3  2099  Q29                25
270  7 200          B     OUTC03                                   4  2100  B !53              25
271  7 210  OUTC01  B     *                                          4  2104  B J07              26
272  7 220  LKNAME  SBR   LK05&3                                    4  2108  H K46              26
273  7 230          MLC   @0@,LKSW                                 7  2112  M R30 Q71          26
274  7 240          MLC   TSTADR,X1                                7  2119  M Q47 089          26
275  7 250  LK01    C     X1,SEGADR                                7  2126  C 089 Q44          26
276  8 010          BE    LK05                                     5  2133  B K43 S            26
277  8 020          C     0&X1,QNAME                               7  2138  C 0|0 Q74          27
278  8 030          SAR   X1                                       4  2145  Q 089              27
279  8 040          BE    LK02                                     5  2149  B J74 S            27
280  8 050          C     0&X1                                     4  2154  C 0|0              27
281  8 060          SAR   X1                                       4  2158  Q 089              27
282  8 070          BWZ   CNRTN,3&X1,B                            8  2162  V O04 0|3 B        27
283  8 080          B     LK01                                     4  2170  B J26              27
284  8 090  LK02    MLC   @1@,LKSW                                7  2174  M R13 Q71          28
285  8 100          C     0&X1                                     4  2181  C 0|0              28
286  8 110          SAR   TSTADR                                   4  2185  Q Q47              28
287  8 120          MLC   0&X1,LEVNO&1                            7  2189  M 0|0 Q77          28
288  8 130          MN    LEVNO&1,TSTCHR                           7  2196  D Q77 Q87          28
289  8 140          MLC   GCN,NXGCN                               7  2203  M Q61 Q50          28
290  8 150          MLC   GCN,CNAME                               7  2210  M Q61 Q80          29
291  8 160          BWZ   LK04,0&X1,B                            8  2217  V K36 0|0 B        29
292  8 170          MLC   3&X1,CNAME                               7  2225  M 0|3 Q80          29
293  8 180          B     LK05                                     4  2232  B K43              29
294  8 190  LK04    A     &1,NXGCN                                 7  2236  A R19 Q50          29
295  8 200  LK05    B     *                                          4  2243  B K46              29
296  8 210  OCCSEG  SBR   OCC05&3                                  4  2247  H L01              30
297  8 220          MLC   TSTADR,X1                                7  2251  M Q47 089          30
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  OCC01  C     X1,SEGADR                                  7  2258  C 089 Q44           30
299  8 240         BE    OCC05                                      5  2265  B K98 S             30
300  8 250         C     0&X1,QNAME                                 7  2270  C 0|0 Q74           30
301  9 010         SAR   X1                                         4  2277  Q 089               30
302  9 020         BE    MLTDEF                                     5  2281  B P49 S             30
303  9 030         C     0&X1                                       4  2286  C 0|0               31
304  9 040         SAR   X1                                         4  2290  Q 089               31
305  9 050         B     OCC01                                      4  2294  B K58               31
306  9 060  OCC05  B     *                                          4  2298  B L01               31
307  9 070  SEGMNT SBR   SEG01&3                                    4  2302  H L56               31
308  9 080         MLC   TSTADR,X1                                 7  2306  M Q47 089           31
309  9 090         C     ENDADR,TSTADR                              7  2313  C Q97 Q47           31
310  9 100         BE    SEG04                                      5  2320  B L69 S             32
311  9 110  SEG03  MLC   X1,SEGADR                                 7  2325  M 089 Q44           32
312  9 120         C     0&X1                                       4  2332  C 0|0               32
313  9 130         C                                                1  2336  C                   32
314  9 140         SAR   X1                                         4  2337  Q 089               32
315  9 150         C     LEVNO,2&X1                                 7  2341  C Q76 0|2           32
316  9 160         BH    SEG02                                      5  2348  B L57 U             32
317  9 170  SEG01  B     *                                          4  2353  B L56               33
318  9 180  SEG02  C     X1,ENDADR                                  7  2357  C 089 Q97           33
319  9 190         BU    SEG03                                      5  2364  B L25 /             33
320  9 200  SEG04  MLC   ENDADR,SEGADR                             7  2369  M Q97 Q44           33
321  9 210         MLC   LEVNO,ENTSYM-1                           7  2376  M Q76 Q22           33
322  9 220         MLC   OUTADR,X2                                  7  2383  M Q83 094           33
323  9 230         MLC   PAD,OUTFLD&3&X2                            7  2390  M Q26 ?Q9           34
324  9 240         MLC                                              1  2397  M                   34
325  9 250         A     &3,OUTADR                                  7  2398  A R20 Q83           34
326 10 010         MLC   @1@,OVFSW                                  7  2405  M R13 Q68           34
327 10 020         B     SEG01                                      4  2412  B L53               34
328 10 030  ENTRTN SBR   ENTR01&3                                   4  2416  H O03               34
329 10 040         MLC   @003@,X2                                   7  2420  M R29 094           34
330 10 050         MLC   @01@,QSW                                   7  2427  M R15 Q20           35
331 10 060         MLC   SVNM,NM&X2                                 7  2434  M Q64 RL6           35
332 10 070         B     ENTR05                                     4  2441  B M49               35
333 10 080  ENTR02 B     GTSYM                                      4  2445  B O19               35
334 10 090  ENTR05 C     CURNT,QUAL                                 7  2449  C Q32 Q58           35
335 10 100         BU    ENTR03                                     5  2456  B M90 /             35
336 10 110         B     GTSYM                                      4  2461  B O19               35
337 10 120         A     &3,X2                                      7  2465  A R20 094           36
338 10 130         MLC   CURNT,NM&X2                               7  2472  M Q32 RL6           36
339 10 140         A     &1,QSW                                     7  2479  A R19 Q20           36
340 10 150         B     ENTR02                                     4  2486  B M45               36
341 10 160  ENTR03 BWZ   ENTR04,SVNM-2,K                           8  2490  V N30 Q62 K         36
342 10 170         MLC   DOVSW,OVSW                                 7  2498  M T35 Q65           37
343 10 180         MLC   DTADR,TSTADR                               7  2505  M T14 Q47           37
344 10 190         MLC   DTCN,GCN                                   7  2512  M T08 Q61           37
345 10 200         MLC   DTEND,ENDADR                              7  2519  M T11 Q97           37
346 10 210         B     ENTR06                                     4  2526  B N58               37
347 10 220  ENTR04 MLC   PRADR,TSTADR                              7  2530  M T26 Q47           37
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          MLC   POVSW,OVSW                                7  2537  M T36 Q65           38
349 10 240          MLC   PRCN,GCN                                  7  2544  M T20 Q61           38
350 10 250          MLC   PREND,ENDADR                              7  2551  M T23 Q97           38
351 11 010  ENTR06  MLC   X2,NMADR                                  7  2558  M 094 Q53           38
352 11 020          MLC   @00000@,SVSW                              7  2565  M R35 Q70           38
353 11 030          MLC   NM&X2,QNAME                               7  2572  M RL6 Q74           39
354 11 040          MLC   ENDADR,SEGADR                            7  2579  M Q97 Q44           39
355 11 050          MLC   @01@,TQSW                                 7  2586  M R15 Q55           39
356 11 060          MLC   @003@,OUTADR                              7  2593  M R29 Q83           39
357 11 070  ENTR01  B     *                                         4  2600  B O03               39
358 11 080  CNRTN   SBR   CNR01&3                                   4  2604  H O18               39
359 11 090          A     &1,GCN                                    7  2608  A R19 Q61           40
360 11 100  CNR01   B     *                                         4  2615  B O18               40
361 11 110  GTSYM   SBR   GT01&3                                   4  2619  H O48               40
362 11 120          B     GETX                                      4  2623  B 335               40
363 11 130          DCW   CURNT                                     3  2629  Q32                 40
364 11 140          DCW   EOJ                                       3  2632  O92                 40
365 11 150  GT03    C     CURNT,CDSYM                               7  2633  C Q32 Q35           40
366 11 160          BE    GT02                                      5  2640  B O49 S             41
367 11 170  GT01    B     *                                         4  2645  B O48               41
368 11 180  GT02    MLC   @0@,CDSW                                 7  2649  M R30 Q94           41
369 11 190  GT04    B     PUTX                                      4  2656  B 363               41
370 11 200          DCW   CURNT                                     3  2662  Q32                 41
371 11 210          B     GETX                                      4  2663  B 335               41
372 11 220          DCW   CURNT                                     3  2669  Q32                 41
373 11 230          DCW   EOJ                                       3  2672  O92                 42
374 11 240          A     &1,CDSW                                   7  2673  A R19 Q94           42
375 11 250          BCE   GT03,CDSW,3                               8  2680  B O33 Q94 3         42
376 12 010          B     GT04                                      4  2688  B O56               42
377 12 020  EOJ     B     PUTX                                      4  2692  B 363               42
378 12 030          DCW   EOP                                       3  2698  Q18                 42
379 12 040          BCE   EOJ1,DOVSW,1                              8  2699  B P22 T35 1         42
380 12 050          BCE   EOJ1,POVSW,1                              8  2707  B P22 T36 1         43
381 12 060          B     SUPER                                     4  2715  B 351               43
382 12 070          DCW   @B09@                                     3  2721                      43
383 12 080  EOJ1    BSP   1                                         5  2722  U %U1 B             43
384 12 090          BSP   1                                         5  2727  U %U1 B             43
385 12 100          BSP   1                                         5  2732  U %U1 B             43
386 12 110          BSP   1                                         5  2737  U %U1 B             43
387 12 120          B     SUPER                                     4  2742  B 351               44
388 12 130          DCW   @B07@                                     3  2748                      44
389 12 140  MLTDEF  MLC   MLTSYM,TEMP                               7  2749  M Q90 Q41           44
390 12 150          B     OUTERR                                    4  2756  B P67               44
391 12 160  UNDEF   MLC   UNDSYM,TEMP                               7  2760  M Q93 Q41           44
392 12 170  OUTERR  MLC   @1@,DSW                                   7  2767  M R13 T42           44
393 12 180          B     PUTX                                      4  2774  B 363               44
394 12 190          DCW   TEMP                                      3  2780  Q41                 45
395 12 200          B     OUTCNS                                    4  2781  B !31               45
396 12 210          B     PUTX                                      4  2785  B 363               45
397 12 220          DCW   TEMP                                      3  2791  Q41                 45
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230  RTEST   BCE   TEST,TBSW,0                         8  2792  B T88 Q67 0         45
399 12 240  RTEST1  BCE   GTEST,CURNT,*                       8  2800  B T84 Q32 *         45
400 12 250          B     GTSYM                               4  2808  B O19               45
401 13 010          B     RTEST1                              4  2812  B Q00               46
402 13 020  EOP     DCW   @.EP@                               3  2818                      46
403 13 030  QSW     DCW   @00@                                2  2820                      46
404 13 040  ENTSYM  DCW   #3                                  3  2823                      46
405 13 050  PAD     DCW   @***@                               3  2826                      46
406 13 060  OUTSYM  DCW   #3                                  3  2829                      46
407 13 070  CURNT   DCW   #3                                  3  2832                      46
408 13 080  CDSYM   DCW   @.CD@                               3  2835                      47
409 13 090  SENV    DCW   @*91@                               3  2838                      47
410 13 100  TEMP    DCW   #3                                  3  2841                      47
411 13 110  SEGADR  DCW   #3                                  3  2844                      47
412 13 120  TSTADR  DCW   #3                                  3  2847                      47
413 13 130  NXGCN   DCW   #3                                  3  2850                      47
414 13 140  NMADR   DCW   #3                                  3  2853                      47
415 13 150  TQSW    DCW   @00@                                2  2855                      48
416 13 160  QUAL    DCW   @*32@                               3  2858                      48
417 13 170  GCN     DCW   #3                                  3  2861                      48
418 13 180  SVNM    DCW   #3                                  3  2864                      48
419 13 190  OVSW    DC    @0@                                 1  2865                      48
420 13 200  USW     DCW   @0@                                 1  2866                      48
421 13 210  TBSW    DC    @0@                                 1  2867                      48
422 13 220  OVFSW   DC    @0@                                 1  2868                      48
423 13 230  SVSW1   DC    @0@                                 1  2869                      48
424 13 240  SVSW    DC    @0@                                 1  2870                      48
425 13 250  LKSW    DC    @0@                                 1  2871                      48
426 14 010  QNAME   DCW   #3                                  3  2874                      48
427 14 020  LEVNO   DCW   @00@                                2  2876                      48
428 14 030          DC    @ @                                 1  2877                      49
429 14 040  CNAME   DCW   #3                                  3  2880                      49
430 14 050  OUTADR  DCW   #3                                  3  2883                      49
431 14 060  TABSYM  DCW   @.QQ@                               3  2886                      49
432 14 070  TSTCHR  DCW   @ @                                 1  2887                      49
433 14 080  MLTSYM  DCW   @.DM@                               3  2890                      50
434 14 090  UNDSYM  DCW   @.DU@                               3  2893                      50
435 14 100  CDSW    DCW   @0@                                 1  2894                      50
436 14 110  ENDADR  DCW   #3                                  3  2897                      50
437 14 120          DC    #9                                  9  2906                      50
438 14 130  SVTQSW  DCW   #2                                  2  2908                      50
439 14 140          LTORG                                          2909
                    DCW   @A@                                 1  2909            LIT     50
                          @R@                                 1  2910            LIT     50
                          @.D@                                2  2912            LIT     51
                          @1@                                 1  2913            LIT     51
                          @01@                                2  2915            LIT     51
                          @ @                                 1  2916            LIT     51
                          @00@                                2  2918            LIT     51
                          &1                                  1  2919            LIT     51
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                           &3                                          1  2920              LIT     51
                           @000@                                       3  2923              LIT     52
                           @***@                                       3  2926              LIT     52
                           @003@                                       3  2929              LIT     52
                           @0@                                         1  2930              LIT     52
       352                 @000000@                                    5  2935              LIT     52
440 14 150  NM      DC     @ @                                         1  2936                      52
441 14 160  OUTFLD EQU    NM&150                                         3086
442 14 170          DCW    @}@   GROUP MARK                            1  2937                      52
443 14 180          END                                                       / 000 080           53
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B09 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B09
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                            0089
 104  1 040  X2      EQU   94                                            0094
 105  1 050  X3      EQU   99                                            0099
 106  1 060  GETX    EQU   335                                           0335
 107  1 070  PUTX    EQU   363                                           0363
 108  1 080  SUPER   EQU   351                                           0351
 109  1 090  SPSW    EQU   1303                                          1303
 110  1 100  LV88SW  EQU   1304                                          1304
 111  1 110  DTVLSW  EQU   1305                                          1305
 112  1 120  SYSW    EQU   1340                                          1340
 113  1 130  DSW     EQU   1342                                          1342
 114  1 140          ORG   1400                                                 1400
 115  1 150  START   BCE   START1,DSW,1                             8   1400  B U20 T42 1          4
 116  1 160          BCE   START1,SYSW,1                           8   1408  B U20 T40 1          4
 117  1 170          B     INIT                                    4   1416  B U34                4
 118  1 180  START1  MLC   @B@,PTCARD                             7   1420  M K52 Y85            4
 119  1 190          MLC   @B@,EOJA                                7   1427  M K52 !82            4
 120  1 200  INIT    B     GTSYM                                   4   1434  B Y35                4
 121  1 210          B     PUTX                                    4   1438  B 363                5
 122  1 220          DCW   CURNT                                   3   1444  J14                  5
 123  1 230          C     CURNT,SENV                              7   1445  C J14 J68            5
 124  1 240          BU    INIT                                    5   1452  B U34 /              5
 125  1 250  SW1     B     INIPRT                                  4   1457  B Z37                5
 126  2 010  PTEST   B     PUTX                                    4   1461  B 363                5
 127  2 020          DCW   CURNT                                   3   1467  J14                  5
 128  2 030  GTEST   B     GTSYM                                   4   1468  B Y35                6
 129  2 040  TEST    C     CURNT,SPNOP                             7   1472  C J14 J08            6
 130  2 050          BU    LIST1                                   5   1479  B U96 /              6
 131  2 060  SW2     B     SPINPT                                  4   1484  B Z58                6
 132  2 070          B     GTSYM                                   4   1488  B Y35                6
 133  2 080          B     PRINT                                   4   1492  B W35                6
 134  2 090  LIST1   C     CURNT,LVOP                              7   1496  C J14 J20            6
 135  2 100          BU    LIST2                                   5   1503  B V24 /              7
 136  2 110  SW3     B     DTINPT                                  4   1508  B Z90                7
 137  2 120          B     PTGTSY                                  4   1512  B Z18                7
 138  2 130          B     PTGTSY                                  4   1516  B Z18                7
 139  2 140          B     PRINT                                   4   1520  B W35                7
 140  2 150  LIST2   C     CURNT,LBFOP                             7   1524  C J14 J11            7
 141  2 160          BU    LIST3                                   5   1531  B V55 /              7
 142  2 170  SW5     B     PRINPT                                  4   1536  B !29                8
 143  2 180          B     GTSYM                                   4   1540  B Y35                8
 144  2 190          B     PUTX                                    4   1544  B 363                8
 145  2 200          DCW   LBOP                                    3   1550  J17                  8
 146  2 210          B     PRINT                                   4   1551  B W35                8
 147  2 220  LIST3   C     CURNT,SFD                               7   1555  C J14 J71            8
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         BU    LIST4                                      5  1562  B V79 /             8
149  2 240  SW4    B     DTINPT                                     4  1567  B Z90               9
150  2 250         B     PTGTSY                                     4  1571  B Z18               9
151  3 010         B     PRINT                                      4  1575  B W35               9
152  3 020  LIST4  C     CURNT,MLTSYM                               7  1579  C J14 J29           9
153  3 030         BU    LIST5                                      5  1586  B V95 /             9
154  3 040         B     GTEST                                      4  1591  B U68               9
155  3 050  LIST5  C     CURNT,LSTOP                                7  1595  C J14 J74           9
156  3 060         BU    LIST6                                      5  1602  B W19 /            10
157  3 070         B     GTSYM                                      4  1607  B Y35              10
158  3 080         B     ENTFLD                                     4  1611  B X38              10
159  3 090         B     GTEST                                      4  1615  B U68              10
160  3 100  LIST6  C     CURNT,TBOP                                 7  1619  C J14 J77          10
161  3 110         BU    PTEST                                      5  1626  B U61 /            10
162  3 120         B     EOJA                                       4  1631  B !82              10
163  3 130  PRINT  C     CURNT,@   @                                7  1635  C J14 K55          11
164  3 140         BE    PTEST                                      5  1642  B U61 S            11
165  3 150         CS    332                                        4  1647  / 332              11
166  3 160         CS                                               1  1651  /                  11
167  3 170         MLC   CURNT,235                                  7  1652  M J14 235          11
168  3 180         MCS   CDSV2,230                                 7  1659  Z J02 230          11
169  3 190         B     PTGTSY                                     4  1666  B Z18              11
170  3 200         C     CURNT,SSCT                                 7  1670  C J14 J26          12
171  3 210         BU    PRT1                                       5  1677  B W93 /            12
172  3 220         MLC   SECTN,280                                  7  1682  M K51 280          12
173  3 230         B     PTGTSY                                     4  1689  B Z18              12
174  3 240  PRT1   B     GTSYM                                      4  1693  B Y35              12
175  3 250         B     ENTFLD                                     4  1697  B X38              12
176  4 010         MCM   FIELD,239                                 7  1701  P J30 239          12
177  4 020         SBR   X2                                         4  1708  H 094              13
178  4 030         MLC   @  @,0&X2                                 7  1712  M K57 0!0          13
179  4 040         W                                                1  1719  2                  13
180  4 050         BCV   PMSG                                       5  1720  B X29 @            13
181  4 060         B     GTEST                                      4  1725  B U68              13
182  4 070  PMSG   CCB   GTEST,1                                   5  1729  F U68 1            13
183  4 080         B     TEST                                       4  1734  B U72              13
184  4 090  ENTFLD SBR   ENTF01&3                                  4  1738  H Y16              14
185  4 100         MLC   CURNT,SYM                                 7  1742  M J14 J65          14
186  4 110         MLC   @002@,X2                                  7  1749  M K60 094          14
187  4 120         B     GTSYM                                      4  1756  B Y35              14
188  4 130         B     ENTF03                                     4  1760  B X87              14
189  4 140  ENTF02 B     GTSYM                                      4  1764  B Y35              14
190  4 150         C     CURNT,SYM                                  7  1768  C J14 J65          14
191  4 160         BE    ENTF04                                     5  1775  B X98 S            15
192  4 170         A     &3,X2                                      7  1780  A K61 094          15
193  4 180  ENTF03 MLC   CURNT,FIELD&X2                            7  1787  M J14 JL0          15
194  4 190         B     ENTF02                                     4  1794  B X64              15
195  4 200  ENTF04 BCE   ENTF05,FIELD&X2,                          8  1798  B Y17 JL0          15
196  4 210         MLC   @|@,FIELD&1&X2                           7  1806  M K62 JL1          15
197  4 220  ENTF01 B     *                                          4  1813  B Y16              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230  ENTF05 S     &1,X2                                      7  1817  S K63 094           16
199  4 240         MZ    @ @,X2                                     7  1824  Y K64 094           16
200  4 250         B     ENTF04                                     4  1831  B X98               16
201  5 010  GTSYM  SBR   GT01&3                                     4  1835  H Y64               16
202  5 020  GT03   B     GETX                                       4  1839  B 335               16
203  5 030         DCW   CURNT                                      3  1845  J14                 16
204  5 040         DCW   EOJ                                        3  1848  !61                 17
205  5 050         C     CURNT,CDSYM                                7  1849  C J14 J05           17
206  5 060         BE    GT02                                       5  1856  B Y65 S             17
207  5 070  GT01   B     *                                          4  1861  B Y64               17
208  5 080  GT02   B     GETX                                       4  1865  B 335               17
209  5 090         DCW   CDSV1                                      3  1871  !99                 17
210  5 100         DCW   EOJ                                        3  1874  !61                 17
211  5 110         B     GETX                                       4  1875  B 335               18
212  5 120         DCW   CDSV2                                      3  1881  J02                 18
213  5 130         DCW   EOJ                                        3  1884  !61                 18
214  5 140  PTCARD NOP   GT04                                       4  1885  N Y93               18
215  5 150         B     GT03                                       4  1889  B Y39               18
216  5 160  GT04   B     PUTX                                       4  1893  B 363               18
217  5 170         DCW   CDSYM                                     3  1899  J05                 18
218  5 180         B     PUTX                                       4  1900  B 363               19
219  5 190         DCW   CDSV1                                      3  1906  !99                 19
220  5 200         B     PUTX                                       4  1907  B 363               19
221  5 210         DCW   CDSV2                                      3  1913  J02                 19
222  5 220         B     GT03                                       4  1914  B Y39               19
223  5 230  PTGTSY SBR   PTGT01&3                                   4  1918  H Z36               19
224  5 240         B     PUTX                                       4  1922  B 363               19
225  5 250         DCW   CURNT                                      3  1928  J14                 20
226  6 010         B     GTSYM                                      4  1929  B Y35               20
227  6 020  PTGT01 B     *                                          4  1933  B Z36               20
228  6 030  INIPRT CC    1                                          2  1937  F 1                 20
229  6 040         CS    332                                        4  1939  / 332               20
230  6 050         CS                                               1  1943  /                   20
231  6 060         MLC   DCTMSG,258                                 7  1944  M J99 258           20
232  6 070         W                                                1  1951  2                   21
233  6 080         CC    J                                          2  1952  F J                 21
234  6 090         B     GTEST                                      4  1954  B U68               21
235  6 100  SPINPT SBR   SPIN01&3                                   4  1958  H Z89               21
236  6 110         CC    J                                          2  1962  F J                 21
237  6 120         CS    332                                        4  1964  / 332               21
238  6 130         CS                                               1  1968  /                   21
239  6 140         MLC   SPMSG,235                                  7  1969  M K14 235           22
240  6 150         W                                                1  1976  2                   22
241  6 160         CC    J                                          2  1977  F J                 22
242  6 170         MLC   @N@,SW2                                    7  1979  M K65 U84           22
243  6 180  SPIN01 B     *                                          4  1986  B Z89               22
244  6 190  DTINPT SBR   DTIN01&3                                   4  1990  H !28               22
245  6 200         CC    J                                          2  1994  F J                 22
246  6 210         CS    332                                        4  1996  / 332               23
247  6 220         CS                                               1  2000  /                   23
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          MLC   DTMSG,235                                 7  2001  M K29 235           23
249  6 240          W                                               1  2008  2                   23
250  6 250          CC    J                                         2  2009  F J                 23
251  7 010          MLC   @N@,SW3                                   7  2011  M K65 V08           23
252  7 020          MLC   @N@,SW4                                   7  2018  M K65 V67           23
253  7 030  DTIN01  B     *                                         4  2025  B !28               24
254  7 040  PRINPT  SBR   PRIN01&3                                  4  2029  H !60               24
255  7 050          CC    J                                         2  2033  F J                 24
256  7 060          CS    332                                       4  2035  / 332               24
257  7 070          CS                                              1  2039  /                   24
258  7 080          MLC   PRMSG,235                                 7  2040  M K44 235           24
259  7 090          W                                               1  2047  2                   24
260  7 100          CC    J                                         2  2048  F J                 25
261  7 110          MLC   @N@,SW5                                   7  2050  M K65 V36           25
262  7 120  PRIN01  B     *                                         4  2057  B !60               25
263  7 130  EOJ     B     PUTX                                      4  2061  B 363               25
264  7 140          DCW   EOP                                       3  2067  !96                 25
265  7 150          B     SUPER                                     4  2068  B 351               25
266  7 160          DCW   @C01@                                     3  2074                      25
267  7 170  EOJ1    B     SUPER                                     4  2075  B 351               26
268  7 180          DCW   @B10@                                     3  2081                      26
269  7 190  EOJA    NOP   EOJ1                                      4  2082  N !75               26
270  7 200          B     GTSYM                                     4  2086  B Y35               26
271  7 210          B     EOJA                                      4  2090  B !82               26
272  7 220  EOP     DCW   @.EP@                                     3  2096                      26
273  7 230  CDSV1   DCW   #3                                        3  2099                      26
274  7 240  CDSV2   DC    #3                                        3  2102                      27
275  7 250  CDSYM   DCW   @.CD@                                     3  2105                      27
276  8 010  SPNOP   DCW   @.SP@                                     3  2108                      27
277  8 020  LBFOP   DCW   @.LF@                                     3  2111                      27
278  8 030  CURNT   DCW   #3                                        3  2114                      27
279  8 040  LBOP    DCW   @.LB@                                     3  2117                      28
280  8 050  LVOP    DCW   @.LV@                                     3  2120                      28
281  8 060  FDOP    DCW   @/26@                                     3  2123                      28
282  8 070  SSCT    DCW   @*09@                                     3  2126                      28
283  8 080  MLTSYM  DCW   @.MT@                                     3  2129                      28
284  8 090  FIELD   DC    @ @                                       1  2130                      28
285  8 100          DC    #32                                      32  2162                      29
286  8 110  SYM     DCW   #3                                        3  2165                      29
287  8 120  SENV    DCW   @*91@                                     3  2168                      29
288  8 130  SFD     DCW   @/26@                                     3  2171                      30
289  8 140  LSTOP   DCW   @.LT@                                     3  2174                      30
290  8 150  TBOP    DCW   @.TO@                                     3  2177                      30
291  8 160  DCTMSG  DCW   @** COBOL DICTIONARY **@                 22  2199                      30
292  8 170  SPMSG   DCW   @SPECIAL NAMES  @                        15  2214                      31
293  8 180  DTMSG   DCW   @DATA NAMES     @                        15  2229                      31
294  8 190  PRMSG   DCW   @PROCEDURE NAMES@                        15  2244                      32
295  8 200  SECTN   DCW   @SECTION@                                 7  2251                      32
296  8 210          LTORG                                                   2252
                    DCW   @B@                                       1  2252             LIT     32
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @   @                                        3  2255              LIT     32
                          @  @                                         2  2257              LIT     32
                          @002@                                        3  2260              LIT     32
                          &3                                           1  2261              LIT     32
                          @|@                                          1  2262              LIT     33
                          &1                                           1  2263              LIT     33
                          @ @                                          1  2264              LIT     33
                          @N@                                          1  2265              LIT     33
 297  8 220         DCW   @}@                                          1  2266                      33
 298  8 230         END                                                     / 000 080           34
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - B10 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - B10
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                              0089
 104  1 040  X2      EQU   94                                              0094
 105  1 050  X3      EQU   99                                              0099
 106  1 060  GETX    EQU   335                                             0335
 107  1 070  SUPER   EQU   351                                             0351
 108  1 080  DUMP    EQU   359                                             0359
 109  1 090  PUTX    EQU   363                                             0363
 110  1 100  DTADR   EQU   1314                                            1314
 111  1 110  SYSW    EQU   1340                                            1340
 112  1 120  DSW     EQU   1342                                            1342
 113  1 130          ORG   1350                                                  1350
 114  1 140  INIT    MLC   DTADR,X3                                    7  1350  M T14 099           4
 115  1 150          MLC   @00@,OVSW                                   7  1357  M Q81 P87           4
 116  1 160          BCE   INTTAB,DSW,1                                8  1364  B T79 T42 1         4
 117  1 170          MLC   @B@,DLQUAL                                  7  1372  M Q82 T95           4
 118  1 180  INTTAB  B     GTSYM                                       4  1379  B N61               4
 119  1 190  INTTB1  C     CURNT,QULSYM                                7  1383  C P95 Q16           5
 120  1 200          BU    TAB01                                       5  1390  B U10 /             5
 121  1 210  DLQUAL  NOP   DLENTY                                      4  1395  N V16               5
 122  1 220          MLC   @ @,TAG                                     7  1399  M Q83 R79           5
 123  1 230          B     ENTER                                       4  1406  B U40               5
 124  1 240  TAB01   C     CURNT,MLTSYM                                7  1410  C P95 Q10           5
 125  1 250          BU    TAB02                                       5  1417  B U33 /             5
 126  2 010          MLC   @&@,TAG                                     7  1422  M Q84 R79           6
 127  2 020          B     ENTER                                       4  1429  B U40               6
 128  2 030  TAB02   MLC   @-@,TAG                                     7  1433  M Q85 R79           6
 129  2 040  ENTER   BCE   OUTENT,OVFSW,1                             8  1440  B V51 P86 1         6
 130  2 050          B     GTSYM                                       4  1448  B N61               6
 131  2 060          MLC   CURNT,CNAME                                 7  1452  M P95 R82           6
 132  2 070          B     GTSYM                                       4  1459  B N61               7
 133  2 080          B     ENTFLD                                      4  1463  B L47               7
 134  2 090          LCA   FIELD&1&X2,SRNM                             7  1467  L RJ2 R78           7
 135  2 100          LCA   CNAME,0&X3                                  7  1474  L R82 0?0           7
 136  2 110          SBR   X3                                          4  1481  H 099               7
 137  2 120          BCE   OVFTST,OVCHR,|                             8  1485  B U97 ?22 |         7
 138  2 130          B     OVCOND                                      4  1493  B V05               7
 139  2 140  OVFTST  BWZ   INTTAB,OVCHR,1                             8  1497  V T79 ?22 1         8
 140  2 150  OVCOND  MLC   @1@,OVFSW                                  7  1505  M Q86 P86           8
 141  2 160          B     INTTAB                                      4  1512  B T79               8
 142  2 170  DLENTY  B     GTSYM                                       4  1516  B N61               8
 143  2 180          B     GTSYM                                       4  1520  B N61               8
 144  2 190          MLC   CURNT,SYM                                   7  1524  M P95 P98           8
 145  2 200  DLENT1  B     GTSYM                                       4  1531  B N61               8
 146  2 210          C     CURNT,SYM                                   7  1535  C P95 P98           9
 147  2 220          BU    DLENT1                                      5  1542  B V31 /             9
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     INTTAB                                     4  1547  B T79               9
149  2 240  OUTENT MLC   @1@,OVSW                                  7  1551  M Q86 P87           9
150  2 250         MLC   @B@,PTCARD                                7  1558  M Q82 O11           9
151  3 010  OUTBOP B     TABOUT                                     4  1565  B W08               9
152  3 020         B     PTGTSY                                     4  1569  B O44               9
153  3 030         B     PTGTSY                                     4  1573  B O44              10
154  3 040         MLC   CURNT,SYM                                  7  1577  M P95 P98          10
155  3 050  OUTET1 B     PTGTSY                                     4  1584  B O44              10
156  3 060         C     CURNT,SYM                                  7  1588  C P95 P98          10
157  3 070         BU    OUTET1                                     5  1595  B V84 /            10
158  3 080         B     PTGTSY                                     4  1600  B O44              10
159  3 090         B     INTTB1                                     4  1604  B T83              10
160  3 100  TABOUT MLC   @N@,OUTBOP                                7  1608  M Q87 V65          11
161  3 110         B     PUTX                                       4  1615  B 363              11
162  3 120         DCW   TBOP                                       3  1621  Q19                11
163  3 130         B     OUTBOP                                     4  1622  B V65              11
164  3 140  EJINT  B     PUTX                                       4  1626  B 363              11
165  3 150         DCW   EOP                                        3  1632  Q22                11
166  3 160  SW1    B     INPRT                                      4  1633  B O63              11
167  3 170         MLC   @N@,RTEOJ                                  7  1637  M Q87 P24          12
168  3 180         MLC   X3,ENDADR                                  7  1644  M 099 Q01          12
169  3 190         B     GTEST                                      4  1651  B W62              12
170  3 200  PTEST  B     PUTX                                       4  1655  B 363              12
171  3 210         DCW   CURNT                                      3  1661  P95                12
172  3 220  GTEST  B     GTSYM                                      4  1662  B N61              12
173  3 230  TEST   C     CURNT,TBOP                                 7  1666  C P95 Q19          12
174  3 240         BE    EOJ1                                       5  1673  B P61 S            13
175  3 250         C     CURNT-1,@.D@                               7  1678  C P94 Q89          13
176  4 010         BU    TEST1                                      5  1685  B Z74 /            13
177  4 020         B     TESTQ,OVSW,1                               8  1690  B Y68 P87 1        13
178  4 030         BCE   TESTQ1,CURNT,M                            8  1698  B X17 P95 M        13
179  4 040         MLC   UNDMSG,240                                 7  1706  M Q32 240          14
180  4 050         B     TESTQ4                                     4  1713  B X24              14
181  4 060  TESTQ1 MLC   MLTMSG,240                                 7  1717  M Q37 240          14
182  4 070  TESTQ4 B     GTSYM                                      4  1724  B N61              14
183  4 080         MLC   @0@,QLSW                                   7  1728  M Q90 P89          14
184  4 090         C     CURNT-1,@.D@                               7  1735  C P94 Q89          14
185  4 100         BE    GTEST                                      5  1742  B W62 S            15
186  4 110         C     CURNT,QUAL                                 7  1747  C P95 P92          15
187  4 120         BU    TESTQ6                                     5  1754  B X70 /            15
188  4 130         MLC   @1@,QLSW                                   7  1759  M Q86 P89          15
189  4 140         B     GTSYM                                      4  1766  B N61              15
190  4 150  TESTQ6 C     CURNT,CNOP                                 7  1770  C P95 Q47          15
191  4 160         BE    TESTQ5                                     5  1777  B Y60 S            16
192  4 170         B     LKNAME                                     4  1782  B K71              16
193  4 180         BCE   TESTQ4,LKSW,0                            8  1786  B X24 P88 0        16
194  4 190         C     0&X1,0&X1                                  7  1794  C 0|0 0|0          16
195  4 200         SAR   X1                                         4  1801  Q 089              16
196  4 210         MCM   1&X1,FIELD                                 7  1805  P 0|1 R11          16
197  4 220  TESTQ9 MCM   FIELD,250                                  7  1812  P R11 250          17
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          SBR   X2                                   4  1819  H 094               17
199  4 240          MLC   @  @,0&X2                            7  1823  M Q92 0!0           17
200  4 250          BCE   TESTQ8,QLSW,0                        8  1830  B Y45 P89 0         17
201  5 010          MLC   @/@,1&X2                             7  1838  M Q93 0!1           17
202  5 020  TESTQ8  MCS   CDSV2,230                            7  1845  Z Q44 230           18
203  5 030          B     PRINT                                4  1852  B P00               18
204  5 040          B     TESTQ4                               4  1856  B X24               18
205  5 050  TESTQ5  B     ENTFLD                               4  1860  B L47               18
206  5 060          B     TESTQ9                               4  1864  B Y12               18
207  5 070  TESTQ   B     PTGTSY                               4  1868  B O44               18
208  5 080  TESTQ2  C     CURNT,CNOP                           7  1872  C P95 Q47           18
209  5 090          BU    TSTQ11                               5  1879  B Z04 /             19
210  5 100  TSTQ12  B     PTGTSY                               4  1884  B O44               19
211  5 110          C     CURNT,CNOP                           7  1888  C P95 Q47           19
212  5 120          BU    TSTQ12                               5  1895  B Y84 /             19
213  5 130          B     PTGTSY                               4  1900  B O44               19
214  5 140  TSTQ11  C     CURNT-1,@.D@                         7  1904  C P94 Q89           19
215  5 150          BE    PTEST                                5  1911  B W55 S             19
216  5 160          C     CURNT,QUAL                           7  1916  C P95 P92           20
217  5 170          BU    TSTQ10                               5  1923  B Z36 /             20
218  5 180  TESTQ3  B     PTGTSY                               4  1928  B O44               20
219  5 190          B     TESTQ2                               4  1932  B Y72               20
220  5 200  TSTQ10  B     LKNAME                               4  1936  B K71               20
221  5 210          BCE   TESTQ3,LKSW,0                        8  1940  B Z28 P88 0         20
222  5 220          C     0&X1,0&X1                            7  1948  C 0|0 0|0           20
223  5 230          SAR   X1                                   4  1955  Q 089               21
224  5 240          MCM   1&X1,FIELD                           7  1959  P 0|1 R11           21
225  5 250          B     OUTNM                                4  1966  B M44               21
226  6 010          B     TESTQ3                               4  1970  B Z28               21
227  6 020  TEST1   BCE   PTEST,SYSW,0                         8  1974  B W55 T40 0         21
228  6 030          C     CURNT-2,@A@                          7  1982  C P93 Q94           21
229  6 040          BH    TEST2                                5  1989  B J25 U             21
230  6 050          C     CURNT-2,@R@                          7  1994  C P93 Q95           22
231  6 060          BL    TEST2                                5  2001  B J25 T             22
232  6 070          BCE   TEST3,OVSW,1                         8  2006  B J81 P87 1         22
233  6 080          B     LKNAME                               4  2014  B K71               22
234  6 090          BCE   PTEST,LKSW,0                         8  2018  B W55 P88 0         22
235  6 100          MLC   0&X1,TSTCHR                          7  2026  M 0|0 Q38           22
236  6 110          BWZ   PTEST,TSTCHR,2                       8  2033  V W55 Q38 2         23
237  6 120          C     0&X1,0&X1                            7  2041  C 0|0 0|0           23
238  6 130          SAR   X1                                   4  2048  Q 089               23
239  6 140          MCM   1&X1,FIELD                           7  2052  P 0|1 R11           23
240  6 150          BWZ   TEST4,TSTCHR,B                       8  2059  V !78 Q38 B         23
241  6 160  TEST6   MLC   UNDMSG,PRMSG                        7  2067  M Q32 Q27           24
242  6 170          B     TEST5                                4  2074  B !85               24
243  6 180  TEST4   MLC   MLTMSG,PRMSG                        7  2078  M Q37 Q27           24
244  6 190  TEST5   MLC   PRMSG,240                           7  2085  M Q27 240           24
245  6 200          MCS   CDSV2,230                            7  2092  Z Q44 230           24
246  6 210          MCM   FIELD,245                           7  2099  P R11 245           24
247  6 220          SBR   X2                                   4  2106  H 094               25
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         MLC   @  @,0&X2                                7  2110  M Q92 0!0           25
249  6 240         B     PRINT                                    4  2117  B P00               25
250  6 250         B     GTEST                                    4  2121  B W62               25
251  7 010  TEST2  BCE   PTEST,OVSW,1                             8  2125  B W55 P87 1         25
252  7 020         C     CURNT,MLTSYM                             7  2133  C P95 Q10           25
253  7 030         BU    TEST7                                    5  2140  B J57 /             25
254  7 040         B     GTSYM                                    4  2145  B N61               26
255  7 050         B     ENTFLD                                   4  2149  B L47               26
256  7 060         B     TEST4                                    4  2153  B !78               26
257  7 070  TEST7  C     CURNT,UNDSYM                             7  2157  C P95 Q13           26
258  7 080         BU    PTEST                                    5  2164  B W55 /             26
259  7 090         B     GTSYM                                    4  2169  B N61               26
260  7 100         B     ENTFLD                                   4  2173  B L47               26
261  7 110         B     TEST6                                    4  2177  B !67               27
262  7 120  TEST3  B     LKNAME                                   4  2181  B K71               27
263  7 130         BCE   PTEST,LKSW,0                            8  2185  B W55 P88 0         27
264  7 140         MLC   0&X1,TSTCHR                            7  2193  M 0|0 Q38           27
265  7 150         BWZ   TEST8,TSTCHR,B                         8  2200  V K31 Q38 B         27
266  7 160         BWZ   TEST9,TSTCHR,K                         8  2208  V K20 Q38 K         27
267  7 170         B     PTEST                                    4  2216  B W55               28
268  7 180  TEST9  MLC   UNDSYM,SYM                             7  2220  M Q13 P98           28
269  7 190         B     TEST10                                   4  2227  B K38               28
270  7 200  TEST8  MLC   MLTSYM,SYM                             7  2231  M Q10 P98           28
271  7 210  TEST10 B     PUTX                                     4  2238  B 363               28
272  7 220         DCW   SYM                                      3  2244  P98                 28
273  7 230         C     0&X1,0&X1                                7  2245  C 0|0 0|0           28
274  7 240         SAR   X1                                       4  2252  Q 089               29
275  7 250         MCM   1&X1,FIELD                              7  2256  P 0|1 R11           29
276  8 010         B     OUTNM                                    4  2263  B M44               29
277  8 020         B     GTEST                                    4  2267  B W62               29
278  8 030  LKNAME SBR   LK05&3                                  4  2271  H L46               29
279  8 040         MLC   @0@,LKSW                                 7  2275  M Q90 P88           29
280  8 050         MLC   DTADR,X1                                7  2282  M T14 089           29
281  8 060  LK01   C     X1,ENDADR                                7  2289  C 089 Q01           30
282  8 070         BE    LK05                                     5  2296  B L43 S             30
283  8 080         C     0&X1,CURNT                               7  2301  C 0|0 P95           30
284  8 090         SAR   X1                                       4  2308  Q 089               30
285  8 100         BU    LK04                                     5  2312  B L28 /             30
286  8 110         MLC   @1@,LKSW                                 7  2317  M Q86 P88           30
287  8 120         B     LK05                                     4  2324  B L43               30
288  8 130  LK04   C     0&X1,0&X1                                7  2328  C 0|0 0|0           31
289  8 140         SAR   X1                                       4  2335  Q 089               31
290  8 150         B     LK01                                     4  2339  B K89               31
291  8 160  LK05   B     *                                        4  2343  B L46               31
292  8 170  ENTFLD SBR   ENTF01&3                                 4  2347  H M25               31
293  8 180         MLC   CURNT,SYM                                7  2351  M P95 P98           31
294  8 190         MLC   @002@,X2                                7  2358  M Q98 094           31
295  8 200         B     GTSYM                                    4  2365  B N61               32
296  8 210         B     ENTF03                                   4  2369  B L96               32
297  8 220  ENTF02 B     GTSYM                                    4  2373  B N61               32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          C     CURNT,SYM                                 7  2377  C P95 P98           32
299  8 240          BE    ENTF04                                    5  2384  B M07 S             32
300  8 250          A     &3,X2                                     7  2389  A Q99 094           32
301  9 010  ENTF03  MLC   CURNT,FIELD&X2                            7  2396  M P95 RJ1           32
302  9 020          B     ENTF02                                    4  2403  B L73               33
303  9 030  ENTF04  BCE   ENTF05,FIELD&X2,                         8  2407  B M26 RJ1           33
304  9 040          MLC   @|@,FIELD&1&X2                           7  2415  M R00 RJ2           33
305  9 050  ENTF01  B     *                                         4  2422  B M25               33
306  9 060  ENTF05  S     &1,X2                                     7  2426  S R01 094           33
307  9 070          MZ    @ @,X2                                    7  2433  Y Q83 094           33
308  9 080          B     ENTF04                                    4  2440  B M07               34
309  9 090  OUTNM   SBR   OUTNM1&3                                 4  2444  H N60               34
310  9 100          B     PUTX                                      4  2448  B 363               34
311  9 110          DCW   CNOP                                     3  2454  Q47                 34
312  9 120          MLC   @000@,X2                                  7  2455  M R04 094           34
313  9 130  OUTNM2  MLC   @   @,OUTSYM                             7  2462  M R07 Q04           34
314  9 140          MLC   @000@,X3                                 7  2469  M R04 099           34
315  9 150  OUTNM3  BCE   OUTNMX,FIELD&X2,|                       8  2476  B N35 RJ1 |         35
316  9 160          MZ    FIELD&X2,OUTSYM-2&X3                      7  2484  Y RJ1 Q?2           35
317  9 170          MN    FIELD&X2,OUTSYM-2&X3                      7  2491  D RJ1 Q?2           35
318  9 180          A     &1,X2                                     7  2498  A R01 094           35
319  9 190          A     &1,X3                                     7  2505  A R01 099           35
320  9 200          C     X3,@003@                                  7  2512  C 099 R10           36
321  9 210          BU    OUTNM3                                    5  2519  B M76 /             36
322  9 220          B     PUTX                                      4  2524  B 363               36
323  9 230          DCW   OUTSYM                                   3  2530  Q04                 36
324  9 240          B     OUTNM2                                    4  2531  B M62               36
325  9 250  OUTNMX  BCE   OUTNM4,X3,0                              8  2535  B N50 099 0         36
326 10 010          B     PUTX                                      4  2543  B 363               36
327 10 020          DCW   OUTSYM                                   3  2549  Q04                 37
328 10 030  OUTNM4  B     PUTX                                      4  2550  B 363               37
329 10 040          DCW   CNOP                                     3  2556  Q47                 37
330 10 050  OUTNM1  B     *                                         4  2557  B N60               37
331 10 060  GTSYM   SBR   GT01&3                                   4  2561  H N90               37
332 10 070  GT08    B     GETX                                      4  2565  B 335               37
333 10 080          DCW   CURNT                                    3  2571  P95                 37
334 10 090          DCW   RTEOJ                                    3  2574  P24                 38
335 10 100  GT03    C     CURNT,CDSYM                               7  2575  C P95 Q07           38
336 10 110          BE    GT02                                      5  2582  B N91 S             38
337 10 120  GT01    B     *                                         4  2587  B N90               38
338 10 130  GT02    B     GETX                                      4  2591  B 335               38
339 10 140          DCW   CDSV1                                    3  2597  Q41                 38
340 10 150          DCW   RTEOJ                                    3  2600  P24                 38
341 10 160          B     GETX                                      4  2601  B 335               39
342 10 170          DCW   CDSV2                                    3  2607  Q44                 39
343 10 180          DCW   RTEOJ                                    3  2610  P24                 39
344 10 190  PTCARD  NOP   GT04                                     4  2611  N O19               39
345 10 200          B     GT08                                      4  2615  B N65               39
346 10 210  GT04    B     PUTX                                      4  2619  B 363               39
347 10 220          DCW   CDSYM                                    3  2625  Q07                 39
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          B     PUTX                                      4  2626  B 363               40
349 10 240          DCW   CDSV1                                     3  2632  Q41                 40
350 10 250          B     PUTX                                      4  2633  B 363               40
351 11 010          DCW   CDSV2                                     3  2639  Q44                 40
352 11 020          B     GT08                                      4  2640  B N65               40
353 11 030  PTGTSY  SBR   PTGT01&3                                  4  2644  H O62               40
354 11 040          B     PUTX                                      4  2648  B 363               40
355 11 050          DCW   CURNT                                     3  2654  P95                 41
356 11 060          B     GTSYM                                     4  2655  B N61               41
357 11 070  PTGT01  B     *                                         4  2659  B O62               41
358 11 080  INPRT   SBR   INP01&3                                  4  2663  H O99               41
359 11 090          CC    1                                         2  2667  F 1                 41
360 11 100          CS    332                                       4  2669  / 332               41
361 11 110          CS                                              1  2673  /                   41
362 11 120          MLC   DIAGMG,250                               7  2674  M Q63 250           42
363 11 130          W                                               1  2681  2                   42
364 11 140          CS    332                                       4  2682  / 332               42
365 11 150          CS                                              1  2686  /                   42
366 11 160          CC    K                                         2  2687  F K                 42
367 11 170          MLC   @N@,SW1                                   7  2689  M Q87 W33           42
368 11 180  INP01   B     *                                         4  2696  B O99               42
369 11 190  PRINT   SBR   PRT01&3                                  4  2700  H P18               43
370 11 200          W                                               1  2704  2                   43
371 11 210          CS    332                                       4  2705  / 332               43
372 11 220          CS                                              1  2709  /                   43
373 11 230          BCV   PMSG                                      5  2710  B P19 @             43
374 11 240  PRT01   B     *                                         4  2715  B P18               43
375 11 250  PMSG    CCB   PRT01,1                                   5  2719  F P15 1             43
376 12 010  RTEOJ   B     EJINT                                     4  2724  B W26               44
377 12 020  EOJ     BCE   EOJ1,OVSW,1                               8  2728  B P61 P87 1         44
378 12 030          CC    1                                         2  2736  F 1                 44
379 12 040          MLC   DISMSG,250                               7  2738  M Q79 250           44
380 12 050          B     PRINT                                     4  2745  B P00               44
381 12 060          CC    1                                         2  2749  F 1                 44
382 12 070          RWD   1                                         5  2751  U %U1 R             44
383 12 080          H                                               1  2756  .                   45
384 12 090          B     *-4                                       4  2757  B P56               45
385 12 100  EOJ1    MLC   @N@,PTCARD                                7  2761  M Q87 O11           45
386 12 110          MLC   @B@,RTEOJ                                 7  2768  M Q82 P24           45
387 12 120          MLC   @B@,OUTBOP                               7  2775  M Q82 V65           45
388 12 130          B     INIT                                      4  2782  B T50               45
389 12 140  OVFSW   DCW   @0@                                       1  2786                      45
390 12 150  OVSW    DC    @0@                                       1  2787                      46
391 12 160  LKSW    DCW   @0@                                       1  2788                      46
392 12 170  QLSW    DCW   @0@                                       1  2789                      46
393 12 180  QUAL    DCW   @*32@                                     3  2792                      46
394 12 190  CURNT   DCW   #3                                        3  2795                      46
395 12 200  SYM     DCW   #3                                        3  2798                      47
396 12 210  ENDADR  DCW   #3                                        3  2801                      47
397 12 220  OUTSYM  DCW   #3                                        3  2804                      47
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  CDSYM   DCW   @.CD@                                     3  2807                      47
399 12 240  MLTSYM  DCW   @.MT@                                     3  2810                      47
400 12 250  UNDSYM  DCW   @.UN@                                     3  2813                      47
401 13 010  QULSYM  DCW   @.QN@                                     3  2816                      47
402 13 020  TBOP    DCW   @.TO@                                     3  2819                      48
403 13 030  EOP     DCW   @.EP@                                     3  2822                      48
404 13 040  PRMSG   DCW   #5                                        5  2827                      48
405 13 050  UNDMSG  DCW   @UNDEF@                                   5  2832                      48
406 13 060  MLTMSG  DCW   @MULT @                                   5  2837                      48
407 13 070  TSTCHR  DCW   @0@                                       1  2838                      48
408 13 080  CDSV1   DCW   #3                                        3  2841                      48
409 13 090  CDSV2   DC    #3                                        3  2844                      49
410 13 100  CNOP    DCW   @.NM@                                     3  2847                      49
411 13 110  DIAGMG  DCW   @NAME DIAGNOSTICS@                       16  2863                      49
412 13 120  DISMSG  DCW   @RUN DISCONTINUED@                       16  2879                      49
413 13 130          LTORG                                                 2880
                    DCW   @00@                                      2  2881             LIT      50
                          @B@                                       1  2882             LIT      50
                          @ @                                       1  2883             LIT      50
                          @&@                                       1  2884             LIT      50
                          @-@                                       1  2885             LIT      50
                          @1@                                       1  2886             LIT      50
                          @N@                                       1  2887             LIT      50
                          @.D@                                      2  2889             LIT      51
                          @0@                                       1  2890             LIT      51
                          @  @                                      2  2892             LIT      51
                          @/@                                       1  2893             LIT      51
                          @A@                                       1  2894             LIT      51
                          @R@                                       1  2895             LIT      51
                          @002@                                     3  2898             LIT      51
                          &3                                        1  2899             LIT      52
                          @|@                                       1  2900             LIT      52
                          &1                                        1  2901             LIT      52
                          @000@                                     3  2904             LIT      52
                          @   @                                     3  2907             LIT      52
                          @003@                                     3  2910             LIT      52
414 13 140  FIELD   DCW   @ @                                       1  2911                      52
415 13 150          DC    #33                                      33  2944                      53
416 13 160          DC    #33                                      33  2977                      54
417 13 170  SRNM    DC    @ @                                       1  2978                      54
418 13 180  TAG     DC    @ @                                       1  2979                      54
419 13 190  CNAME   DC    #3                                        3  2982                      54
420 13 200          ORG   *&39                                                3022
421 13 210  OVCHR   DCW   @|@                                       1  3022                      55
422 13 220          DCW   @}@                                       1  3023                      55
423 13 230          END   INIT                                              / T50 080            56
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - C01							
102	1	020		CTL	631 11							
103	1	030	TESTSN	EQU	1303				1303			
104	1	040	TEST88	EQU	1304				1304			
105	1	050	TESTDV	EQU	1305				1305			
106	1	060		ORG	1306					1306		
107	1	070	X1	EQU	89				0089			
108	1	080	X3	EQU	99				0099			
109	1	090	SUPER	EQU	351				0351			
110	1	100	GETX	EQU	335				0335			
111	1	110	PUTX	EQU	363				0363			
112	1	120	IORW	EQU	343				0343			
113	1	130	START	BCE	EOJ0,TESTSN,0			8	1306	B !85 T03 0		4
114	1	140		B	PLACE			4	1314	B L17		4
115	1	150		DCW	VSN			3	1320	K00		4
116	1	160	START0	B	GTPTIL	GET-PUT UNTIL SPECIAL-NAMES		4	1321	B K49		4
117	1	170		DCW	VSPNM	PARAGRAPH		3	1327	J27		4
118	1	180	SPNM1	B	GETSX			4	1328	B K16		4
119	1	190	SPNM2	C	SX-1,@*8@			7	1332	C J29 P74		4
120	1	200		BE	SPNMDV	DEVICE OR SWITCH		5	1339	B T72 S		5
121	1	210		C	SX,VPRD			7	1344	C J30 J33		5
122	1	220		BE	EOSPNM	END OF SPECIAL-NAMES PARAGRAPH		5	1351	B Z14 S		5
123	1	230		C	SX,VNM			7	1356	C J30 J36		5
124	1	240		BE	SPNMEQ	A/C-COBOL EQUATE		5	1363	B W95 S		5
125	1	250		B	SPNM1			4	1368	B T28		5
126	2	010	SPNMDV	MLC	SX,DEVICE			7	1372	M J30 J39		6
127	2	020		BCE	SPNMSW,DEVICE,7	CARRIAGE-OVERFLOW		8	1379	B V74 J39 7		6
128	2	030		BCE	SPNMSW,DEVICE,1	SENSE-SWITCH		8	1387	B V74 J39 1		6
129	2	040		BCE	SPNMSW,DEVICE,6	PRINTER-BUSY		8	1395	B V74 J39 6		6
130	2	050		BCE	SPNMSW,DEVICE,5	CHANNEL-9		8	1403	B V74 J39 5		6
131	2	060		MLC	VDV,FLAG	DEVICE,NOT A SWITCH		7	1411	M J42 J45		7
132	2	070		B	GETSX			4	1418	B K16		7
133	2	080		C	SX,VNL			7	1422	C J30 J48		7
134	2	090		BE	SNDV02	POCKET SUPPLIED		5	1429	B U64 S		7
135	2	100		BCE	SNDV01,DEVICE,8	IS DEVICE THE PUNCH		8	1434	B U53 J39 8		7
136	2	110		MLC	V1,PKT	ASSIGN		7	1442	M J51 J54		7
137	2	120		B	EOPKT	ASSUMED		4	1449	B V59		8
138	2	130	SNDV01	MLC	V4,PKT	VALUES		7	1453	M J57 J54		8
139	2	140		B	EOPKT			4	1460	B V59		8
140	2	150	SNDV02	B	GETSX			4	1464	B K16		8
141	2	160		MLC	@ @,PKT			7	1468	M P77 J54		8
142	2	170		BCE	SNDV05,SX-2,1			8	1475	B U98 J28 1		8
143	2	180	SNDV03	MLC	SX-2,PKT			7	1483	M J28 J54		9
144	2	190	SNDV04	B	GETSX			4	1490	B K16		9
145	2	200		B	SNDV07			4	1494	B V55		9
146	2	210	SNDV05	BCE	SNDV03,SX-1,			8	1498	B U83 J29		9
147	2	220		BCE	SNDV06,SX-1,1			8	1506	B V33 J29 1		9

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          BCE   SNDV6A,SX-1,2                                 8  1514  B V44 J29 2          9
149  2 240          MLC   @0@,PKT                                       7  1522  M P78 J54           10
150  2 250          B     SNDV04                                        4  1529  B U90               10
151  3 010  SNDV06  MLC   VEL,PKT                                       7  1533  M J63 J54           10
152  3 020          B     SNDV04                                        4  1540  B U90               10
153  3 030  SNDV6A  MLC   VTW,PKT                                       7  1544  M J60 J54           10
154  3 040          B     SNDV04                                        4  1551  B U90               10
155  3 050  SNDV07  B     GETSX                                         4  1555  B K16               10
156  3 060  EOPKT   MLC   SX,NAME                                      7  1559  M J30 J66           11
157  3 070          B     DESCRB            DATA-DESCRIPTION TO PRE-MERGE  4  1566  B X79               11
158  3 080          B     SPNM1                                         4  1570  B T28               11
159  3 090  SPNMSW  MLC   @1@,SWSW          SWITCH-ROUTINE              7  1574  M P79 J67           11
160  3 100          MLC   @B@,DSCR1                                     7  1581  M P80 X95           11
161  3 110          C     DEVICE,VSS                                    7  1588  C J39 J70           11
162  3 120          BU    SNSW1                                         5  1595  B W18 /             12
163  3 130          B     GETSX             GET PAST LIT.OP.            4  1600  B K16               12
164  3 140          B     GETX              GET S.S. LETTER             4  1604  B 335               12
165  3 150          DCW   DEVICE                                        3  1610  J39                 12
166  3 160          DCW   EOJ                                           3  1613  !67                 12
167  3 170          B     GETSX             GET PAST LIT.OP.            4  1614  B K16               12
168  3 180  SNSW1   MLC   VSW,FLAG                                     7  1618  M J73 J45           12
169  3 190          B     GETX                                          4  1625  B 335               13
170  3 200          DCW   PKT               GET STATUS                  3  1631  J54                 13
171  3 210          DCW   EOJ                                           3  1634  !67                 13
172  3 220  SNSW2   B     GETX              GET NAME                    4  1635  B 335               13
173  3 230          DCW   NAME                                          3  1641  J66                 13
174  3 240          DCW   EOJ                                           3  1644  !67                 13
175  3 250          B     DESCRB            DATA-DESCRIPTION TO PRE-MERGE  4  1645  B X79               13
176  4 010          B     GETSX                                         4  1649  B K16               14
177  4 020          C     SX,VON            IS THERE ANOTHER STATUS     7  1653  C J30 J76           14
178  4 030          BE    SNSW3                                         5  1660  B W77 S             14
179  4 040          C     SX,VOFF                                       7  1665  C J30 J79           14
180  4 050          BU    SPNM2                                         5  1672  B T32 /             14
181  4 060  SNSW3   MLC   SX,PKT             ASSIGN STATUS               7  1677  M J30 J54           14
182  4 070          MLC   @B@,DSCR1                                     7  1684  M P80 X95           15
183  4 080          B     SNSW2                                         4  1691  B W35               15
184  4 090  SPNMEQ  B     PLACE             A/C-COBOL EQUATE            4  1695  B L17               15
185  4 100          DCW   VSPOP                                         3  1701  J82                 15
186  4 110  SNEQ01  B     GETSX                                         4  1702  B K16               15
187  4 120          C     SX,VNM                                        7  1706  C J30 J36           15
188  4 130          BE    SNEQ02                                        5  1713  B X29 S             15
189  4 140          B     PLACE                                         4  1718  B L17               16
190  4 150          DCW   SX                                            3  1724  J30                 16
191  4 160          B     SNEQ01                                        4  1725  B X02               16
192  4 170  SNEQ02  B     PLACE                                         4  1729  B L17               16
193  4 180          DCW   VLOC                                          3  1735  J85                 16
194  4 190          B     PLACE                                         4  1736  B L17               16
195  4 200          DCW   VEQU                                          3  1742  J88                 16
196  4 210          B     PLACE                                         4  1743  B L17               17
197  4 220          DCW   VOP                                           3  1749  J91                 17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          B     GETSX                                       4  1750  B K16               17
199  4 240          B     PLACE                                       4  1754  B L17               17
200  4 250          DCW   SX                                          3  1760  J30                 17
201  5 010          B     PLACE                                       4  1761  B L17               17
202  5 020          DCW   MACSP                                       3  1767  J94                 17
203  5 030          B     PLACE                                       4  1768  B L17               18
204  5 040          DCW   VDE                                         3  1774  K03                 18
205  5 050          B     SPNM1                                       4  1775  B T28               18
206  5 060  DESCRB  SBR   DSCREX&3                                    4  1779  H Y44               18
207  5 070          C     NAME,@   @                                  7  1783  C J66 P77           18
208  5 080          BE    DSCR3                                       5  1790  B Y45 S             18
209  5 090  DSCR1   NOP   BLDTBL                                     4  1795  N Y68               18
210  5 100  DSCR2   B     PLACE                                       4  1799  B L17               19
211  5 110          DCW   VTE                                         3  1805  J97                 19
212  5 120          B     PLACE                                       4  1806  B L17               19
213  5 130          DCW   NAME                                        3  1812  J66                 19
214  5 140          B     PLACE                                       4  1813  B L17               19
215  5 150          DCW   FLAG                                        3  1819  J45                 19
216  5 160          B     PLACE                                       4  1820  B L17               19
217  5 170          DCW   DEVICE                                      3  1826  J39                 20
218  5 180          B     PLACE                                       4  1827  B L17               20
219  5 190          DCW   PKT                                         3  1833  J54                 20
220  5 200          B     PLACE                                       4  1834  B L17               20
221  5 210          DCW   VTE                                         3  1840  J97                 20
222  5 220  DSCREX  B     *                                           4  1841  B Y44               20
223  5 230  DSCR3   BCE   DSCR4,DSCR1,B                              8  1845  B Y57 X95 B         20
224  5 240          B     DSCREX                                      4  1853  B Y41               21
225  5 250  DSCR4   MLC   @N@,DSCR1                                  7  1857  M P81 X95           21
226  6 010          B     DSCREX                                      4  1864  B Y41               21
227  6 020  BLDTBL  MLC   @N@,DSCR1                                  7  1868  M P81 X95           21
228  6 030          MLC   NEXTTE,X3                                  7  1875  M Z13 099           21
229  6 040          MLCWA NAME,0&X3                                 7  1882  L J66 0?0           21
230  6 050          SBR   X3                                        4  1889  H 099               22
231  6 060          MLCWA @|@,0&X3                                  7  1893  L P82 0?0           22
232  6 070          MLC   X3,NEXTTE                                 7  1900  M 099 Z13           22
233  6 080          B     DSCR2                                       4  1907  B X99               22
234  6 090  NEXTTE  DCW   GM                                        3  1913  G98                 22
235  6 100  EOSPNM  BCE   START0,SWSW,0       ARE THERE NO SWITCHES  8  1914  B T21 J67 0         22
236  6 110          B     GTPTIL                                      4  1922  B K49               22
237  6 120          DCW   VPROC                                      3  1928  K06                 23
238  6 130  ESN01   B     PUTSX                                       4  1929  B K34               23
239  6 140          B     GETSX                                       4  1933  B K16               23
240  6 150          C     SX,VIF                                      7  1937  C J30 K09           23
241  6 160          BE    ESN02                                       5  1944  B Z61 S             23
242  6 170          C     SX,VUNTIL                                   7  1949  C J30 K12           23
243  6 180          BU    ESN01                                       5  1956  B Z29 /             23
244  6 190  ESN02   B     PUTSX              CONDITIONAL EXPRESSION   4  1961  B K34               24
245  6 200          B     GETSX                                       4  1965  B K16               24
246  6 210          C     SX-2,@?@                                    7  1969  C J28 P83           24
247  6 220          BL    ESN03              NAME TEST                5  1976  B !21 T             24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230          BCE   ESN02,SX-2,          OPERATOR TEST          8  1981  B Z61 J28           24
249  6 240          C     SX,VPRD                                     7  1989  C J30 J33           24
250  6 250          BE    ESN01                END OF CONDITIONAL EXPRESSION  5  1996  B Z29 S             25
251  7 010          BCE   ESN02,SX-2,.         RELATIONAL TEST        8  2001  B Z61 J28 .         25
252  7 020          BCE   ESN02,SX-2,$         LOG./CLASS/SIGN/RELATIONAL TEST  8  2009  B Z61 J28 $         25
253  7 030          B     ESN01                KEY-VERB--END OF COND. EXP.  4  2017  B Z29               25
254  7 040  ESN03   MLC   TBARG,X3                                    7  2021  M K15 099           25
255  7 050  ESN04   C     SX,0&X3                                     7  2028  C J30 0?0           25
256  7 060          SBR   X3                                        4  2035  H 099               26
257  7 070          BE    ESN05                                       5  2039  B !56 S             26
258  7 080          BCE   ESN02,0&X3,|                              8  2044  B Z61 0?0 |         26
259  7 090          B     ESN04                                       4  2052  B !28               26
260  7 100  ESN05   B     PUTX                                        4  2056  B 363               26
261  7 110          DCW   VSW                                       3  2062  J73                 26
262  7 120          B     ESN02                                       4  2063  B Z61               26
263  7 130  EOJ     B     PUTSX                                       4  2067  B K34               27
264  7 140          B     PLACE                                       4  2071  B L17               27
265  7 150          DCW   VSN                                       3  2077  K00                 27
266  7 160          B     PLACE                                       4  2078  B L17               27
267  7 170          DCW   VEB                                       3  2084  J24                 27
268  7 180  EOJ0    BCE   EOJ1,TEST88,0                             8  2085  B J00 T04 0         27
269  7 190          B     SUPER                CALL 88 PHASE          4  2093  B 351               27
270  7 200          DCW   @C02@                                     3  2099                      28
271  7 210  EOJ1    BCE   EOJ2,TESTDV,0                            8  2100  B J15 T05 0         28
272  7 220          B     SUPER                CALL DATA-VALUE PHASE  4  2108  B 351               28
273  7 230          DCW   @C03@                                     3  2114                      28
274  7 240  EOJ2    B     SUPER                CALL STORAGE ALLOCATION PHASE  4  2115  B 351               28
275  7 250          DCW   @D01@                                     3  2121                      28
276  8 010  VEB            @.EB@                                     3  2124                      28
277  8 020  VSPNM   DCW   @*95@                                     3  2127                      29
278  8 030  SX             #3                                        3  2130                      29
279  8 040  VPRD           @.PD@                                     3  2133                      29
280  8 050  VNM            @.NM@                                     3  2136                      29
281  8 060  DEVICE         #3                                        3  2139                      29
282  8 070  VDV            @.DV@                                     3  2142                      29
283  8 080  FLAG           #3                                        3  2145                      29
284  8 090  VNL            @.NL@                                     3  2148                      30
285  8 100  V1             @  1@                                     3  2151                      30
286  8 110  PKT            #3                                        3  2154                      30
287  8 120  V4             @  4@                                     3  2157                      30
288  8 130  VTW            @.TW@                                     3  2160                      30
289  8 140  VEL            @.EL@                                     3  2163                      30
290  8 150  NAME           #3                                        3  2166                      30
291  8 160  SWSW           @0@                                       1  2167                      31
292  8 170  VSS            @*81@                                     3  2170                      31
293  8 180  VSW            @.SW@                                     3  2173                      31
294  8 190  VON            @*31@                                     3  2176                      31
295  8 200  VOFF           @*71@                                     3  2179                      31
296  8 210  VSPOP          @.EQ@                                     3  2182                      31
297  8 220  VLOC           @.LC@                                     3  2185                      31
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230  VEQU         @EQU@                                         3  2188                      32
299  8 240  VOP          @.OP@                                         3  2191                      32
300  8 250  MACSP        @.MC@                                         3  2194                      32
301  9 010  VTE          @.TE@                                         3  2197                      32
302  9 020  VSN          @.SN@                                         3  2200                      32
303  9 030  VDE          @.DE@                                         3  2203                      32
304  9 040  VPROC  DCW   @*01@                                         3  2206                      32
305  9 050  VIF          @)19@                                         3  2209                      33
306  9 060  VUNTIL       @*18@                                         3  2212                      33
307  9 070  TBARG        GM                                            3  2215  G98                 33
308  9 080  GETSX  SBR   GTSEX&3             GETSX                     4  2216  H K33               33
309  9 090         B     GETX                                          4  2220  B 335               33
310  9 100         DCW   &SX                                           3  2226  J30                 33
311  9 110               &EOJ                                          3  2229  !67                 33
312  9 120  GTSEX  B     *                                             4  2230  B K33               34
313  9 130  PUTSX  SBR   PTSEX&3             PUTSX                     4  2234  H K48               34
314  9 140         B     PUTX                                          4  2238  B 363               34
315  9 150         DCW   &SX                                           3  2244  J30                 34
316  9 160  PTSEX  B     *                                             4  2245  B K48               34
317  9 170  GTPTIL SBR   X1                  GTPTIL                    4  2249  H 089               34
318  9 180         MLC   @P@,GTPSW                                     7  2253  M P84 L16           34
319  9 190  GTL01  MLC   X1,GTLSV                                      7  2260  M 089 L15           35
320  9 200         MLC   2&X1,GTL03&3                                  7  2267  M 0|2 K81           35
321  9 210  GTL02  B     GETSX                                         4  2274  B K16               35
322  9 220  GTL03  C     *,SX                                          7  2278  C K84 J30           35
323  9 230         BE    GTL04                                         5  2285  B L02 S             35
324  9 240         BCE   PUTSX,GTPSW,P                                 8  2290  B K34 L16 P         35
325  9 250         B     GTL02                                         4  2298  B K74               36
326 10 010  GTL04  MLC   GTLSV,X1                                      7  2302  M L15 089           36
327 10 020         B     3&X1                                          4  2309  B 0|3               36
328 10 030  GTLSV  DCW   #3                                            3  2315                      36
329 10 040  GTPSW        #1                                            1  2316                      36
330 10 050  PLACE  SBR   X1                                            4  2317  H 089               36
331 10 060         SBR   PLC2&3,3&X1                                   7  2321  H L91 0|3           36
332 10 070         MLC   2&X1,PLC1&3                                   7  2328  M 0|2 L38           37
333 10 080  PLC1   MLC   0,PLCSY                                       7  2335  M 000 M71           37
334 10 090  PLC1A  MLC   PLCSY,PLCB                                    7  2342  M M71 M74           37
335 10 100         C     PLCSY,@.EB@                                   7  2349  C M71 P87           37
336 10 110         BE    PLC3                                          5  2356  B L92 S             37
337 10 120         C     PLC1A&6,&PLCMAX                               7  2361  C L48 P90           38
338 10 130         BE    PLC3                                          5  2368  B L92 S             38
339 10 140         MA    @003@,PLC1A&6                                                  MACRO
340                SW    PLC1A&6-2                                     4  2373  , L46       GEN     38
341                A     @003@,PLC1A&6                                 7  2377  A P93 L48   GEN     38
342                CW    PLC1A&6-2                                     4  2384  ) L46       GEN     38
343 10 150  PLC2   B     0                                             4  2388  B 000               38
344 10 160  PLC3   SW    PLC5&1                                        4  2392  , M68               38
345 10 170         B     IORW                                          4  2396  B 343               39
346 10 180         RT    4,PLC5                                        8  2400  M %U4 M67 R         39
347 10 190         DCW   PLC4                                          3  2410  M15                 39
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 200         B     PLC3                                 4  2411  B L92              39
349 10 210  PLC4   BSP   4                                    5  2415  U %U4 B            39
350 10 220         SW    PLCMAX&1                             4  2420  , P72              39
351 10 230         B     IORW                                 4  2424  B 343              39
352 10 240         WT    4,PLCA                               8  2428  M %U4 M72 W        40
353 10 250         DCW   *&1                                  3  2438  M39                40
354 11 010         WTM   4                                    5  2439  U %U4 M            40
355 11 020         BSP   4                                    5  2444  U %U4 B            40
356 11 030         MLC   &PLCB,PLC1A&6                        7  2449  M P96 L48          40
357 11 040         ZA    @0@,PLCMAX                           7  2456  ? P78 P71          40
358 11 050         B     PLC2                                 4  2463  B L88              40
359 11 060  PLC5   EQU   *&1                                     2467
360 11 070         DCW   @ }MAX&1                             4  2420  , P72              39
351 10 230         B     IORW                                 4  2424  B 343              39
352 10 240         WT    4,PLCA                               8  2428  M %U4 M72 W        40
353 10 250         DCW   *&1                                  3  2438  M39                40
354 11 010         WTM   4                                    5  2439  U %U4 M            40
355 11 020         BSP   4                                    5  2444  U %U4 B            40
356 11 030         MLC   &PLCB,PLC1A&6                        7  2449  M P96 L48          40
357 11 040         ZA    @0@,PLCMAX                           7  2456  ? P78 P71          40
358 11 050         B     PLC2                                 4  2463  B L88              40
359 11 060  PLC5   EQU   *&1                                     2467
                         @0@                                  1  2778             LIT     42
                         @1@                                  1  2779             LIT     42
                         @B@                                  1  2780             LIT     43
                         @N@                                  1  2781             LIT     43
                         @|@                                  1  2782             LIT     43
                         @?@                                  1  2783             LIT     43
                         @P@                                  1  2784             LIT     43
                         @.EB@                                3  2787             LIT     43
       337               &PLCMAX                              3  2790  P71        ADCON   43
                         @003@                                3  2793             LIT     44
       356               &PLCB                                3  2796  M74        ADCON   44
368 11 150         ORG   3798                                        3798
369 11 160  GM     DCW   @}@                                  1  3798                       45
370 11 170         END   START                                       / T06 080            46
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - C02
 102  1 020         CTL   631 11
 103  1 030         ORG   1306                                                  1306
 104  1 040  GNBKT  EQU   1302                                          1302
 105  1 050  DATAV  EQU   1305                                          1305
 106  1 060  SUPER  EQU   351                                           0351
 107  1 070  PUTX   EQU   363                                           0363
 108  1 080  GETX   EQU   335                                           0335
 109  1 090  X1     EQU   89                                            0089
 110  1 100  X2     EQU   94                                            0094
 111  1 110  X3     EQU   99                                            0099
 112  1 120  START  BCE   STRT1,ITSW,0                              8  1306  B T28 N10 0          4
 113  1 130         B     GTPTIL                                     4  1314  B P92                4
 114  1 140         DCW   VITOP                                      3  1320  N64                  4
 115  1 150         MLC   @0@,ITSW                                  7  1321  M R42 N10            4
 116  1 160  STRT1  SW    RM&100                                     4  1328  , ?97                4
 117  1 170         MLC   TBARG,X3                                   7  1332  M M47 099            4
 118  1 180         MLC   TBARG,X2                                   7  1339  M M47 094            5
 119  1 190  STRT2  CS    0&X2                                       4  1346  / 0!0                5
 120  1 200         SBR   X2                                         4  1350  H 094                5
 121  1 210         BW    STRT2,RM&100                               8  1354  V T46 ?97 1          5
 122  1 220         C     SX,VITOP                                   7  1362  C M50 N64            5
 123  1 230         BE    LEVEL0                                     5  1369  B U22 S              5
 124  1 240  STRT3  B     GETSX              GENERAL CONTROL         4  1374  B P59                5
 125  1 250         C     SX,VLV                                     7  1378  C M50 N13            6
 126  2 010         BE    LEVEL                                      5  1385  B U10 S              6
 127  2 020         C     SX,VPROC                                   7  1390  C M50 N16            6
 128  2 030         BE    PROCD                                      5  1397  B Y21 S              6
 129  2 040         B     PUTSX                                      4  1402  B P77                6
 130  2 050         B     STRT3                                      4  1406  B T74                6
 131  2 060  LEVEL  B     PUTSX              NEW DATA DESCRIPTION    4  1410  B P77                6
 132  2 070         B     GETSX              GET-PUT LEVEL NUMBER    4  1414  B P59                7
 133  2 080         B     PUTSX                                      4  1418  B P77                7
 134  2 090  LEVEL0 B     GETX               GET DATA NAME           4  1422  B 335                7
 135  2 100         DCW   NAME                                       3  1428  M53                  7
 136  2 110               EOJ                                        3  1431  M11                  7
 137  2 120  LEVEL1 B     GETSX              GET DATA DESCRIPTION OPTIONS  4  1432  B P59           7
 138  2 130  LEVEL2 C     SX,VPRD                                    7  1436  C M50 N19            7
 139  2 140         BE    EOFDD                                      5  1443  B X66 S              8
 140  2 150         C     SX,VLV                                     7  1448  C M50 N13            8
 141  2 160         BE    LVL88                                      5  1455  B U74 S              8
 142  2 170         B     ADSL               SAVE NON-88 OPTIONS     4  1460  B N65                8
 143  2 180         DCW   WORKST                                     3  1466  R93                  8
 144  2 190               SX                                         3  1469  M50                  8
 145  2 200         B     LEVEL1                                     4  1470  B U32                8
 146  2 210  LVL88  B     GETSX                                      4  1474  B P59                9
 147  2 220         C     NAME,@   @                                 7  1478  C M53 R45            9
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          BU    LVL88A                                        5  1485  B V04 /             9
149  2 240          MLC   GNBKT,NAME          SUPPLY NAME IF MISSING   7  1490  M T02 M53           9
150  2 250          A     &1,GNBKT                                      7  1497  A R46 T02           9
151  3 010  LVL88A  B     GETX                                          4  1504  B 335               9
152  3 020          DCW   CONDNM                                       3  1510  M56                 9
153  3 030          EOJ                                                 3  1513  M11                10
154  3 040          C     CONDNM,@   @                                  7  1514  C M56 R45          10
155  3 050          BE    SKIP                                          5  1521  B V58 S            10
156  3 060  LEVEL3  B     GETSX               SELECT VALUE OPTION OF 88 4  1526  B P59              10
157  3 070          C     SX,VVALUE                                     7  1530  C M50 N25          10
158  3 080          BE    VALUE                                         5  1537  B V90 S            10
159  3 090          C     SX,V88                                        7  1542  C M50 N22          10
160  3 100          BE    LVL88A                                        5  1549  B V04 S            11
161  3 110          B     LEVEL3                                        4  1554  B V26              11
162  3 120  SKIP    B     GETSX                                         4  1558  B P59              11
163  3 130          C     SX,VPRD                                       7  1562  C M50 N19          11
164  3 140          BE    EOFDD                                         5  1569  B X66 S            11
165  3 150          C     SX,V88                                        7  1574  C M50 N22          11
166  3 160          BE    LVL88A                                        5  1581  B V04 S            11
167  3 170          B     SKIP                                          4  1586  B V58              12
168  3 180  VALUE   C     0&X3,SAFE                                     7  1590  C 0?0 N09          12
169  3 190          BU    ITER                                          5  1597  B X85 /            12
170  3 200          MLC   CONDNM,0&X3         BUILD TABLE              7  1602  M M56 0?0          12
171  3 220          MLC   NAME                NAME                     4  1609  M M53              12
172  3 230          SBR   X3                                            4  1613  H 099              12
173  3 240          B     GETX                                          4  1617  B 335              12
174  3 250          DCW   LIT1                                          3  1623  M59                13
175  4 010          EOJ                                                 3  1626  M11                13
176  4 020  VALUE1  B     GETSX                                         4  1627  B P59              13
177  4 030          C     SX,VTHRU                                      7  1631  C M50 N28          13
178  4 040          BE    THRU                                          5  1638  B X27 S            13
179  4 050          MLC   VEQUAL,0&X3         EQUAL                    7  1643  M N31 0?0          13
180  4 060          MLC   LIT1                LITERAL                  4  1650  M M59              13
181  4 070          SBR   X3                                            4  1654  H 099              14
182  4 080  VALUE2  BWZ   ORTEST,SX-1,2                                 8  1658  V W70 M49 2        14
183  4 090          B     NOTLIT                                        4  1666  B W86              14
184  4 100  ORTEST  BWZ   OR,SX-2,S                                    8  1670  V X05 M48 S        14
185  4 110          BWZ   OR,SX,K                                      8  1678  V X05 M50 K        14
186  4 120  NOTLIT  MLC   @  )@,0&X3                                   7  1686  M R49 0?0          14
187  4 130          MLCWA @|@                                           4  1693  L R50              15
188  4 140          SBR   X3                  DESCRIPTION              4  1697  H 099              15
189  4 150          B     LEVEL2                                        4  1701  B U36              15
190  4 160  OR      MLC   VOR,0&X3            OR                       7  1705  M N34 0?0          15
191  4 170          SBR   X3                                            4  1712  H 099              15
192  4 180          MLC   SX,LIT1                                      7  1716  M M50 M59          15
193  4 190          B     VALUE1                                        4  1723  B W27              15
194  4 200  THRU    B     GETSX                                         4  1727  B P59              16
195  4 210          MLC   VGE,0&X3                                     7  1731  M N37 0?0          16
196  4 220          MLC   LIT1                                          4  1738  M M59              16
197  4 230          MLC   VAND                                          4  1742  M N40              16
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 240          MLC   VLE                                          4  1746  M N43               16
199  4 250          MLC   SX                                           4  1750  M M50               16
200  5 010          SBR   X3                                           4  1754  H 099               16
201  5 020          B     GETSX                                        4  1758  B P59               17
202  5 030          B     VALUE2                                       4  1762  B W58               17
203  5 040  EOFDD   B     PUTX                                         4  1766  B 363               17
204  5 050          DCW   NAME                                         3  1772  M53                 17
205  5 060          B     OUTST                                        4  1773  B Q60               17
206  5 070          B     PUTSX                                        4  1777  B P77               17
207  5 080          B     STRT3                                        4  1781  B T74               17
208  5 090  ITER    B     PUTX                                         4  1785  B 363               18
209  5 100          DCW   VITOP                                        3  1791  N64                 18
210  5 110          MLC   @1@,ITSW                                     7  1792  M R51 N10           18
211  5 120          B     PUTX                                         4  1799  B 363               18
212  5 130          DCW   NAME                                         3  1805  M53                 18
213  5 140          B     OUTST                                        4  1806  B Q60               18
214  5 150          B     PUTSX                                        4  1810  B P77               18
215  5 160          B     GTPTIL                                       4  1814  B P92               19
216  5 170          DCW   VPROC                                        3  1820  N16                 19
217  5 180  PROCD   B     PUTSX              PROCEDURE DIVISION        4  1821  B P77               19
218  5 190  PROC1   B     GETSX                                        4  1825  B P59               19
219  5 200  PROC2   B     PUTSX                                        4  1829  B P77               19
220  5 210          C     SX,VIF                                       7  1833  C M50 N46           19
221  5 220          BE    CONDEX                                       5  1840  B Y57 S             19
222  5 230          C     SX,VUNTIL                                    7  1845  C M50 N49           20
223  5 240          BU    PROC1                                        5  1852  B Y25 /             20
224  5 250  CONDEX  B     GETSX              CONDITIONAL EXPRESSION    4  1857  B P59               20
225  6 010  CEX0    C     SX-2,@A@                                     7  1861  C M48 R52           20
226  6 020          BH    NOO                                          5  1868  B Y89 U             20
227  6 030          C     SX-2,@I@                                     7  1873  C M48 R53           20
228  6 040          BL    NOTFND                                       5  1880  B !67 T             21
229  6 050          B     CEX2                                         4  1885  B !17               21
230  6 060  NOO     BCE   NOTFND,SX-2,         OPERATOR TEST           8  1889  B !67 M48           21
231  6 070          C     SX,VPRD                                      7  1897  C M50 N19           21
232  6 080          BE    PROCD              END OF COND. EXP.         5  1904  B Y21 S             21
233  6 090          C     SX,VSW                                       7  1909  C M50 N52           21
234  6 100          BU    CEX1                                         5  1916  B Z37 /             22
235  6 110          B     PUTSX                                        4  1921  B P77               22
236  6 120          B     GETSX                                        4  1925  B P59               22
237  6 130          B     PUTSX                                        4  1929  B P77               22
238  6 140          B     CONDEX                                       4  1933  B Y57               22
239  6 150  CEX1    BCE   NOTFND,SX-2,.        RELATIONAL TEST         8  1937  B !67 M48 .         22
240  6 160          BCE   NOTFND,SX-2,$       LOG./CLASS/SIGN/RELATIONAL TEST  8  1945  B !67 M48 $  22
241  6 170  DIAGSW  NOP   DGNSTC                                       4  1953  N Z61               23
242  6 180          B     PROC2                                        4  1957  B Y29               23
243  6 190  DGNSTC  MLC   @N@,DIAGSW                                   7  1961  M R54 Z53           23
244  6 200          MLC   &FST,DGPTSY                                  7  1968  M R57 Z81           23
245  6 210  DGPT    B     PUTX                                         4  1975  B 363               23
246  6 220  DGPTSY  DCW   *                                            3  1981  Z81                 23
247  6 230          C     DGPTSY,&ENDED                                7  1982  C Z81 R60           23
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 240         BE    PROCD                                        5  1989  B Y21 S             24
249  6 250         A     &3,DGPTSY                                    7  1994  A R61 Z81           24
250  7 010         B     DGPT                                         4  2001  B Z75               24
251  7 020  FST    DCW   @#DC@                                       3  2007                      24
252  7 030  ENDED  DC    @***C0A#DC@                                  9  2016                      24
253  7 040  CEX2   MLC   TBARG,X2           LOOK-UP                 7  2017  M M47 094           24
254  7 050  CEX3   C     X2,X3                                        7  2024  C 094 099           25
255  7 060         BE    NOTFND                                       5  2031  B !67 S             25
256  7 070         C     0&X2,SX                                      7  2036  C 0!0 M50           25
257  7 080         SAR   X2                                           4  2043  Q 094               25
258  7 090         BE    FOUND                                        5  2047  B !75 S             25
259  7 100         MLC   0&X2,0&X2                                   7  2052  M 0!0 0!0           25
260  7 110         SBR   X2                                           4  2059  H 094               25
261  7 120         B     CEX3                                         4  2063  B !24               26
262  7 130  NOTFND B     PUTSX                                        4  2067  B P77               26
263  7 140         B     CONDEX                                       4  2071  B Y57               26
264  7 150  FOUND  MLC   @  %@,SX                                    7  2075  M R64 M50           26
265  7 151         B     PUTSX                                        4  2082  B P77               26
266  7 152         B     GETX                                         4  2086  B 335               26
267  7 160         DCW   SYM                                          3  2092  K67                 26
268  7 170               EOJ                                        3  2095  M11                 27
269  7 180         BCE   GTSBSC,SYM,%       BRANCH IF SUBSCRIPTED    8  2096  B K71 K67 %         27
270  7 190  FOUND1 BCE   FOUND4,0&X2,|      BRANCH IF EQUATION FINISHED 8  2104  B J53 0!0 |       27
271  7 200         MLC   0&X2,SX                                      7  2112  M 0!0 M50           27
272  7 210         SAR   X2                                           4  2119  Q 094               27
273  7 220         B     PUTSX              CURRENT SYMBOL OF EQUATION 4  2123  B P77               27
274  7 230  FOUND3 NOP   FOUND2             OFF ONLY FOR FIRST SYMBOL  4  2127  N J45               27
275  7 240         MLC   @B@,FOUND3                                   7  2131  M R65 J27           28
276  7 250         MLC   SX,NAME1           SAVE CONDITIONAL VARIABLE  7  2138  M M50 K70           28
277  8 010  FOUND2 NOP   CVTEST            ON IF COND.NAME IS SUBSCRIPTED 4  2145  N L45           28
278  8 020         B     FOUND1                                       4  2149  B J04               28
279  8 030  FOUND4 MLC   @N@,FOUND3         REINITIALIZATION         7  2153  M R54 J27           28
280  8 040         MLC   @N@,FOUND2                                   7  2160  M R54 J45           28
281  8 050         MLC   SYM,SX             FIRST-NON-SUBSCRIPTED SYMBOL 7  2167  M K67 M50         29
282  8 060  FOUND5 BCE   CEX0,SX-2,)                                  8  2174  B Y61 M48 )         29
283  8 070         C     SX,@*22@                                     7  2182  C M50 R68           29
284  8 080         BE    CEX0                                         5  2189  B Y61 S             29
285  8 090         C     SX,@$31@                                     7  2194  C M50 R71           29
286  8 100         BE    CEX0                                         5  2201  B Y61 S             29
287  8 110         C     SX,@$32@                                     7  2206  C M50 R74           30
288  8 120         BE    CEX0                                         5  2213  B Y61 S             30
289  8 130         C     SX,@*25@                                     7  2218  C M50 R77           30
290  8 140         BE    CEX0                                         5  2225  B Y61 S             30
291  8 150         C     SX,VPRD                                      7  2230  C M50 N19           30
292  8 160         BE    PROCD                                        5  2237  B Y21 S             30
293  8 161         BCE   CEX0,SX-2,                                   8  2242  B Y61 M48           31
294  8 170         MLC   @B@,DIAGSW                                   7  2250  M R65 Z53           31
295  8 180         B     GETSX                                        4  2257  B P59               31
296  8 190         B     FOUND5                                       4  2261  B J74               31
297  8 200  SYM    DCW   #3                                          3  2267                      31
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 210  NAME1   DCW   #3                                            3  2270                      31
299  8 220  GTSBSC  MLC   BGNST,ENDST        --FREE WORKST--            7  2271  M N58 N61           31
300  8 230          MLC   @000@,WORKST                                 7  2278  M R80 R93           32
301  8 240          MLC   @|@,RM                                       7  2285  M R50 R97           32
302  8 250  GTSB01  B     ADSL              BUILD STRING OF SUBSCRIPTING 4  2292  B N65               32
303  9 010          DCW   WORKST                                       3  2298  R93                 32
304  9 020                SYM                                         3  2301  K67                 32
305  9 030          BCE   GTSB02,SYM,)                                8  2302  B L24 K67 )         32
306  9 040          B     GETX                                        4  2310  B 335               32
307  9 050          DCW   SYM                                         3  2316  K67                 33
308  9 060                EOJ                                         3  2319  M11                 33
309  9 070          B     GTSB01                                      4  2320  B K92               33
310  9 080  GTSB02  MLC   @B@,FOUND2                                  7  2324  M R65 J45           33
311  9 090          B     GETX                                        4  2331  B 335               33
312  9 100          DCW   SYM                                         3  2337  K67                 33
313  9 110                EOJ                                         3  2340  M11                 33
314  9 120          B     FOUND1                                      4  2341  B J04               34
315  9 130  CVTEST  C     SX,NAME1                                    7  2345  C M50 K70           34
316  9 140          BU    FOUND1                                      5  2352  B J04 /             34
317  9 150          MLC   &RM2,CVSX                                   7  2357  M R83 L77           34
318  9 160          MLC   @000@,CVCNTR                               7  2364  M R80 M10           34
319  9 170  CV01    B     PUTX                                        4  2371  B 363               34
320  9 180  CVSX    DCW   *                                           3  2377  L77                 34
321  9 190          A     &3,CVCNTR                                   7  2378  A R61 M10           35
322  9 200          A     &3,CVSX                                     7  2385  A R61 L77           35
323  9 210          C     CVCNTR,WORKST                               7  2392  C M10 R93           35
324  9 220          BU    CV01                                        5  2399  B L71 /             35
325  9 230          B     FOUND1                                      4  2404  B J04               35
326  9 240  CVCNTR  DCW   #3                                          3  2410                      35
327  9 250  RM2     EQU   RM&2                                           2999
328 10 010  EOJ     B     PUTSX                                       4  2411  B P77               35
329 10 020          BCE   START,ITSW,1                                8  2415  B T06 N10 1         36
330 10 030          BCE   EOJ1,DATAV,0                                8  2423  B M38 T05 0         36
331 10 040          B     SUPER                                       4  2431  B 351               36
332 10 050          DCW   @C03@                                       3  2437                      36
333 10 060  EOJ1    B     SUPER                                       4  2438  B 351               36
334 10 070          DCW   @D01@                                       3  2444                      36
335 10 080  TBARG   DCW   GM                                          3  2447  G98                 36
336 10 090  SX            #3                                          3  2450                      37
337 10 100  NAME          #3                                          3  2453                      37
338 10 110  CONDNM        #3                                          3  2456                      37
339 10 120  LIT1          #3                                          3  2459                      37
340 10 130  SAFE          #50                                        50  2509                      39
341 10 140  ITSW          @0@                                         1  2510                      39
342 10 150  VLV           @.LV@                                       3  2513                      39
343 10 160  VPROC         @*01@                                       3  2516                      39
344 10 170  VPRD          @.PD@                                       3  2519                      39
345 10 180  V88           @088@                                       3  2522                      40
346 10 190  VVALUE        @/13@                                       3  2525                      40
347 10 200  VTHRU         @*08@                                       3  2528                      40
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 210  VEQUAL        @  #@                                          3  2531                      40
349 10 220  VOR           @$31@                                          3  2534                      40
350 10 230  VGE           @.GE@                                          3  2537                      40
351 10 240  VAND          @$32@                                          3  2540                      40
352 10 250  VLE           @.LE@                                          3  2543                      41
353 11 010  VIF           @)19@                                          3  2546                      41
354 11 020  VUNTIL        @*18@                                          3  2549                      41
355 11 030  VSW           @.SW@                                          3  2552                      41
356 11 040  FIRST         RM&2                                           3  2555  R99                 41
357 11 050  BGNST         RM                                             3  2558  R97                 41
358 11 060  ENDST         RM                                             3  2561  R97                 41
359 11 070  VITOP   DCW   @.IT@                                          3  2564                      42
360 11 080  ADSL    SBR   X1                                             4  2565  H 089               42
361 11 090          SBR   ADSL5&3,6&X1          FIX EXIT                 7  2569  H O81 0|6           42
362 11 100          MLC   2&X1,ADSL1            STRING 1                 7  2576  M 0|2 O10           42
363 11 110          MLC   ADSL1,ADSL4&6         STRING1                  7  2583  M O10 O70           42
364 11 120          MLC   5&X1,ADSL3&3         SYMBOL                   7  2590  M 0|5 O56           42
365 11 130          A     @003@,ADSL1                                    7  2597  A R86 O10           43
366 11 140          B     LCST                  LOCATE FIRST OF NEXT STRING  4  2604  B O82           43
367 11 150  ADSL1  DCW   #3                                              3  2610                      43
368 11 160          LOCTN                                                3  2613  P58                 43
369 11 170          MLC   ENDST,X1              SET OPENER               7  2614  M N61 089           43
370 11 180          SBR   ADSL2&3,0&X1                                   7  2621  H O49 0|0           43
371 11 190          SBR   ADSL2&6,3&X1                                   7  2628  H O52 0|3           43
372 11 200          MLC   LOCTN,X1                                       7  2635  M P58 089           44
373 11 210          SW    0&X1                                           4  2642  , 0|0               44
374 11 220  ADSL2  MLC   0,0                   OPEN STRING AREA         7  2646  M 000 000           44
375 11 230  ADSL3  MLC   0,2&X1                                         7  2653  M 000 0|2           44
376 11 240          CW    0&X1                                           4  2660  ) 0|0               44
377 11 250  ADSL4  A     @003@,0               INCREMENT NORM           7  2664  A R86 000           44
378 12 010          A     @003@,ENDST                                    7  2671  A R86 N61           45
379 12 020  ADSL5  B     0                     EXIT                     4  2678  B 000               45
380 12 030  *          LOCATION GIVEN IS LEFT END CHARACTER
381 12 040  LCST    SBR   X1                                             4  2682  H 089               45
382 12 050          MLC   2&X1,*&4              SET ADDER                7  2686  M 0|2 O96           45
383 12 060          MLC   0,LOCTN                                        7  2693  M 000 P58           45
384 12 070          SAR   LCST2&3                                        4  2700  Q P44               45
385 12 080          MLC   BGNST,LOCTN           INITIALIZE COUNTER       7  2704  M N58 P58           46
386 12 090  LCST1  C     LCST2&3,&BGNLC        TEST FOR END             7  2711  C P44 R89           46
387 12 100          BU    LCST2                                          5  2718  B P41 /             46
388 12 110          MLC   5&X1,*&7                                       7  2723  M 0|5 P36           46
389 12 120          MLC   LOCTN,*                                        7  2730  M P58 P36           46
390 12 130          B     6&X1                                           4  2737  B 0|6               46
391 12 140  LCST2  A     0,LOCTN               ADDER                    7  2741  A 000 P58           47
392 12 150          SAR   LCST2&3               DECREMENT ADDER          4  2748  Q P44               47
393 12 160          B     LCST1                                          4  2752  B P11               47
394 12 170  LOCTN  DCW   #3                    LOCATION OF STRING       3  2758                      47
395 12 180  GETSX  SBR   GTSEX&3               GETSX                    4  2759  H P76               47
396 12 190          B     GETX                                           4  2763  B 335               47
397 12 200          DCW   &SX                                            3  2769  M50                 47
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 210                &EOJ                                      3  2772  M11               48
399 12 220  GTSEX   B     *                                         4  2773  B P76             48
400 12 230  PUTSX   SBR   PTSEX&3             PUTSX                 4  2777  H P91             48
401 12 240          B     PUTX                                      4  2781  B 363             48
402 12 250          DCW   &SX                                       3  2787  M50               48
403 13 010  PTSEX   B     *                                         4  2788  B P91             48
404 13 020  GTPTIL  SBR   X1                  GTPTIL                4  2792  H 089             48
405 13 030          MLC   @P@,GTPSW                                 7  2796  M R90 Q59         49
406 13 040  GTL01   MLC   X1,GTLSV                                  7  2803  M 089 Q58         49
407 13 050          MLC   2&X1,GTL03&3                             7  2810  M 0|2 Q24         49
408 13 060  GTL02   B     GETSX                                     4  2817  B P59             49
409 13 070  GTL03   C     *,SX                                      7  2821  C Q27 M50         49
410 13 080          BE    GTL04                                     5  2828  B Q45 S           49
411 13 090          BCE   PUTSX,GTPSW,P                            8  2833  B P77 Q59 P       50
412 13 100          B     GTL02                                     4  2841  B Q17             50
413 13 110  GTL04   MLC   GTLSV,X1                                  7  2845  M Q58 089         50
414 13 120          B     3&X1                                      4  2852  B 0|3             50
415 13 130  GTLSV   DCW   #3                                        3  2858                    50
416 13 140  GTPSW         #1                                        1  2859                    50
417 13 150  OUTST   SBR   OUTSEX&3                                 4  2860  H R35             50
418 13 160          MLC   FIRST,OUTCNT                              7  2864  M N55 R38         51
419 13 170  OUTS01  MLC   OUTCNT,*&4                                 7  2871  M R38 Q81         51
420 13 180          MLC   *,OUTSYM                                  7  2878  M Q84 R41         51
421 13 190          BCE   DONE,OUTSYM-2,|                           8  2885  B R11 R39 |       51
422 13 200          B     PUTX                                      4  2893  B 363             51
423 13 210          DCW   OUTSYM                                    3  2899  R41               51
424 13 220          A     &3,OUTCNT                                 7  2900  A R61 R38         52
425 13 230          B     OUTS01                                    4  2907  B Q71             52
426 13 240  DONE    MLC   BGNST,ENDST                              7  2911  M N58 N61         52
427 13 250          MLC   NULL,WORKST                               7  2918  M R96 R93         52
428 14 010          MLC   @|@,RM                                   7  2925  M R50 R97         52
429 14 020  OUTSEX  B     *                                         4  2932  B R35             52
430 14 030  OUTCNT  DCW   #3                                        3  2938                    52
431 14 040  OUTSYM  DCW   #3                                        3  2941                    53
432 14 050          LTORG                                                  2942
                    DCW   @0@                                       1  2942          LIT     53
                          @   @                                     3  2945          LIT     53
                          &1                                        1  2946          LIT     53
                          @  )@                                     3  2949          LIT     53
                          @|@                                       1  2950          LIT     53
                          @1@                                       1  2951          LIT     53
                          @A@                                       1  2952          LIT     54
                          @I@                                       1  2953          LIT     54
                          @N@                                       1  2954          LIT     54
       244                &FST                                      3  2957  !07       ADCON   54
       247                &ENDED                                    3  2960  !16       ADCON   54
                          &3                                        1  2961          LIT     54
                          @  %@                                     3  2964          LIT     54
                          @B@                                       1  2965          LIT     55
                          @*22@                                     3  2968          LIT     55
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @$31@                                      3  2971              LIT     55
                         @$32@                                      3  2974              LIT     55
                         @*25@                                      3  2977              LIT     55
                         @000@                                      3  2980              LIT     55
       317               &RM2                                       3  2983  R99         ADCON   55
                         @003@                                      3  2986              LIT     56
       386               &BGNLC                                     3  2989  R90         ADCON   56
                         @P@                                        1  2990              LIT     56
433 14 060  BGNLC  EQU   *                                           2990
434 14 070  WORKST DCW   @000@                                      3  2993                      56
435 14 080  NULL       @000@                                      3  2996                      56
436 14 090  RM     DC    @|@                                        1  2997                      56
437 14 100         ORG   3798                                             3798
438 14 110  GM     DCW   @}@                                        1  3798                      57
439 14 120         END   START                                           / T06 080               58
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - C03
 102  1 020          CTL   631 11
 103  1 030          ORG   1304                                                 1304
 104  1 040  ITERSW  EQU   1303                                          1303
 105  1 050  NEXTAN  EQU   1302                                          1302
 106  1 060  X1      EQU   89                                            0089
 107  1 070  X2      EQU   94                                            0094
 108  1 080  X3      EQU   99                                            0099
 109  1 090  PUTX    EQU   363                                           0363
 110  1 100  GETX    EQU   335                                           0335
 111  1 110  SUPER   EQU   351                                           0351
 112  1 120          MLC   @0@,ITERSW                                 7  1304  M Z00 T03           4
 113  1 130  START   MLC   @G98@,X3                                    7  1311  M Z03 099           4
 114  1 140          MLC   @G98@,X2                                    7  1318  M Z03 094           4
 115  1 150          MLC   ITERSW,ITERSV                               7  1325  M T03 X08           4
 116  1 160          BCE   START1,ITERSW,0                             8  1332  B T47 T03 0         4
 117  1 170  START0  B     GTPTIL                                      4  1340  B Y32               5
 118  1 180          DCW   VITER                                       3  1346  X98                 5
 119  1 190  START1  B     GTPTIL                                      4  1347  B Y32               5
 120  1 200          DCW   VLV                                         3  1353  X74                 5
 121  1 210          B     PUTSX                                       4  1354  B Y17               5
 122  1 220  STRT0   B     GETSX                                       4  1358  B X99               5
 123  1 230          B     PUTSX                                       4  1362  B Y17               5
 124  1 240          B     GETX                                        4  1366  B 335               6
 125  1 250          DCW   NAME                                        3  1372  X80                 6
 126  2 010                EOJ                                       3  1375  W35                 6
 127  2 020          B     PUTX                                        4  1376  B 363               6
 128  2 030          DCW   NAME                                        3  1382  X80                 6
 129  2 040  STRT1   B     GETSX              GET NEXT SYMBOL IN DATA-DESCR.  4  1383  B X99         6
 130  2 050          C     SX,VVALUE                                   7  1387  C X77 X83           6
 131  2 060          BE    VALUE                                       5  1394  B U84 S             7
 132  2 070          C     SX,VPRD                                     7  1399  C X77 X86           7
 133  2 080          BE    EODD                                        5  1406  B U19 S             7
 134  2 090          B     PUTSX                                       4  1411  B Y17               7
 135  2 100          B     STRT1                                       4  1415  B T83               7
 136  2 110  EODD    B     EODDA              END OF DATA DESCRIPTION  4  1419  B U44               7
 137  2 120          MLC   @B@,EODD                                    7  1423  M Z04 U19           7
 138  2 130          B     PUTX                                        4  1430  B 363               8
 139  2 140          DCW   VNM                                         3  1436  X71                 8
 140  2 150          B     PUTX                                        4  1437  B 363               8
 141  2 160          DCW   NAME                                        3  1443  X80                 8
 142  2 170  EODDA   B     PUTSX                                       4  1444  B Y17               8
 143  2 180          B     GETSX                                       4  1448  B X99               8
 144  2 190  EODD1   B     PUTSX                                       4  1452  B Y17               8
 145  2 200          C     SX,VPROC                                    7  1456  C X77 X89           9
 146  2 210          BE    PROCD                                       5  1463  B V91 S             9
 147  2 220          C     SX,VLV                                      7  1468  C X77 X74           9
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          BE    STRT0                                       5  1475  B T58 S              9
149  2 240          B     START1                                      4  1480  B T47                9
150  2 250  VALUE   B     GETSX               GET NAME OF LITERAL     4  1484  B X99                9
151  3 010          C     NAME,@   @                                  7  1488  C X80 Z07            9
152  3 020          BE    VALUE2                                      5  1495  B V66 S             10
153  3 030  VALUE1  MLCWA SX,0&X3             SAVE LITERAL            7  1500  L X77 0?0           10
154  3 040          MLCWA NAME                SAVE NAME IN TABLE      4  1507  L X80               10
155  3 050          SBR   X3                  UPDATE POINTER          4  1511  H 099               10
156  3 060          C     0&X3,@      @                               7  1515  C 0?0 Z13           10
157  3 070          BE    STRT1                                       5  1522  B T83 S             10
158  3 080          A     &1,ITERSW                                   7  1527  A Z14 T03           10
159  3 081          B     PUTX                                        4  1534  B 363               11
160  3 082          DCW   VNM                                         3  1540  X71                 11
161  3 083          B     PUTX                                        4  1541  B 363               11
162  3 084          DCW   NAME                                        3  1547  X80                 11
163  3 090          B     PUTX                                        4  1548  B 363               11
164  3 100          DCW   VITER                                      3  1554  X98                 11
165  3 110          B     GTPTIL                                      4  1555  B Y32               11
166  3 120          DCW   VPROC                                       3  1561  X89                 12
167  3 130          B     EODD1                                       4  1562  B U52               12
168  3 140  VALUE2  MLC   NEXTAN,NAME          USE NEXT-AVAILABLE-NAME 7  1566  M T02 X80           12
169  3 150          A     &1,NEXTAN           UPDATE NEXT-AVAILABLE-NAME 7  1573  A Z14 T02           12
170  3 160          MLC   @N@,EODD                                     7  1580  M Z15 U19           12
171  3 170          B     VALUE1                                      4  1587  B V00               12
172  3 180  PROCD   C     ITERSV,@0@                                  7  1591  C X08 Z00           12
173  3 190          BU    CHKSWI                                      5  1598  B W97 /             13
174  3 200          B     GETSX                                       4  1603  B X99               13
175  3 210          B     PUTSX                                       4  1607  B Y17               13
176  3 220          B     GETSX                                       4  1611  B X99               13
177  3 230          B     PUTSX                                       4  1615  B Y17               13
178  3 240  PROCAA  B     PURGE                                       4  1619  B X09               13
179  3 250  PROC1   B     GETSX                                       4  1623  B X99               13
180  4 010          B     PUTSX                                       4  1627  B Y17               14
181  4 020          B     PROC1                                       4  1631  B W23               14
182  4 030  EOJ     B     PUTSX                                       4  1635  B Y17               14
183  4 040          C     ITERSW,ITERSV                               7  1639  C T03 X08           14
184  4 050          BE    EOJ2                                        5  1646  B W90 S             14
185  4 060          BCE   EOJ2,ITERSW,0                              8  1651  B W90 T03 0         14
186  4 070          MLC   @G98@,X3                                   7  1659  M Z03 099           14
187  4 080          SW    VXFR&300                                    4  1666  , !95               15
188  4 090  EOJ1    CS    0&X3                                        4  1670  / 0?0               15
189  4 100          SBR   X3                                        4  1674  H 099               15
190  4 110          BW    EOJ1,VXFR&300                               8  1678  V W70 !95 1         15
191  4 120          B     START                                       4  1686  B T11               15
192  4 130  EOJ2    B     SUPER                                       4  1690  B 351               15
193  4 140          DCW   @D01@                                       3  1696                      15
194  4 150  CHKSWI  B     GTPTIL                                      4  1697  B Y32               16
195  4 160          DCW   VXFR                                        3  1703  X95                 16
196  4 170          B     PROCAA                                      4  1704  B W19               16
197  4 180  ITERSV  DCW   #1                                          1  1708                      16
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 190  PURGE   B     PUTX              PURGE TABLE             4  1709  B 363              16
199  4 200          DCW   VMOVE             MOVE                    3  1715  X92                16
200  4 210          MLC   0&X2,SX                                   7  1716  M 0!0 X77          16
201  4 220          SAR   X2                                        4  1723  Q 094              17
202  4 230          B     PUTSX             LITERAT                 4  1727  B Y17              17
203  4 240          MLC   0&X2,SX                                   7  1731  M 0!0 X77          17
204  4 250          SAR   X2                                        4  1738  Q 094              17
205  5 010          B     PUTSX             TO DATA-NAME            4  1742  B Y17              17
206  5 020          C     X2,X3                                     7  1746  C 094 099          17
207  5 030          BU    PURGE                                     5  1753  B X09 /            17
208  5 040          B     PUTX                                      4  1758  B 363              18
209  5 050          DCW   VXFR              .XF                     3  1764  X95                18
210  5 060          B     PROC1                                     4  1765  B W23              18
211  5 070  VNM     DCW   @.NM@                                     3  1771                     18
212  5 080  VLV     DCW   @.LV@                                     3  1774                     18
213  5 090  SX            #3                                        3  1777                     18
214  5 100  NAME          #3                                        3  1780                     18
215  5 110  VVALUE        @/13@                                     3  1783                     19
216  5 120  VPRD          @.PD@                                     3  1786                     19
217  5 130  VPROC         @*01@                                     3  1789                     19
218  5 140  VMOVE         @)15@                                     3  1792                     19
219  5 150  VXFR          @.XF@                                     3  1795                     19
220  5 160  VITER         @.IT@                                     3  1798                     19
221  5 170  GETSX   SBR   GTSEX&3             GETSX                   4  1799  H Y16              19
222  5 180          B     GETX                                      4  1803  B 335              20
223  5 190          DCW   &SX                                       3  1809  X77                20
224  5 200                &EOJ                                      3  1812  W35                20
225  5 210  GTSEX   B     *                                         4  1813  B Y16              20
226  5 220  PUTSX   SBR   PTSEX&3            PUTSX                   4  1817  H Y31              20
227  5 230          B     PUTX                                      4  1821  B 363              20
228  5 240          DCW   &SX                                       3  1827  X77                20
229  5 250  PTSEX   B     *                                         4  1828  B Y31              21
230  6 010  GTPTIL  SBR   X1                GTPTIL                  4  1832  H 089              21
231  6 020          MLC   @P@,GTPSW                                 7  1836  M Z16 Y99          21
232  6 030  GTL01   MLC   X1,GTLSV                                  7  1843  M 089 Y98          21
233  6 040          MLC   2&X1,GTL03&3                             7  1850  M 0|2 Y64          21
234  6 050  GTL02   B     GETSX                                     4  1857  B X99              21
235  6 060  GTL03   C     *,SX                                      7  1861  C Y67 X77          22
236  6 070          BE    GTL04                                     5  1868  B Y85 S            22
237  6 080          BCE   PUTSX,GTPSW,P                           8  1873  B Y17 Y99 P        22
238  6 090          B     GTL02                                     4  1881  B Y57              22
239  6 100  GTL04   MLC   GTLSV,X1                                  7  1885  M Y98 089          22
240  6 110          B     3&X1                                      4  1892  B 0|3              22
241  6 120  GTLSV   DCW   #3                                        3  1898                     22
242  6 130  GTPSW         #1                                        1  1899                     23
243  6 140          LTORG                                                  1900
                    DCW   @0@                                       1  1900          LIT     23
                          @G98@                                     3  1903          LIT     23
                          @B@                                       1  1904          LIT     23
                          @   @                                     3  1907          LIT     23
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

       156           @      @                                        6  1913              LIT     23
                     &1                                              1  1914              LIT     23
                     @N@                                             1  1915              LIT     24
                     @P@                                             1  1916              LIT     24
 244  6 150         ORG   3798                                                  3798
 245  6 160         DCW   @}@                                        1  3798                      25
 246  6 170         END   START                                                / T11 080           26
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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1401 COBOL - D01 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - D01							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	GETX	EQU	335				0335			
107	1	070	IORW	EQU	343				0343			
108	1	080	SUPER	EQU	351				0351			
109	1	090	DUMP	EQU	359				0359			
110	1	100	PUTX	EQU	363				0363			
111	1	110	CONST	EQU	188				0188			
112	1	120	SCRBKT	EQU	1126				1126			
113	1	130		ORG	1303					1303		
114	1	140	HOWBIG	DCW	#3	SIZE OF TZBLE BUCKET		3	1305			4
115	1	150	NXTNAM	EQU	1302				1302			
116	1	160		SW	GRPMK			4	1306	, C46		4
117	1	170	GMADDR	EQU	*				1309			
118	1	180		BCE	AA0,SCRBKT,4			8	1310	B T25 /26 4		4
119	1	190		MLC	&TBR4K,TBLNM&6			7	1318	M ?37 Z98		4
120	1	200	AA0	MLC	TBLNM&6,HOWBIG			7	1325	M Z98 T05		4
121	1	210	AA1	B	SRSKIP			4	1332	B Q12		4
122	1	220	AA5	B	SRGET			4	1336	B Q40		4
123	1	230	AA5A	B	SRPUT			4	1340	B Q58		5
124	1	240		C	SX,LEVELI			7	1344	C R95 R65		5
125	1	250		BE	BB1	HANDLE ENTRY		5	1351	B U44 S		5
126	2	010		MLC	@0@,NOWMSW	RESET NOWMSW		7	1356	M ?38 R76		5
127	2	020		C	SX,@/01@	WORKING-STORAGE		7	1363	C R95 ?41		5
128	2	030		BE	AA4			5	1370	B U33 S		5
129	2	040		C	SX,@/09@	CONSTANTS		7	1375	C R95 ?44		6
130	2	050		BE	AA4			5	1382	B U33 S		6
131	2	060		C	SX,PROCI	PROCEDURE		7	1387	C R95 R62		6
132	2	070		BE	EOJRT			5	1394	B !07 S		6
133	2	080		C	SX,@/26@	FD		7	1399	C R95 ?47		6
134	2	090		BE	SETFD			5	1406	B U15 S		6
135	2	100		B	AA1			4	1411	B T32		7
136	2	110	SETFD	MLC	NULL,O1CONT			7	1415	M R74 ?63		7
137	2	120		MLC	@1@,FILESW			7	1422	M ?48 R75		7
138	2	130		B	AA1			4	1429	B T32		7
139	2	140	AA4	MLC	NULL,FILESW			7	1433	M R74 R75		7
140	2	150		B	AA1			4	1440	B T32		7
141	2	160	BB1	B	GETX			4	1444	B 335		7
142	2	170	BB1A	DCW	SXSAV2			3	1450	?34		8
143	2	180	BB1B	DCW	ERR			3	1453	Q80		8
144	2	190	BB2	B	PUTX	HANDLE ENTRY		4	1454	B 363		8
145	2	200		DCW	SXSAV2			3	1460	?34		8
146	2	210		MLC	SXSAV2,LVL#3			7	1461	M ?34 ?51		8
147	2	220		C	LVL,@001@			7	1468	C ?51 ?54		8

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         BU    BB3                                          5  1475  B V33 /             8
149  2 240         MLC   @0@,NOWMSW          RESET NOWMSW           7  1480  M ?38 R76           9
150  2 250         B     SRGET                                        4  1487  B Q40               9
151  3 010         C     SX,@   @                                     7  1491  C R95 ?57           9
152  3 020         BE    BB2C                                         5  1498  B W15 S             9
153  3 030  BB2D   B     SRPUT                                        4  1503  B Q58               9
154  3 040         C     O1CONT,NULL                                  7  1507  C ?63 R74           9
155  3 050         BE    BB2A                                         5  1514  B W04 S             9
156  3 060  BB2B   MLC   SX,O1NAME#3                                  7  1519  M R95 ?60          10
157  3 070         A     @1@,O1CONT#3                                 7  1526  A ?48 ?63          10
158  3 080  BB3    B     SRGET                                        4  1533  B Q40              10
159  3 090         C     SX,PICTI          PICTURE                    7  1537  C R95 R68          10
160  3 100         BE    PICTUR                                       5  1544  B !50 S            10
161  3 110         C     SX,PERIOD                                    7  1549  C R95 R71          10
162  3 120         BE    PERDRT                                       5  1556  B X02 S            11
163  3 130         C     SX,@/14@          OCCURRS                    7  1561  C R95 ?66          11
164  3 140         BE    OCCURS                                       5  1568  B W87 S            11
165  3 150         C     SX,@/05@          REDEFINES                  7  1573  C R95 ?69          11
166  3 160         BE    REDEF                                        5  1580  B W33 S            11
167  3 170         B     SRPUT                                        4  1585  B Q58              11
168  3 180         B     BB3                                          4  1589  B V33              11
169  3 190  BB4    MLC   @1@,EDCLSW           SET EDIT CLAUSE SW     7  1593  M ?48 R78          12
170  3 200         B     BB3                                          4  1600  B V33              12
171  3 210  BB2A   MLC   SX,NAMSAV#3                                  7  1604  M R95 ?72          12
172  3 220         B     BB2B                                         4  1611  B V19              12
173  3 230  BB2C   MLC   NXTNAM,SX                                    7  1615  M T02 R95          12
174  3 240         A     @1@,NXTNAM                                   7  1622  A ?48 T02          12
175  3 250         B     BB2D                                         4  1629  B V03              13
176  4 010  REDEF  B     SRPUT             REDEFINES                  4  1633  B Q58              13
177  4 020         MLC   @1@,NOWMSW                                   7  1637  M ?48 R76          13
178  4 030         C     LVL,@001@                                    7  1644  C ?51 ?54          13
179  4 040         BU    *&9                                          5  1651  B W64 /            13
180  4 050         BCE   BB3,FILESW,1                                 8  1656  B V33 R75 1        13
181  4 060         B     SRGET                                        4  1664  B Q40              13
182  4 070         B     SRPUT                                        4  1668  B Q58              14
183  4 080         MLC   &SX,X1                                       7  1672  M ?75 089          14
184  4 090         B     TBLSET                                       4  1679  B Z33              14
185  4 100         B     BB3                                          4  1683  B V33              14
186  4 110  OCCURS B     SRPUT             OCCURS                     4  1687  B Q58              14
187  4 120         MLC   @1@,NOWMSW                                   7  1691  M ?48 R76          14
188  4 130         B     BB3                                          4  1698  B V33              14
189  4 140  PERDRT B     GETX                                         4  1702  B 335              15
190  4 150         DCW   SXSAVE                                       3  1708  ?31                15
191  4 160         DCW   ERR                                          3  1711  Q80                15
192  4 170         C     SXSAVE,LEVELI                                7  1712  C ?31 R65          15
193  4 180         BE    PERD1                                        5  1719  B X35 S            15
194  4 190  PERD3  B     PUTX                                         4  1724  B 363              15
195  4 200         DCW   &@#EL@            HIT VERB SO ENTRY ELEM     3  1730  ?78                15
196  4 210         B     PERD2                                        4  1731  B X80              16
197  4 220  PERD1  B     GETX                                         4  1735  B 335              16
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          DCW   SXSAV2                                            3  1741  ?34               16
199  4 240          DCW   ERR                                               3  1744  Q80               16
200  4 250          C     LVL,SXSAV2                                        7  1745  C ?51 ?34         16
201  5 010          BH    PERD4                                             5  1752  B X61 U           16
202  5 020          B     PERD3                                             4  1757  B X24             16
203  5 030  PERD4    C     SXSAV2,@077@                                      7  1761  C ?34 ?81         17
204  5 040          BE    PERD3                                             5  1768  B X24 S           17
205  5 050          B     PUTX                                              4  1773  B 363             17
206  5 060          DCW   &@#GR@                                            3  1779  ?84               17
207  5 070  PERD2    BCE   PERD10,FILESW,1                                   8  1780  B Y34 R75 1       17
208  5 080  PERD7    BCE   PERD20,NOWMSW,1                                   8  1788  B Z18 R76 1       17
209  5 090  PERD8    B     PICANL                                            4  1796  B J13             17
210  5 100  PERD9    B     PUTX                                              4  1800  B 363             18
211  5 110          DCW   PERIOD                                            3  1806  R71               18
212  5 120          MLC   SXSAVE,SX                                         7  1807  M ?31 R95         18
213  5 130          C     SX,LEVELI                                         7  1814  C R95 R65         18
214  5 140          BU    AA5A              IF NOT LEVEL - BR TO ANALYZE    5  1821  B T40 /           18
215  5 150          B     SRPUT             PUT OUT LEVEL OPERATOR          4  1826  B Q58             18
216  5 160          B     BB2               BRANCH TO LEVEL ANALYSIS ROUTINE  4  1830  B U54             18
217  5 170  PERD10   C     LVL,@001@                                         7  1834  C ?51 ?54         19
218  5 180          BU    PERD7                                             5  1841  B X88 /           19
219  5 190          C     O1CONT,@002@                                      7  1846  C ?63 ?87         19
220  5 200          BE    PERD12                                            5  1853  B Y67 S           19
221  5 210          BH    PERD7                                             5  1858  B X88 U           19
222  5 220          B     PERD13                                            4  1863  B Y78             19
223  5 230  PERD12   MLC   &NAMSAV,X1                                       7  1867  M ?90 089         20
224  5 240          B     TBLSET                                            4  1874  B Z33             20
225  5 250  PERD13   BCE   PERD7,NOWMSW,1                                   8  1878  B X88 R76 1       20
226  6 010          B     PUTX                                              4  1886  B 363             20
227  6 020          DCW   &@/05@             IMPLIED REDEF                 3  1892  ?69               20
228  6 030          B     PUTX                                              4  1893  B 363             20
229  6 040          DCW   &NAMSAV                                           3  1899  ?72               20
230  6 050          MLC   @1@,NOWMSW                                       7  1900  M ?48 R76         21
231  6 060          MLC   O1NAME,NAMSAV                                     7  1907  M ?60 ?72         21
232  6 070          B     PERD7                                             4  1914  B X88             21
233  6 080  PERD20   MLC   &O1NAME,X1                                       7  1918  M ?93 089         21
234  6 090          B     TBLSET                                            4  1925  B Z33             21
235  6 100          B     PERD8                                             4  1929  B X96             21
236  6 110  *   BUILD NO WDMK TABLE ROUTINE
237  6 120  TBLSET   SBR   XTBLST&3                                         4  1933  H !06             21
238  6 130          MLC   TBLNM&6,X3                                       7  1937  M Z98 099         22
239  6 140          C     0&X1,3&X3                                         7  1944  C 0|0 0?3         22
240  6 150          BE    XTBLST          NAME ALREADY ON TABLE             5  1951  B !03 S           22
241  6 160          C     0&X1,6&X3                                         7  1956  C 0|0 0?6         22
242  6 170          BE    XTBLST                                            5  1963  B !03 S           22
243  6 180          C     0&X1,9&X3                                         7  1968  C 0|0 0?9         22
244  6 190          BE    XTBLST                                            5  1975  B !03 S           23
245  6 200          C     GMADDR,X3    TABLE OVERFLO IF PAST GM             7  1980  C T09 099         23
246  6 210          BE    ERR002                                            5  1987  B Q73 S           23
247  6 220  TBLNM    LCA   0&X1,TBLSTR                                       7  1992  L 0|0 G96         23
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         SBR   TBLNM&6                                       4  1999  H Z98               23
249  6 240  XTBLST B     0                                             4  2003  B 000               23
250  6 250  EOJRT  MLC   &GRPMK,X1                                     7  2007  M ?96 089           23
251  7 010         B     TBLSET                                        4  2014  B Z33               24
252  7 020  EOJ1   B     GETX                                          4  2018  B 335               24
253  7 030         DCW   SX                                            3  2024  R95                 24
254  7 040         DCW   EOJ2                                          3  2027  !39                 24
255  7 050         B     PUTX                                          4  2028  B 363               24
256  7 060         DCW   SX                                            3  2034  R95                 24
257  7 070         B     EOJ1                                          4  2035  B !18               24
258  7 080  EOJ2   B     SRPUT                                         4  2039  B Q58               25
259  7 090         B     SUPER                                         4  2043  B 351               25
260  7 100         DCW   @D02@                                        3  2049                      25
261  7 110  PICTUR MLC   PICR&1,PICR        BLANK OUT PICTURE         7  2050  M ?28 ?27           25
262  7 120  PICT1  B     SRGET                                         4  2057  B Q40               25
263  7 130         C     SX,PICTI                                      7  2061  C R95 R68           25
264  7 140         BE    BB3                                           5  2068  B V33 S             25
265  7 150         MLC   PICR-1,PICR       SHIFT                     7  2073  M ?26 ?27           26
266  7 160         MLC   SX,PICL                                       7  2080  M R95 R96           26
267  7 170         BCE   PICT1,PICR&1,                                8  2087  B !57 ?28           26
268  7 180         MLC   @ @,PICR&1        PICTURE TOO BIG - ERROR   7  2095  M ?97 ?28           26
269  7 190         MLC   PICR&1,PICR                                   7  2102  M ?28 ?27           26
270  7 200         B     ERR001                                        4  2109  B R25               27
271  7 210  *  ANALYZE PICTURES
272  7 220  PICANL BCE   PERD9,PICL,       PICL BLANK IF NO PICTURE  8  2113  B Y00 R96           27
273  7 230         MLC   NULL,X2           NITIALIZE PICTURE UNPACK ROUTIEN  7  2121  M R74 094     27
274  7 240         MLC   @    @,TIMESR                                 7  2128  M A01 R91           27
275  7 250         MLC   NULL,PACKSW                                   7  2135  M R74 R79           27
276  8 010         MLC   NULL,CLASSW       **                        7  2142  M R74 R81           28
277  8 020         MLC   NULL,EDITSW       **                        7  2149  M R74 R80           28
278  8 030         MLC   NULL,SIZCNT       **                        7  2156  M R74 R87           28
279  8 040         MLC   &SDEC06,SDEC03&3      INITIALIZE DEC         7  2163  M A04 P74           28
280  8 050         MLC   @B@,SDEC03         **                        7  2170  M A05 P71           28
281  8 060         MLC   NULL,DECSW        **                        7  2177  M R74 R77           29
282  8 070         MLC   NULL,DECONT       **                        7  2184  M R74 A32           29
283  8 080  PICAN1 B     SSINGL            GET ONE CHAR              4  2191  B L94               29
284  8 090  PICA10 BCE   PICAN2,PICHAR,    END OF PICTURE IF BLANK   8  2195  B K47 R92           29
285  8 100         B     SSIZE             FIND SIZE OF PICTURE      4  2203  B O21               29
286  8 110  PICA12 B     SDECNT            CALCULATE DECIMAL COUNT   4  2207  B O49               29
287  8 120  PICA13 B     SEDCLS                                        4  2211  B N51               29
288  8 130  PICA14 B     PICAN1                                        4  2215  B J91               30
289  8 140  PICN22 S     @1@,DECONT                                    7  2219  S ?48 A32           30
290  8 150         MLZS  @1@,DECONT                                    7  2226  Y ?48 A32           30
291  8 160         MLC   @N@,PICN21                                    7  2233  M A06 K62           30
292  8 170         MLC   @B@,SWITCH                                    7  2240  M A05 R59           30
293  8 180  PICAN2 BCE   *&8,DECSW,1                                   8  2247  B K62 R77 1         31
294  8 190         MLC   NULL,DECONT                                   7  2255  M R74 A32           31
295  8 200  PICN21 NOP   PICN22                                       4  2262  N K19               31
296  8 210         B     PUTX                                          4  2266  B 363               31
297  8 220         DCW   PICTI                                         3  2272  R68                 31
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

 298  8 230         B     PUTX                                              4  2273  B 363              31
 299  8 240         DCW   SIZCNT-3           HIGHORDER - SIZE             3  2279  R84                31
 300  8 250         B     PUTX                                              4  2280  B 363              32
 301  9 010         DCW   SIZCNT             LOW ORDER SIZE               3  2286  R87                32
 302  9 020         B     PUTX                                              4  2287  B 363              32
 303  9 030         DCW   DECONT             DECIMAL COUNT                3  2293  A32                32
 304  9 040         MLC   @  9@,SX                                         7  2294  M A09 R95          32
 305  9 050         BCE   *&8,CLASSW,2       DETERMINE AND PUT CLASS      8  2301  B L16 R81 2        32
 306  9 060         MLC   @X@,SX                                           7  2309  M A10 R95          32
 307  9 070         B     SRPUT                                             4  2316  B Q58              33
 308  9 080         BCE   PICAN3,EDITSW,1                                  8  2320  B L50 R80 1        33
 309  9 090         MLC   @.KK@,SX       PUT NO EDIT SYMBOL               7  2328  M A13 R95          33
 310  9 100         B     SRPUT                                             4  2335  B Q58              33
 311  9 110  PICAN4 MLC   PICR&1,PICR        BLANK OUT PICTURE AREA       7  2339  M ?28 ?27          33
 312  9 120         B     PERD9                                             4  2346  B Y00              33
 313  9 130  PICAN3 B     PUTX                                              4  2350  B 363              33
 314  9 140         DCW   &@  E@    YES EDIT                              3  2356  A16                34
 315  9 150         MLC   @002@,X2                                        7  2357  M ?87 094          34
 316  9 160  PICA30 MLC   PICL&X2,SX                                       7  2364  M RR6 R95          34
 317  9 170         B     SRPUT                                             4  2371  B Q58              34
 318  9 180         BCE   PICAN4,PICL&X2,     IS PICTURE ALL OUT           8  2375  B L39 RR6          34
 319  9 190         A     @003@,X2                                        7  2383  A A19 094          34
 320  9 200         B     PICA30                                            4  2390  B L64              35
 321  9 210  *   SSINGL ROUTINE SUPLIES ONE UNPACKED CHAR AT A TIME FROM PICTURE
 322  9 220  SSINGL BCE   UNPACK,PACKSW,1                                  8  2394  B N11 R79 1        35
 323  9 230         MLC   PICL&X2,PICHAR                                    7  2402  M RR6 R92          35
 324  9 240         BCE   PACKED,PICHAR,)    IS IT RT PAREN               8  2409  B M28 R92 )        35
 325  9 250         A     @1@,X2                                          7  2417  A ?48 094          35
 326 10 010  XSINGL B     PICA10                                            4  2424  B J95              35
 327 10 020  PACKED A     @1@,X2               SET UP FOR UNPACKING %NN) PICT  7  2428  A ?48 094          36
 328 10 030         BCE   PACKD1,PICL&X2,%   LEFT PAREN                   8  2435  B M82 RR6 %        36
 329 10 040         MLNS  PICL&X2,TIMESL                                    7  2443  D RR6 R88          36
 330 10 050         MLC   TIMESR-1,TIMESR                                   7  2450  M R90 R91          36
 331 10 060         MLC   NULL,TIMESL                                      7  2457  M R74 R88          36
 332 10 070         B     PACKED                                            4  2464  B M28              37
 333 10 080  PACKD2 MLC   TIMESR-1,TIMESR    SHIFT TO FILL TIMES BUCKET    7  2468  M R90 R91          37
 334 10 090         MLC   NULL,TIMESL                                      7  2475  M R74 R88          37
 335 10 100  PACKD1 BCE   PACKD2,TIMESR,                                   8  2482  B M68 R91          37
 336 10 110         A     @1@,X2                                          7  2490  A ?48 094          37
 337 10 120         MLC   PICL&X2,PICHAR                                   7  2497  M RR6 R92          38
 338 10 130         MLC   @1@,PACKSW                                      7  2504  M ?48 R79          38
 339 10 140  UNPACK S     @1@,TIMESR                                      7  2511  S ?48 R91          38
 340 10 150         BWZ   XSINGL,TIMESR,B    IS TIMES BUCKET STILL PLUS   8  2518  V M24 R91 B        38
 341 10 160         MLC   NULL,PACKSW        NO, RESET AND BR OUT         7  2526  M R74 R79          38
 342 10 170         MLC   @    @,TIMESR                                    7  2533  M A01 R91          39
 343 10 180         A     @1@,X2                                          7  2540  A ?48 094          39
 344 10 190         B     SSINGL                                            4  2547  B L94              39
 345 10 200  SEDCLS BCE   CLASS9,PICHAR,9      CLASS AND EDIT ROUTINE      8  2551  B O10 R92 9        39
 346 10 210         BCE   CLASSX,PICHAR,X    ALPHANUM CHAR                8  2559  B N99 R92 X        39
 347 10 220         BCE   CLASSX,PICHAR,A    ALPHA CHAR                   8  2567  B N99 R92 A        40
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          MLC   PICHAR,*&8         TEST FOR EDIT            7  2575  M R92 N89           40
349 10 240          BCE   XEDCLS,@SVP@,                               8  2582  B O06 A22           40
350 10 250          BCE                                              1  2590  B                   40
351 11 010          BCE                                              1  2591  B                   40
352 11 020          MLC   @1@,EDITSW                                 7  2592  M ?48 R80           40
353 11 030  CLASSX  MLC   @B@,CLASSW                                 7  2599  M A05 R81           40
354 11 040  XEDCLS B     PICA14                                      4  2606  B K15               41
355 11 050  CLASS9 MLNS  @2@,CLASSW                                 7  2610  D A23 R81           41
356 11 060          B     XEDCLS                                      4  2617  B O06               41
357 11 070  SSIZE  MLC   PICHAR,*&8         COUNT SIZE OF PICTURE IGNORE SVP  7  2621  M R92 O35  41
358 11 080          BCE   XSIZE,@SVP@,                               8  2628  B O45 A22           41
359 11 090          BCE                                              1  2636  B                   41
360 11 100          BCE                                              1  2637  B                   41
361 11 110          A     @1@,SIZCNT                                 7  2638  A ?48 R87           42
362 11 120  XSIZE  B     PICA12                                      4  2645  B K07               42
363 11 130  SDECNT BCE   SDEC04,PICHAR,P                            8  2649  B P57 R92 P         42
364 11 140          BCE   XDECNT,DECSW,1     BRANCH ORE  BEYOND DECIMAL  8  2657  B P24 R77 1      42
365 11 150          BCE   SDEC01,PICHAR,V                           8  2665  B P46 R92 V         42
366 11 160          BCE   SDEC01,PICHAR,.                           8  2673  B P46 R92 .         43
367 11 170          MLC   PICHAR,SDEC02&7    SETUP FOR TEST SKIP NONDECIMALS  7  2681  M R92 O95  43
368 11 180  SDEC02 BCE   XDECNT,@CR0BSD@,                           8  2688  B P24 A29           43
369 11 190          BCE                                              1  2696  B                   43
370 11 200          BCE                                              1  2697  B                   43
371 11 210          BCE                                              1  2698  B                   43
372 11 220          BCE                                              1  2699  B                   43
373 11 230          BCE                                              1  2700  B                   44
374 11 240          BCE   PLSMNS,PICHAR,&                           8  2701  B P28 R92 &         44
375 11 250          BCE   PLSMNS,PICHAR,-                           8  2709  B P28 R92 -         44
376 12 010  SDEC05 A     @1@,DECONT#3                               7  2717  A ?48 A32           44
377 12 020  XDECNT B     PICA13                                      4  2724  B K11               44
378 12 030  PLSMNS MLC   SWITCH,PICN21                              7  2728  M R59 K62           44
379 12 040          MLC   @N@,SWITCH                                 7  2735  M A06 R59           45
380 12 050          B     SDEC05                                     4  2742  B P17               45
381 12 060  SDEC01 MLC   @1@,DECSW                                 7  2746  M ?48 R77           45
382 12 070          B     XDECNT                                     4  2753  B P24               45
383 12 080  SDEC04 MLC   @1@,DECSW                                 7  2757  M ?48 R77           45
384 12 090          C     SIZCNT,NULL                                7  2764  C R87 R74           45
385 12 100  SDEC03 BU    SDEC06                                     5  2771  B P94 /             46
386 12 110          MLC   @N@,SDEC03                                 7  2776  M A06 P71           46
387 12 120          S     @1@,DECONT                                 7  2783  S ?48 A32           46
388 12 130          B     XDECNT                                     4  2790  B P24               46
389 12 140  SDEC06 MLC   SIZCNT,DECONT                              7  2794  M R87 A32           46
390 12 150          MLC   &SDEC05,SDEC03&3                          7  2801  M A35 P74           46
391 12 160          B     SDEC05                                     4  2808  B P17               47
392 12 170  SRSKIP SBR   EXSKIP&3                                   4  2812  H Q39               47
393 12 180  SKIP1  B     SRGET                                      4  2816  B Q40               47
394 12 190          B     SRPUT                                      4  2820  B Q58               47
395 12 200          C     SX,PERIOD                                  7  2824  C R95 R71           47
396 12 210          BU    SKIP1                                      5  2831  B Q16 /             47
397 12 220  EXSKIP B     0                                          4  2836  B 000               47
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  SRGET  SBR   EXGET&3                                           4  2840  H Q57              48
399 12 240         B     GETX                                              4  2844  B 335              48
400 12 250         DCW   SX                                                3  2850  R95                48
401 13 010         DCW   ERR                                               3  2853  Q80                48
402 13 020  EXGET  B     0                                                 4  2854  B 000              48
403 13 030  SRPUT  SBR   EXPUT&3                                           4  2858  H Q72              48
404 13 040         B     PUTX                                              4  2862  B 363              48
405 13 050         DCW   SX                                                3  2868  R95                49
406 13 060  EXPUT  B     0                                                 4  2869  B 000              49
407 13 070  ERR002 MLC   @9@,DIAG                                          7  2873  M A36 R24          49
408 13 080  ERR    CS    333                                               4  2880  / 333              49
409 13 090         CS                                                      1  2884  /                  49
410 13 100         CC    1                                                 2  2885  F 1                49
411 13 110         MLC   DIAG,260                                          7  2887  M R24 260          49
412 13 120         W                                                       1  2894  2                  50
413 13 130         CC    1                                                 2  2895  F 1                50
414 13 140         B     DUMP                                              4  2897  B 359              50
415 13 150  DIAG   DCW   @SYSTEM FAILURE PHASE D01@                       24  2924                     50
416 13 160  ERR001 B     PUTX                                              4  2925  B 363              50
417 13 170         DCW   &@.DG@                                            3  2931  A39                50
418 13 180         B     PUTX                                              4  2932  B 363              51
419 13 190         DCW   &@D01@                                            3  2938  A42                51
420 13 200  ER1    B     SRGET                                             4  2939  B Q40              51
421 13 210         C     SX,@.PC@                                          7  2943  C R95 A45          51
422 13 220         BU    ER1                                               5  2950  B R39 /            51
423 13 230         B     BB3                                               4  2955  B V33              51
424 13 240  SWITCH DCW   @B@                                               1  2959                     51
425 13 250  PROCI  DCW   @*01@                                             3  2962                     52
426 14 010  LEVELI DCW   @.LV@                                             3  2965                     52
427 14 020  PICTI  DCW   @.PC@                                             3  2968                     52
428 14 030  PERIOD DCW   @.PD@                                             3  2971                     52
429 14 040  NULL   DCW   @000@                                             3  2974                     52
430 14 050  FILESW DCW   @0@               1 IF IN FILE SECTION            1  2975                     52
431 14 060  NOWMSW DCW   @0@               1 IF 01  HAS NO WDMKS           1  2976                     52
432 14 070  DECSW  DCW   @0@               1 WHEN DEC COUNT COMPLETE FOR ENT  1  2977                  53
433 14 080  EDCLSW DCW   @0@               1 WHEN ANY EDIT CLAUSES         1  2978                     53
434 14 090  PACKSW DCW   @0@                                               1  2979                     53
435 14 100  EDITSW DCW   @0@                                               1  2980                     53
436 14 110  CLASSW DCW   @0@                                               1  2981                     53
437 14 120  SIZCNT DCW   #6                                                6  2987                     53
438 14 130  TIMESL DA    1X4      ****                                        2988   2991              53
439 14 140  TIMESR       4                                                   2991              SBFLD
440 14 150  PICHAR DCW   #1                                                1  2992                     54
441 14 160  SX     DCW   #3                                                3  2995                     54
442 14 170  PICL   DA    1X33      *****                                     2996   3028              54
443 14 180  PICR         32       *****                                     3027              SBFLD
444 14 190  SXSAVE DCW   #3                                                3  3031                     55
445 14 200  SXSAV2 DCW   #3                                                3  3034                     55
446 14 210         LTORG                                                          3035
       119         DCW   &TBR4K                                            3  3037  L4W         ADCON  55
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @0@                                        1  3038             LIT     55
                         @/01@                                      3  3041             LIT     55
                         @/09@                                      3  3044             LIT     55
                         @/26@                                      3  3047             LIT     55
                         @1@                                        1  3048             LIT     56
       146  LVL          #03                                        3  3051             AREA    56
                         @001@                                      3  3054             LIT     56
                         @   @                                      3  3057             LIT     56
       156  O1NAME       #03                                        3  3060             AREA    56
       157  O1CONT       #03                                        3  3063             AREA    56
                         @/14@                                      3  3066             LIT     56
                         @/05@                                      3  3069             LIT     57
       171  NAMSAV       #03                                        3  3072             AREA    57
       183               &SX                                        3  3075  R95        ADCON   57
                         @#EL@                                      3  3078             LIT     57
                         @077@                                      3  3081             LIT     57
                         @#GR@                                      3  3084             LIT     57
                         @002@                                      3  3087             LIT     57
       223               &NAMSAV                                    3  3090  ?72        ADCON   58
       233               &O1NAME                                    3  3093  ?60        ADCON   58
       250               &GRPMK                                     3  3096  C46        ADCON   58
                         @ @                                        1  3097             LIT     58
                         @    @                                     4  3101             LIT     58
       279               &SDEC06                                    3  3104  P94        ADCON   58
                         @B@                                        1  3105             LIT     58
                         @N@                                        1  3106             LIT     59
                         @  9@                                      3  3109             LIT     59
                         @X@                                        1  3110             LIT     59
                         @.KK@                                      3  3113             LIT     59
                         @  E@                                      3  3116             LIT     59
                         @003@                                      3  3119             LIT     59
                         @SVP@                                      3  3122             LIT     59
                         @2@                                        1  3123             LIT     60
       368               @CR0BSD@                                   6  3129             LIT     60
       376  DECONT       #03                                        3  3132             AREA    60
       390               &SDEC05                                    3  3135  P17        ADCON   60
                         @9@                                        1  3136             LIT     60
                         @.DG@                                      3  3139             LIT     60
                         @D01@                                      3  3142             LIT     60
                         @.PC@                                      3  3145             LIT     61
447 14 220          ORG   *&200                                          3346
448 14 230  GRPMK   DCW   @}@              GROUPMARK                1  3346                     62
449 14 240  TBLSTR EQU   *&450                                         3796
450 14 250          DA    1X3000                                       3347   6346          62
451 15 010  TBR4K   EQU   *                                            6346
452 15 020          END                                                      / 000 080       63
```

OBJECT CORE EXCEEDED

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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1401 COBOL - D02 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - D02						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89				0089		
104	1	040	X2	EQU	94				0094		
105	1	050	X3	EQU	99				0099		
106	1	060	GETX	EQU	335				0335		
107	1	070	IORW	EQU	343				0343		
108	1	080	SUPER	EQU	351				0351		
109	1	090	DUMP	EQU	359				0359		
110	1	100	PUTX	EQU	363				0363		
111	1	110	CONST	EQU	188				0188		
112	1	120	SCRBKT	EQU	1126				1126		
113	1	130	NXTNAM	EQU	1302				1302		
114	1	140	TBLSTR	EQU	1305	RIGHT ADDRESS OF TABLE FROM D10			1305		
115	1	150		ORG	1306					1306	
116	1	160	AA1	B	GETX			4	1306	B 335	4
117	1	170		DCW	SX			3	1312	?04	4
118	1	180		DCW	ERR			3	1315	Q80	4
119	1	190		B	PUTX			4	1316	B 363	4
120	1	200		DCW	SX			3	1322	?04	4
121	1	210		C	SX,@.LV@			7	1323	C ?04 ?10	4
122	1	220		BE	AA2			5	1330	B T69 S	4
123	1	230		C	SX,@*01@	PROCEDURE		7	1335	C ?04 ?13	5
124	1	240		BE	EOJ1A			5	1342	B P69 S	5
125	1	250		B	AA1			4	1347	B T06	5
126	2	010	AA3	MLC	@001@,DLEVEL			7	1351	M ?16 R60	5
127	2	020		MLC	@N@,SW77			7	1358	M ?17 U11	5
128	2	030		B	AA4			4	1365	B T94	5
129	2	040	AA2	MLC	ZERO,ZERO-1	ZERO OUT DESCRIPTION AREA		7	1369	M R97 R96	6
130	2	050		B	GETX			4	1376	B 335	6
131	2	060		DCW	DLEVEL			3	1382	R60	6
132	2	070		DCW	ERR			3	1385	Q80	6
133	2	080		BCE	AA3,DLEVEL-1,7			8	1386	B T51 R59 7	6
134	2	090	AA4	B	PUTX			4	1394	B 363	6
135	2	100		DCW	DLEVEL			3	1400	R60	6
136	2	110		B	GETX			4	1401	B 335	7
137	2	120		DCW	DNAME			3	1407	R63	7
138	2	130		DCW	ERR			3	1410	Q80	7
139	2	140	SW77	B	AA5			4	1411	B U29	7
140	2	150		B	PUTX			4	1415	B 363	7
141	2	160		DCW	&@077@			3	1421	?20	7
142	2	170		MLC	@B@,SW77			7	1422	M ?21 U11	7
143	2	180	AA5	C	DLEVEL,@001@			7	1429	C R60 ?16	8
144	2	190		BE	NOWMTB			5	1436	B N22 S	8
145	2	200		BCE	RETURN,DPNDSW,0			8	1441	B U75 ?01 0	8
146	2	210		C	DNAME,DPNAME			7	1449	C R63 ?00	8
147	2	220		BU	RETURN			5	1456	B U75 /	8

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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          B     PUTX                                          4  1461  B 363               8
149  2 240          DCW   &@*03@                                        3  1467  ?24                 8
150  2 250          MLC   @0@,DPNDSW                                   7  1468  M ?25 ?01           9
151  3 010  RETURN  B     SRGET                                         4  1475  B R25               9
152  3 020          C     SX,@/10@           SIZE                       7  1479  C ?04 ?28           9
153  3 030          BE    DCSIZE                                        5  1486  B X45 S             9
154  3 040          C     SX,@$16@           NUMERIC CLASS              7  1491  C ?04 ?31           9
155  3 050          BE    DCNUM                                         5  1498  B X80 S             9
156  3 060          C     SX,@/03@           ALPHANUMERIC CLASS         7  1503  C ?04 ?34          10
157  3 070          BE    DCALNM                                        5  1510  B X69 S            10
158  3 080          C     SX,@$10@           ALPHABETIC                 7  1515  C ?04 ?37          10
159  3 090          BE    DCALNM                                        5  1522  B X69 S            10
160  3 100          C     SX,@/18@           POINT                      7  1527  C ?04 ?40          10
161  3 110          BE    DCDIML                                        5  1534  B X91 S            10
162  3 120          C     SX,@#EL@           ELEM                       7  1539  C ?04 ?43          11
163  3 130          BE    DCTYPE                                        5  1546  B Z24 S            11
164  3 140          C     SX,@#GR@           GROUP                      7  1551  C ?04 ?46          11
165  3 150          BE    DCTYPE                                        5  1558  B Z24 S            11
166  3 160          C     SX,@/15@          LEFT JUSTIFIED              7  1563  C ?04 ?49          11
167  3 170          BE    DCJUST                                        5  1570  B Y60 S            11
168  3 180          C     SX,@/17@          RIGHT JUSTIFIED             7  1575  C ?04 ?52          12
169  3 190          BE    DCJUST                                        5  1582  B Y60 S            12
170  3 200          C     SX,@/20@           FLOATING $$$               7  1587  C ?04 ?55          12
171  3 210          BE    DCEDTC                                        5  1594  B Y90 S            12
172  3 220          C     SX,@/21@           CHECK PROTECT              7  1599  C ?04 ?58          12
173  3 230          BE    DCEDTC                                        5  1606  B Y90 S            12
174  3 240          C     SX,@$08@    ZERO SUPR                        7  1611  C ?04 ?61          13
175  3 250          BE    DCEDTC                                        5  1618  B Y90 S            13
176  4 010          C     SX,@/12@           LEAVING                    7  1623  C ?04 ?64          13
177  4 020          BE    DCLVNG                                        5  1630  B Z10 S            13
178  4 030          C     SX,@.NM@          NAME OF                     7  1635  C ?04 ?67          13
179  4 040          BE    NAMERT                                        5  1642  B Y45 S            13
180  4 050          C     SX,@/22@                                      7  1647  C ?04 ?70          14
181  4 060          BE    DCBLNK                                        5  1654  B Z50 S            14
182  4 070          C     SX,@.PD@           PERIOD                     7  1659  C ?04 ?73          14
183  4 080          BE    PERDRT                                        5  1666  B Z61 S            14
184  4 090          C     SX,@.PC@           PICTURE                    7  1671  C ?04 ?76          14
185  4 100          BE    PICTRT                                        5  1678  B O39 S            14
186  4 110          C     SX,@*03@     DEPENDING                        7  1683  C ?04 ?24          15
187  4 120          BE    DPNDRT                                        5  1690  B Y24 S            15
188  4 130          C     SX,@/14@           OCCURS                     7  1695  C ?04 ?79          15
189  4 140          BE    OCCURT                                        5  1702  B X15 S            15
190  4 150  RETRN1  B     SRPUT                                         4  1707  B R43              15
191  4 160          B     RETURN                                        4  1711  B U75              15
192  4 170  OCCURT  C     DNAME,@   @         OCCURS - IS NAME BLANK     7  1715  C R63 ?82          15
193  4 180          BU    RETRN1                                        5  1722  B X07 /            16
194  4 190          MLC   NXTNAM,DNAME                                  7  1727  M T02 R63          16
195  4 200          A     @1@,NXTNAM                                    7  1734  A ?83 T02          16
196  4 210          B     RETRN1                                        4  1741  B X07              16
197  4 220  DCSIZE  B     GETX               SIZE DECLARED              4  1745  B 335              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         DCW   DSIZHO                                            3  1751  R66                 16
199  4 240         DCW   ERR                                               3  1754  Q80                 16
200  4 250         B     GETX                                              4  1755  B 335               17
201  5 010         DCW   DSIZLO                                            3  1761  R69                 17
202  5 020         DCW   ERR                                               3  1764  Q80                 17
203  5 030         B     RETURN                                            4  1765  B U75               17
204  5 040  DCALNM MLC   @  X@,DCLASS        ALPHA OR ALPHANUMERIC DECLAR  7  1769  M ?86 R75          17
205  5 050         B     RETURN                                            4  1776  B U75               17
206  5 060  DCNUM  MLC   @  9@,DCLASS        NUMERIC DECLARARION           7  1780  M ?89 R75          17
207  5 070         B     RETURN                                            4  1787  B U75               18
208  5 080  DCDIML B     SRGET               DECIMAL POINT DECLARED        4  1791  B R25               18
209  5 090         B     GETX                                              4  1795  B 335               18
210  5 100         DCW   DDCIML                                            3  1801  R72                 18
211  5 110         DCW   ERR                                               3  1804  Q80                 18
212  5 120         BCE   *&8,SX,5    NO SIGN IF LEFT DEC                  8  1805  B Y20 ?04 5         18
213  5 130         MLZS  @K@,DDCIML                                        7  1813  Y ?90 R72           18
214  5 140         B     RETURN                                            4  1820  B U75               19
215  5 150  DPNDRT MLC   @1@,DPNDSW                                       7  1824  M ?83 ?01           19
216  5 160         B     GETX                                              4  1831  B 335               19
217  5 170         DCW   DPNAME                                            3  1837  ?00                 19
218  5 180         DCW   ERR                                               3  1840  Q80                 19
219  5 190         B     RETURN                                            4  1841  B U75               19
220  5 200  NAMERT B     SRGET                                             4  1845  B R25               19
221  5 210         MLC   SX,DNAME                                          7  1849  M ?04 R63           20
222  5 220         B     RETURN     ATTACH PROPER NAME IF VALUE IS ONLY USE 4  1856  B U75               20
223  5 230  DCJUST BCE   JUSTL,SX,5          SKIP IF LEFT JUST             8  1860  B Y79 ?04 5         20
224  5 240         MLC   @  R@,DJUST                                       7  1868  M ?93 R84           20
225  5 250         B     RETURN                                            4  1875  B U75               20
226  6 010  JUSTL  MLC   @  L@,DJUST                                       7  1879  M ?96 R84           20
227  6 020         B     RETURN                                            4  1886  B U75               21
228  6 030  DCEDTC B     SPLCHK              CHECK PROTECT-ZERO SUP-FLOAT$$$ 4  1890  B Q01               21
229  6 040         DCW   DEDTCL                                            3  1896  R93                 21
230  6 050         DCW   @02@     D02 CONFLICTION EDIT CLAUSES            2  1898                      21
231  6 060         MLC   @  E@,DEDIT                                       7  1899  M ?99 R87           21
232  6 070         B     RETURN                                            4  1906  B U75               21
233  6 080  DCLVNG B     GETX                                              4  1910  B 335               21
234  6 090         DCW   DLVING                                            3  1916  R96                 22
235  6 100         DCW   ERR                                               3  1919  Q80                 22
236  6 110         B     RETURN                                            4  1920  B U75               22
237  6 120  DCTYPE MLC   @  E@,DTYPE         GROUP OR R  ELEM              7  1924  M ?99 R81           22
238  6 130         BCE   RETURN,SX,L                                       8  1931  B U75 ?04 L         22
239  6 140         MLC   @G@,DTYPE                                         7  1939  M A00 R81           22
240  6 150         B     RETURN                                            4  1946  B U75               22
241  6 160  DCBLNK MLC   @  B@,DBLNK                                       7  1950  M A03 R90           23
242  6 170         B     RETURN                                            4  1957  B U75               23
243  6 180  PERDRT BCE   JUSTF,DJUST,0                                     8  1961  B J67 R84 0         23
244  6 190  PERD4  BCE   PERD6,DEDTCL-2,0                                  8  1969  B Z88 R91 0         23
245  6 200  PERD5  MLC   @  E@,DEDIT                                       7  1977  M ?99 R87           23
246  6 210         B     PERD3                                             4  1984  B !18               23
247  6 220  PERD6  BCE   PERD5,DBLNK,B                                     8  1988  B Z77 R90 B         24
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230          MLC   @  K@,DBLNK                               7  1996  M A06 R90           24
249  6 240          MLC   @.KK@,DEDIT                               7  2003  M A09 R87           24
250  6 250  PERD2   BCE   GROUP,DTYPE,G                             8  2010  B N82 R81 G         24
251  7 010  PERD3   BCE   CLASS,DCLASS,0      SET CLASS IF NEEDED   8  2018  B J78 R75 0         24
252  7 020  PERD3A  C     DSIZLO,@000000@     IS ELEM SIZE ZERO     7  2026  C R69 A15           25
253  7 030          BE    SIZERR                                    5  2033  B J89 S             25
254  7 040  PERD7   B     PUTX                PUTX BASIC DESCRIPTION 4  2038  B 363               25
255  7 050          DCW   &@.DS@                                    3  2044  A18                 25
256  7 060          B     PUTX                                      4  2045  B 363               25
257  7 070          DCW   DNAME                                     3  2051  R63                 25
258  7 080          B     PUTX                                      4  2052  B 363               25
259  7 090          DCW   DSIZHO                                    3  2058  R66                 26
260  7 100          B     PUTX                                      4  2059  B 363               26
261  7 110          DCW   DSIZLO                                    3  2065  R69                 26
262  7 120          B     PUTX                                      4  2066  B 363               26
263  7 130          DCW   DDCIML                                    3  2072  R72                 26
264  7 140          B     PUTX                                      4  2073  B 363               26
265  7 150          DCW   DCLASS                                    3  2079  R75                 26
266  7 160          B     PUTX                                      4  2080  B 363               27
267  7 170          DCW   DWDMK                                     3  2086  R78                 27
268  7 180          B     PUTX                                      4  2087  B 363               27
269  7 190          DCW   DTYPE                                     3  2093  R81                 27
270  7 200          B     PUTX                                      4  2094  B 363               27
271  7 210          DCW   DJUST                                     3  2100  R84                 27
272  7 220          B     PUTX                                      4  2101  B 363               27
273  7 230          DCW   DEDIT                                     3  2107  R87                 28
274  7 240          BCE   PERD7A,DEDIT,K      BRANCH OUT IF NO EDIT 8  2108  B J56 R87 K         28
275  7 250          MLC   @D03@,NEXTPH                             7  2116  M A21 Q00           28
276  8 010          B     PUTX                                      4  2123  B 363               28
277  8 020          DCW   DBLNK                                     3  2129  R90                 28
278  8 030          B     PUTX                                      4  2130  B 363               28
279  8 040          DCW   DEDTCL                                    3  2136  R93                 28
280  8 050          C     DEDTCL,@.PC@                              7  2137  C R93 ?76           29
281  8 060          BE    PASPIC                                    5  2144  B K04 S             29
282  8 070          B     PUTX                                      4  2149  B 363               29
283  8 080          DCW   DLVING                                    3  2155  R96                 29
284  8 090  PERD7A  B     PUTX                                      4  2156  B 363               29
285  8 100          DCW   &@.PD@                                    3  2162  ?73                 29
286  8 110          B     AA1                                       4  2163  B T06               29
287  8 120  JUSTF   MLC   @  K@,DJUST                              7  2167  M A06 R84           30
288  8 130          B     PERD4                                     4  2174  B Z69               30
289  8 140  CLASS   MLC   @  X@,DCLASS                             7  2178  M ?86 R75           30
290  8 150          B     PERD3A                                    4  2185  B !26               30
291  8 160  SIZERR  MLC   @0I@,ERRNUM                             7  2189  M A23 ?07           30
292  8 170          B     SDGNST                                    4  2196  B Q58               30
293  8 180          B     PERD7                                     4  2200  B !38               30
294  8 190  PASPIC  MLC   &PICTL-4,X3                             7  2204  M A26 099           31
295  8 200          MLC   @    @,TIMESR                           7  2211  M A30 L59           31
296  8 210          MLC   @0@,PACKSW                             7  2218  M ?25 L55           31
297  8 220          MLC   PICTR1,PICTR1-1                         7  2225  M L48 L47           31
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  PASPC2 B     SRGET                                                4  2232  B R25               31
299  8 240         C     SX,PERIOD                                            7  2236  C ?04 L51           31
300  8 250         BE    UNPAC                                                5  2243  B K63 S             32
301  9 010         MLC   SX,6&X3                                             7  2248  M ?04 0?6           32
302  9 020         SBR   X3                                                   4  2255  H 099               32
303  9 030         B     PASPC2                                               4  2259  B K32               32
304  9 040  UNPAC  MLC   @   @,SX                                            7  2263  M ?82 ?04           32
305  9 050         MLC   @000@,X3                                           7  2270  M A33 099           32
306  9 060  UNPAC1 B     SRSNGL                                               4  2277  B L61               32
307  9 070         MLC   PICHAR,SX                                          7  2281  M L60 ?04           33
308  9 080         B     SRPUT                                                4  2288  B R43               33
309  9 090         BCE   PICEND,PICHAR,                                     8  2292  B L04 L60           33
310  9 100         B     UNPAC1                                               4  2300  B K77               33
311  9 110  PICEND B     PUTX                                                 4  2304  B 363               33
312  9 120         DCW   PERIOD                                             3  2310  L51                 33
313  9 130         B     AA1                                                  4  2311  B T06               33
314  9 140  PICTL  DA    1X33                                                    2315   2347               34
315  9 150  PICTR1 DC    @ @                                                  1  2348                      35
316  9 160  PERIOD DCW   @.PD@                                               3  2351                      35
317  9 170  NULL   DCW   @000@                                               3  2354                      35
318  9 180  PACKSW DCW   #1                                                   1  2355                      35
319  9 190  TIMESL DA    1X4                                                     2356   2359               35
320  9 200  TIMESR       4                                                       2359              SBFLD
321  9 210  PICHAR DCW   @0@                                                  1  2360                      36
322  9 220  *   SSINGL ROUTINE SUPLIES ONE UNPACKED CHAR AT A TIME FROM PICTURE
323  9 230  PICL   EQU   PICTL                                                   2315
324  9 240  SRSNGL SBR   XSINGL&3                                             4  2361  H L98               36
325  9 250  SSINGL BCE   UNPACK,PACKSW,1                                      8  2365  B M82 L55 1         36
326 10 010         MLC   PICL&X3,PICHAR                                       7  2373  M LA5 L60           36
327 10 020         BCE   PACKED,PICHAR,)    IS IT RT PAREN                  8  2380  B L99 L60 )         36
328 10 030         A     @1@,X3                                               7  2388  A ?83 099           36
329 10 040  XSINGL B     0                                                    4  2395  B 000               36
330 10 050  PACKED A     @1@,X3                                               7  2399  A ?83 099           37
331 10 060         BCE   PACKD1,PICL&X3,%    LEFT PAREN                     8  2406  B M53 LA5 %         37
332 10 070         MLNS  PICL&X3,TIMESL                                       7  2414  D LA5 L56           37
333 10 080         MLC   TIMESR-1,TIMESR                                      7  2421  M L58 L59           37
334 10 090         MLC   NULL,TIMESL                                          7  2428  M L54 L56           37
335 10 100         B     PACKED                                               4  2435  B L99               38
336 10 110  PACKD2 MLC   TIMESR-1,TIMESR    SHIFT TO FILL TIMES BUCKET       7  2439  M L58 L59           38
337 10 120         MLC   NULL,TIMESL                                          7  2446  M L54 L56           38
338 10 130  PACKD1 BCE   PACKD2,TIMESR,                                      8  2453  B M39 L59           38
339 10 140         A     @1@,X3                                               7  2461  A ?83 099           38
340 10 150         MLC   PICL&X3,PICHAR                                       7  2468  M LA5 L60           39
341 10 160         MLC   @1@,PACKSW                                           7  2475  M ?83 L55           39
342 10 170  UNPACK S     @1@,TIMESR                                           7  2482  S ?83 L59           39
343 10 180         BWZ   XSINGL,TIMESR,B    IS TIMES BUCKET STILL PLUS       8  2489  V L95 L59 B         39
344 10 190         MLC   NULL,PACKSW        NO, RESET AND BR OUT             7  2497  M L54 L55           39
345 10 200         MLC   @    @,TIMESR                                        7  2504  M A30 L59           40
346 10 210         A     @1@,X3                                               7  2511  A ?83 099           40
347 10 220         B     SSINGL                                               4  2518  B L65               40
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  *  LOOK FOR 01 NAME ON NO-WDMK-TABLE
349 10 240  NOWMTB MLC   TBLSTR,X1                                          7  2522  M T05 089           40
350 10 250         MLC   @0@,DPNDSW      RESET DEPENDING SW AT 01 LEVEL    7  2529  M ?25 ?01           40
351 11 010         MLC   @1@,DWDMK                                         7  2536  M ?83 R78           40
352 11 020  NOWM1  BCE   RETURN,0&X1,}   HIT END OF TABLE IF NEXT A GM      8  2543  B U75 0|0 }         41
353 11 030         C     DNAME,0&X1                                        7  2551  C R63 0|0           41
354 11 040         SBR   X1                                                4  2558  H 089               41
355 11 050         BE    NOWM2               HIT                           5  2562  B N71 S             41
356 11 060         B     NOWM1               LOOK MORE                     4  2567  B N43               41
357 11 070  NOWM2  MLC   @0@,DWDMK                                         7  2571  M ?25 R78           41
358 11 080         B     RETURN                                            4  2578  B U75               41
359 11 090  GROUP  MLC   @  X@,DCLASS      GROUP ITEM W/O PICTURE          7  2582  M ?86 R75           42
360 11 100         MLC   @000@,DSIZHO                                      7  2589  M A33 R66           42
361 11 110         MLC   @000@,DSIZLO                                      7  2596  M A33 R69           42
362 11 120         MLC   @000@,SX                                          7  2603  M A33 ?04           42
363 11 130         B     SPLCHK              GROUP DECIMAL COUNT SET TO ZERO 4  2610  B Q01               42
364 11 140         DCW   DDCIML                                           3  2616  R72                 42
365 11 150         DCW   @03@                                             2  2618                      42
366 11 160         MLC   @.KK@,SX                                         7  2619  M A09 ?04           43
367 11 170         B     SPLCHK              NO GROUP EDITING              4  2626  B Q01               43
368 11 180         DCW   DEDIT                                            3  2632  R87                 43
369 11 190         DCW   @04@                                             2  2634                      43
370 11 200         B     PERD7                                             4  2635  B !38               43
371 11 210  PICTRT B     SRGET               PLACE PIC SIZE                4  2639  B R25               43
372                MLC   @99@,ERRNUM       SET DIAG FOR PICT W/ GROUP ITEM 7  2643  M A35 ?07           43
373                BCE   SDGNST,DTYPE,G     DIAGNOIS PICT/GROUP COMBINATION 8  2650  B Q58 R81 G         44
374 11 220         B     SPLCHK                                            4  2658  B Q01               44
375 11 230         DCW   DSIZHO                                           3  2664  R66                 44
376 11 240         DCW   @05@                                             2  2666                      44
377 11 250         B     SRGET                                             4  2667  B R25               44
378 12 010         B     SPLCHK                                            4  2671  B Q01               44
379 12 020         DCW   DSIZLO                                           3  2677  R69                 44
380 12 030         DCW   @05@                                             2  2679                      45
381 12 040         B     SRGET                                             4  2680  B R25               45
382 12 050         B     SPLCHK              PLACE PIC DEC                 4  2684  B Q01               45
383 12 060         DCW   DDCIML                                           3  2690  R72                 45
384 12 070         DCW   @06@                                             2  2692                      45
385 12 080         B     SRGET                                             4  2693  B R25               45
386 12 090         B     SPLCHK                                            4  2697  B Q01               45
387 12 100         DCW   DCLASS              PLACE PIC CLASS               3  2703  R75                 46
388 12 110         DCW   @07@                                             2  2705                      46
389 12 120         B     SRGET                                             4  2706  B R25               46
390 12 130         MLC   SX,DEDIT    PLACE PIC EDITSW W/O DIAGNOSTIC       7  2710  M ?04 R87           46
391 12 140         BCE   NOEDIT,DEDIT,K                                    8  2717  B P45 R87 K         46
392 12 150         MLC   @.PC@,SX            .PC IN DEDTCL - EDITED PICTURE 7  2725  M ?76 ?04           46
393 12 160         B     SPLCHK                                            4  2732  B Q01               46
394 12 170         DCW   DEDTCL                                           3  2738  R93                 47
395 12 180         DCW   @08@                                             2  2740                      47
396 12 190         B     PERDRT                                            4  2741  B Z61               47
397 12 200  NOEDIT MLC   @000@,SX                                         7  2745  M A33 ?04           47
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 210          B     SPLCHK                                              4  2752  B Q01               47
399 12 220          DCW   DEDTCL                                             3  2758  R93                 47
400 12 230          DCW   @08@                                              2  2760                      47
401 12 240          B     RETURN                                            4  2761  B U75               48
402 12 250  EOJ1    B     SRPUT                                             4  2765  B R43               48
403 13 010  EOJ1A   B     GETX                                              4  2769  B 335               48
404 13 020          DCW   SX                                                3  2775  ?04                 48
405 13 030          DCW   EOJ2                                              3  2778  P90                 48
406 13 040          B     PUTX                                              4  2779  B 363               48
407 13 050          DCW   SX                                                3  2785  ?04                 48
408 13 060          B     EOJ1A                                             4  2786  B P69               49
409 13 070  EOJ2    B     SRPUT                                             4  2790  B R43               49
410 13 080          B     SUPER                                             4  2794  B 351               49
411 13 090  NEXTPH DCW   @D04@                                             3  2800                      49
412 13 100  *  SUBROUTINE PLACE AND CHECK PLACES SX INTO AREA SPECIFIED  BY 1ST
413 13 110  *  PARAMATER - AN ERROR MESSAGE IS PUT OUT FOR ANY DISCREPANACIES
414 13 120  SPLCHK SBR   X3                                                4  2801  H 099               49
415 13 130          MLC   2&X3,X2                                           7  2805  M 0?2 094           49
416 13 140          C     0&X2,@000@                                        7  2812  C 0!0 A33           49
417 13 150          BE    SPLC                                              5  2819  B Q47 S             50
418 13 160          C     0&X2,SX                                           7  2824  C 0!0 ?04           50
419 13 170          BE    SPLC                                              5  2831  B Q47 S             50
420 13 180          MLC   4&X3,ERRNUM                                       7  2836  M 0?4 ?07           50
421 13 190          B     SDGNST                                            4  2843  B Q58               50
422 13 200  SPLC    MLC   SX,0&X2                                           7  2847  M ?04 0!0           50
423 13 210          B     5&X3                                              4  2854  B 0?5               50
424 13 220  SDGNST SBR   XDGNST&3                                          4  2858  H Q79               51
425 13 230          B     PUTX                                              4  2862  B 363               51
426 13 240          DCW   &@.DG@                                           3  2868  A38                 51
427 13 250          B     PUTX                                              4  2869  B 363               51
428 14 010          DCW   ERRNUM                                           3  2875  ?07                 51
429 14 020  XDGNST B     0                                                 4  2876  B 000               51
430 14 030  ERR     CS    333                                               4  2880  / 333               51
431 14 040          CS                                                      1  2884  /                   52
432 14 050          CC    1                                                 2  2885  F 1                 52
433 14 060          MLC   DIAG,260                                         7  2887  M R24 260           52
434 14 070          W                                                       1  2894  2                   52
435 14 080          CC    1                                                 2  2895  F 1                 52
436 14 090          B     DUMP                                              4  2897  B 359               52
437 14 100  DIAG    DCW   @SYSTEM FAILURE PHASE D02@                       24  2924                      53
438 14 110  SRGET   SBR   EXGET&3                                           4  2925  H R42               53
439 14 120          B     GETX                                              4  2929  B 335               53
440 14 130          DCW   SX                                                3  2935  ?04                 53
441 14 140          DCW   ERR                                               3  2938  Q80                 53
442 14 150  EXGET   B     0                                                 4  2939  B 000               54
443 14 160  SRPUT   SBR   EXPUT&3                                           4  2943  H R57               54
444 14 170          B     PUTX                                              4  2947  B 363               54
445 14 180          DCW   SX                                                3  2953  ?04                 54
446 14 190  EXPUT   B     0                                                 4  2954  B 000               54
447 14 200  DESCRP DA     1X39                                                 2958   2996               54
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 210  DLEVEL       3                 LEVEL                          2960              SBFLD
449 14 220  DNAME        6                 NAME                           2963              SBFLD
450 14 230  DSIZHO       9                 SIZE - HIGH ORDER              2966              SBFLD
451 14 240  DSIZLO       12                SIZE - LOW ORDER               2969              SBFLD
452 14 250  DDCIML       15                DECIMAL POSITION               2972              SBFLD
453 15 010  DCLASS       18                CLASS                          2975              SBFLD
454 15 020  DWDMK        21                WORDMARKS - 01 LEVEL YES/NO    2978              SBFLD
455 15 030  DTYPE        24                TYPE - GR OR EL                2981              SBFLD
456 15 040  DJUST        27                JUSTIFIED                      2984              SBFLD
457 15 050  DEDIT        30                EDITING                        2987              SBFLD
458 15 060  DBLNK        33                BLANK WHEN ZERO                2990              SBFLD
459 15 070  DEDTCL       36                EDIT CLAUSES/PICTURE           2993              SBFLD
460 15 080  DLVING       39                LEAVING                        2996              SBFLD
461 15 090  ZERO   DC    @0@                                         1  2997                        55
462 15 100  DPNAME DCW   #3                                          3  3000                        55
463 15 110  DPNDSW DCW   #1                                          1  3001                        55
464 15 120  SX     DCW   #3                                          3  3004                        55
465 15 130  ERRNUM DCW   @D  @                                       3  3007                        55
466 15 140         LTORG                                                    3008
                   DCW   @.LV@                                       3  3010              LIT     56
                         @*01@                                       3  3013              LIT     56
                         @001@                                       3  3016              LIT     56
                         @N@                                         1  3017              LIT     56
                         @077@                                       3  3020              LIT     56
                         @B@                                         1  3021              LIT     56
                         @*03@                                       3  3024              LIT     56
                         @0@                                         1  3025              LIT     57
                         @/10@                                       3  3028              LIT     57
                         @$16@                                       3  3031              LIT     57
                         @/03@                                       3  3034              LIT     57
                         @$10@                                       3  3037              LIT     57
                         @/18@                                       3  3040              LIT     57
                         @#EL@                                       3  3043              LIT     57
                         @#GR@                                       3  3046              LIT     58
                         @/15@                                       3  3049              LIT     58
                         @/17@                                       3  3052              LIT     58
                         @/20@                                       3  3055              LIT     58
                         @/21@                                       3  3058              LIT     58
                         @$08@                                       3  3061              LIT     58
                         @/12@                                       3  3064              LIT     58
                         @.NM@                                       3  3067              LIT     59
                         @/22@                                       3  3070              LIT     59
                         @.PD@                                       3  3073              LIT     59
                         @.PC@                                       3  3076              LIT     59
                         @/14@                                       3  3079              LIT     59
                         @   @                                       3  3082              LIT     59
                         @1@                                         1  3083              LIT     59
                         @  X@                                       3  3086              LIT     60
                         @  9@                                       3  3089              LIT     60
                         @K@                                         1  3090              LIT     60
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                       @  R@                                          3  3093              LIT     60
                       @  L@                                          3  3096              LIT     60
                       @  E@                                          3  3099              LIT     60
                       @G@                                            1  3100              LIT     60
                       @  B@                                          3  3103              LIT     61
                       @  K@                                          3  3106              LIT     61
                       @.KK@                                          3  3109              LIT     61
       252             @0000000@                                      6  3115              LIT     61
                       @.DS@                                          3  3118              LIT     61
                       @D03@                                          3  3121              LIT     61
                       @0I@                                           2  3123              LIT     61
       294             &PICTL-4                                       3  3126  L11         ADCON   62
                       @    @                                         4  3130              LIT     62
                       @000@                                          3  3133              LIT     62
                       @99@                                           2  3135              LIT     62
                       @.DG@                                          3  3138              LIT     62
 467 15 150         DCW   @}@        GROUPMARK                        1  3139                          62
 468 15 160         END                                                    / 000 080                 63
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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1401 COBOL - D03 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - D03
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                                      0089
 104  1 040  X2      EQU   94                                                      0094
 105  1 050  X3      EQU   99                                                      0099
 106  1 060  GETX    EQU   335                                                     0335
 107  1 070  IORW    EQU   343                                                     0343
 108  1 080  SUPER   EQU   351                                                     0351
 109  1 090  DUMP    EQU   359                                                     0359
 110  1 100  PUTX    EQU   363                                                     0363
 111  1 110  CONST   EQU   188                                                     0188
 112  1 120  SCRBKT  EQU   1126                                                    1126
 113  1 130  NAME    EQU   1302                                                    1302
 114  1 140          ORG   1303                                                          1303
 115  1 150  START1  B     PLACE                                           4  1303  B A70                 4
 116  1 160          DCW   &@.ED@                                          3  1309  F94                   4
 117  1 170  START   B     GETX                                            4  1310  B 335                 4
 118  1 180          DCW   SX                                              3  1316  F73                   4
 119  1 190          DCW   EOJ                                             3  1319  ?14                   4
 120  1 200          B     PUTX                                            4  1320  B 363                 4
 121  1 210          DCW   SX                                              3  1326  F73                   4
 122  1 220          C     SX,@.LV@                                        7  1327  C F73 F97             5
 123  1 230          BU    START                                           5  1334  B T10 /               5
 124  1 240  AA1     B     GETX                                            4  1339  B 335                 5
 125  1 250          DCW   SX                                              3  1345  F73                   5
 126  2 010          DCW   ERR                                             3  1348  F26                   5
 127  2 020          C     SX,@.DS@                                        7  1349  C F73 G00             5
 128  2 030          BE    CLEAR                                           5  1356  B T72 S               5
 129  2 040          B     PUTX                                            4  1361  B 363                 6
 130  2 050          DCW   SX                                              3  1367  F73                   6
 131  2 060          B     AA1                                             4  1368  B T39                 6
 132  2 070  CLEAR   CW    CLRBFR                                          4  1372  ) ?13                 6
 133  2 080          MLC   CLRBFR                                          4  1376  M ?13                 6
 134  2 090          MLC   NINULL,ED2       INITIALIZE FIELSD TO   K      7  1380  M F85 ?00             6
 135  2 100          MLC   EDMSKR,EDMSKR-1                                7  1387  M R54 R53             6
 136  2 110          SAR   X2                                              4  1394  Q 094                 7
 137  2 120          MLC   @@@,0&X2                                       7  1398  M G01 0!0             7
 138  2 130          SBR   X2                                              4  1405  H 094                 7
 139  2 140  DESCRT  MLC   &DESLFT&2,ADDRES     GET DESCRIPTION ET AL       7  1409  M G04 U56             7
 140  2 150  DESGET  B     GETX                                            4  1416  B 335                 7
 141  2 160          DCW   SX                                              3  1422  F73                   7
 142  2 170          DCW   ERR                                             3  1425  F26                   7
 143  2 180          C     SX,@.PD@                                        7  1426  C F73 G07             8
 144  2 190          BE    BB1               GOT DATA - NOW ANALYZE        5  1433  B U76 S               8
 145  2 200          C     SX,@.PC@                                        7  1438  C F73 G10             8
 146  2 210          BE    PICT2                                           5  1445  B X72 S               8
 147  2 220          MLC   SX,0                                            7  1450  M F73 000             8
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230  ADDRES EQU   *                                                         1456
149  2 240         MA    @003@,ADDRES                                                                MACRO
150                SW    ADDRES-2                                                4  1457  , U54       GEN      8
151                A     @003@,ADDRES                                            7  1461  A G13 U56   GEN      9
152                CW    ADDRES-2                                                4  1468  ) U54       GEN      9
153  2 250         B     DESGET                                                  4  1472  B U16                 9
154  3 010  BB1    BCE   DESOUT,EDITSW,K    BR OUT IF NO EDIT                    8  1476  B W97 R85 K          9
155  3 020         MLC   SIZE,COUNT                                              7  1484  M R67 F76            9
156  3 030         C     EDCLSW,@000@                                            7  1491  C R91 G16            9
157  3 040         BE    JSTBLK             BR IF ONLY BLANK WHEN ZERO           5  1498  B W79 S             10
158  3 050  EDCLAS MLC   DECIML,X3          EDIT CLAUSES                         7  1503  M R70 099           10
159  3 060         A     LEVING,X3                                               7  1510  A R94 099           10
160  3 070         A     @1@,X3                                                  7  1517  A G17 099           10
161  3 080         C     SIZE,X3                                                 7  1524  C R67 099           10
162  3 090         BH    FCRERR    ZERO SUPRESS FIT ERROR                        5  1531  B Z29 U             10
163  3 100         MLC   @0@,EDMSKL&X3                                           7  1536  M G18 QC2           11
164  3 110         BCE   BB2,EDCLSW-1,0                                          8  1543  B V92 R90 0         11
165  3 120         C     SIZE,X3                                                 7  1551  C R67 099           11
166  3 130         BE    FCRERR    EDIT FIT ERROR                                5  1558  B Z29 S             11
167  3 140         MLC   @*@,EDMSKL&1&X3                                         7  1563  M G19 QC3           11
168  3 150         BCE   BB2,EDCLSW,1    CHECK PROTECT                           8  1570  B V92 R91 1         12
169  3 160         S     @1@,COUNT                                               7  1578  S G17 F76           12
170  3 170         MLC   @$@,EDMSKL&1&X3                                         7  1585  M G20 QC3           12
171  3 180  BB2    MLC   SIZE,X3                                                 7  1592  M R67 099           12
172  3 190         MLC   @@@,EDMSKL&1&X3                                         7  1599  M G01 QC3           12
173  3 200         SBR   X2                                                      4  1606  H 094               13
174  3 210         MLC   NINULL,ED2                                              7  1610  M F85 ?00           13
175  3 220         MLC   NAME,MASK01                                             7  1617  M T02 R91           13
176  3 230         A     @1@,NAME                                                7  1624  A G17 T02           13
177  3 240         MLC   COUNT,CHARCN                                            7  1631  M F76 ?03           13
178  3 250         MLZS  @ @,CHARCN                                              7  1638  Y G21 ?03           13
179  4 010  BB3    MLC   @.PD@,CHARCN&3                                          7  1645  M G07 ?06           14
180  4 020         BCE   BB4,MASK01,K                                            8  1652  B W71 R91 K         14
181  4 030         MLC   @000@,MASKCB                                            7  1660  M G16 R94           14
182  4 040         B     SRDECL                                                  4  1667  B N50               14
183  4 050  BB4    B     SRDESC                                                  4  1671  B X08               14
184  4 060         B     START                                                   4  1675  B T10               14
185  4 070  JSTBLK MLC   @  K@,MASK01       JUST BWZERO                          7  1679  M G24 R91           15
186  4 080         MLC   NINULL,ED2                                              7  1686  M F85 ?00           15
187  4 090         B     BB3                                                     4  1693  B W45               15
188  4 100  DESOUT MLC   @.PD@,BLANK        DESC W/O EDIT                        7  1697  M G07 R88           15
189  4 110         B     BB4                                                     4  1704  B W71               15
190  4 120  SRDESC SBR   XDESC&3            PUTX DESCRIPTION THRU .PD            4  1708  H X60               15
191  4 130         MLC   &DESLFT-7,X3                                            7  1712  M G27 099           16
192  4 140         BCE   SDESC2,BLANK,0                                          8  1719  B X61 R88 0         16
193  4 150  SDESC1 MLC   6&X3,SX                                                 7  1727  M 0?6 F73           16
194  4 160         SAR   X3                                                      4  1734  Q 099               16
195  4 170         B     PUTX                                                    4  1738  B 363               16
196  4 180         DCW   SX                                                      3  1744  F73                 16
197  4 190         C     SX,@.PD@                                                7  1745  C F73 G07           17
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 200          BU    SDESC1                                              5  1752  B X27 /             17
199  4 210  XDESC   B     0                                                   4  1757  B 000               17
200  4 220  SDESC2  MLC   @  K@,BLANK                                        7  1761  M G24 R88           17
201  4 230          B     SDESC1                                              4  1768  B X27               17
202  4 240  PICT2   B     SRSNGL        SETUP FOR SYMBOL #1                   4  1772  B P00               17
203  4 250          B     SRSNGL                                              4  1776  B P00               17
204  5 010          MLC   SIZE,COUNT                                         7  1780  M R67 F76           18
205  5 020          C     DECIML,@000@        SET DECIML SW IF REQUIRED       7  1787  C R70 G16           18
206  5 030          BE    *&8                                                 5  1794  B Y06 S             18
207  5 040          MLC   @1@,DECSW                                         7  1799  M G17 ?12           18
208  5 050          BCE   FDBRT,SINGLE,B                                     8  1806  B Z90 G72 B         18
209  5 060          BCE   FCRRT,SINGLE,R                                     8  1814  B Z21 G72 R         19
210  5 070          BCE   FPLUS,SINGLE,&                                     8  1822  B Y50 G72 &         19
211  5 080          BCE   FMINUS,SINGLE,-                                   8  1830  B Y98 G72 -         19
212  5 090          BCE   BLKFRC,SINGLE,$       LOW ORDER $, FUL FLOT &/- BLK0  8  1838  B Z10 G72 $         19
213  5 100          B     TESTN                                               4  1846  B ?46               19
214  5 110  FPLUS   BCE   BLKFRC,NEXT,&                                      8  1850  B Z10 G69 &         20
215  5 120          MLC   @000@,ED1                                         7  1858  M G16 R97           20
216  5 130          MLNS  SIZE,ED1                                          7  1865  D R67 R97           20
217  5 140          MLNS                                                    1  1872  D                   20
218  5 150          MLNS                                                    1  1873  D                   20
219  5 160  FPLUS1  B     MASK                                              4  1874  B Q00               20
220  5 170          DCW   @-@                                               1  1878                      20
221  5 180          S     @1@,COUNT                                         7  1879  S G17 F76           21
222  5 190          B     PICT3                                             4  1886  B Y90               21
223  5 200  PICT3   B     SRSNGL                                            4  1890  B P00               21
224  5 210          B     TESTN                                             4  1894  B ?46               21
225  5 220  FMINUS  BCE   BLKFRC,NEXT,-      - IN 1ST POS-  BLK/0 IF FULL FLOT  8  1898  B Z10 G69 -         21
226  5 230          B     FPLUS1                                            4  1906  B Y74               21
227  5 240  BLKFRC  MLC   @B@,BLANK     FORCE BLK IF ZERO FOR FULL FLOAT & - $  7  1910  M G28 R88           21
228  5 250          B     TESTN                                             4  1917  B ?46               22
229  6 010  FCRRT   BCE   FCRRT1,NEXT,C      CR                             8  1921  B Z61 G69 C         22
230  6 020  FCRERR  B     PUTX      ERROR - ILLEGIAL EDIT SPECIFIED           4  1929  B 363               22
231  6 030          DCW   &@.DG@                                            3  1935  G31                 22
232  6 040          B     PUTX                                              4  1936  B 363               22
233  6 050          DCW   &@D14@                                            3  1942  G34                 22
234  6 060          MLC   @.KK@,EDITSW                                      7  1943  M G37 R85           22
235  6 070          MLC   @.PD@,BLANK                                       7  1950  M G07 R88           23
236  6 080          B     BB4                                               4  1957  B W71               23
237  6 090  FCRRT1  B     SRSNGL                                            4  1961  B P00               23
238  6 100  FCRRT2  B     MASK                                              4  1965  B Q00               23
239  6 110          DCW   @R@                                               1  1969                      23
240  6 120          B     MASK                                              4  1970  B Q00               23
241  6 130          DCW   @C@                                               1  1974                      23
242  6 140          S     @2@,COUNT                                         7  1975  S G38 F76           24
243  6 150          B     SRSNGL                                            4  1982  B P00               24
244  6 160          B     TESTN                                             4  1986  B ?46               24
245  6 170  FDBRT   BCE   FDBRT1,NEXT,D      B TEST - DB OR INSERT ZERO      8  1990  B !02 G69 D         24
246  6 180          B     TESTN                                             4  1998  B ?46               24
247  6 190  FDBRT1  MLC   @D D@,ED1     SET DB SW                          7  2002  M G41 R97           24
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 200          B     FCRRT1              BRANCH OUT              4  2009  B Z61               24
249  6 210  SUSPRT  BCE   NUMBRT,ZEROSW,1     ZERO SUPPRESS           8  2013  B !76 ?10 1         25
250  6 220          BCE   SUPRT1,DECSW,1                            8  2021  B !53 ?12 1         25
251  6 230          BCE   SUPRT3,NEXT,        ERROR IF SINGLE HO Z5RO SUPRESS  8  2029  B O88 G69  25
252  6 240  SUSS    MLC   @1@,ZEROSW                                7  2037  M G17 ?10           25
253  6 250  SUPRT2  B     MASK                                      4  2044  B Q00               25
254  7 010          DCW   @0@                                       1  2048                      25
255  7 020          B     PICT3               BR TO GET NEXT          4  2049  B Y90               26
256  7 030  SUPRT1  BWZ   NUMBRT,CLRBFR,1                           8  2053  V !76 ?13 1         26
257  7 040          SW    CLRBFR                                    4  2061  , ?13               26
258  7 050          SBR   REPLS&6,2&X2                              7  2065  H K28 0!2           26
259  7 060          B     SUPRT2                                    4  2072  B !44               26
260  7 070  NUMBRT  B     MASK                                      4  2076  B Q00               26
261  7 080          DCW   @ @                                       1  2080                      26
262  7 090          B     PICT3                                     4  2081  B Y90               27
263  7 100  PRTCRT  BCE   SUPRT1,DECSW,1                           8  2085  B !53 ?12 1         27
264  7 110          BCE   NUMBRT,PROTSW,2                           8  2093  B !76 ?09 2         27
265  7 120          BCE   PROT1,PROTSW,0      IF SW 0 NEEDS ZDERO SUP BEFOR C/P  8  2101  B J25 ?09 0  27
266  7 130          B     MASK                                      4  2109  B Q00               27
267  7 140          DCW   @*@                                       1  2113                      27
268  7 150          MLC   @2@,PROTSW                                7  2114  M G38 ?09           28
269  7 160          B     PICT3                                     4  2121  B Y90               28
270  7 170  PROT1   MLC   @1@,PROTSW          SET ZERO SUPRESS PRIOR TO C/P  7  2125  M G17 ?09  28
271  7 180          B     SUSPRT                                    4  2132  B !13               28
272  7 190  DECMRT  B     MASK                ACTUAL DECIMAL          4  2136  B Q00               28
273  7 200          DCW   @.@                                       1  2140                      28
274  7 210          S     @1@,COUNT                                 7  2141  S G17 F76           28
275  7 220  DECRT1  MLC   @0@,DECSW           ASSUMED DECIMAL         7  2148  M G18 ?12           29
276  7 230          B     PICT3                                     4  2155  B Y90               29
277  7 240  FLOTRT  BCE   NUMBRT,DECSW,1      FLOAT $                 8  2159  B !76 ?12 1         29
278  7 250          BCE   NUMBRT,FLOTSW,2                           8  2167  B !76 ?08 2         29
279  8 010          BCE   FLOT21,NEXT,                              8  2175  B J99 G69           29
280  8 020          BCE   SUSPRT,ZEROSW,0     IF 0 NEEDS ZERO SUPRESS BEFORE $  8  2183  B !13 ?10 0  30
281  8 030  FLOT2   BWZ   REPLS,CLRBFR,1                           8  2191  V K22 ?13 1         30
282  8 040  FLOT21  B     MASK                                      4  2199  B Q00               30
283  8 050          DCW   @$@                                       1  2203                      30
284  8 060          MLC   @2@,FLOTSW                                7  2204  M G38 ?08           30
285  8 070          S     @1@,COUNT                                 7  2211  S G17 F76           30
286  8 080          B     PICT3                                     4  2218  B Y90               30
287  8 090  REPLS   MLC   @ @,0                                     7  2222  M G21 000           31
288  8 100          B     FLOT21                                    4  2229  B J99               31
289  8 110  CREDRT  BCE   *&5,NEXT,C          HIGHORDER CREDIT        8  2233  B K45 G69 C         31
290  8 120          B     FCRERR              ERROR IF R W/O PROCEDING C  4  2241  B Z29            31
291  8 130  CRED1   B     SRSNGL                                    4  2245  B P00               31
292  8 140          BCE   FCRRT2,NEXT,                            8  2249  B Z65 G69           31
293  8 150          B     FCRERR                                    4  2257  B Z29               31
294  8 160  PLUSRT  BCE   NUMBRT,DECSW,1      FLOATING PLUS - KILL TO RT OF DEC  8  2261  B !76 ?12 1  32
295  8 170          BCE   NUMBRT,FLPLSW,2     IF ESTABLISHED - SLUFF  8  2269  B !76 ?07 2         32
296  8 180          BCE   PLUS1,NEXT,         BRANCH IF LAST CHAR     8  2277  B L18 G69           32
297  8 190          MLC   @1@,FLPLSW          SHOW REC 1ST FLOT& CHAR  7  2285  M G17 ?07           32
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 200          BCE   SUSPRT,ZEROSW,0    FLOATING & NEEDS ZERO SUPRESS         8  2292  B !13 ?10 0         32
299  8 210  PLUS4   MLC   @& &@,ED2     SET EDI TO FLOT PLUS                     7  2300  M G44 ?00           33
300  8 220          MLC   @2@,FLPLSW                                             7  2307  M G38 ?07           33
301  8 230          B     FLOT2              BUILD $ INTO MASK                   4  2314  B J91               33
302  8 240  PLUS1   BCE   PLUS4,FLPLSW,1                                         8  2318  B L00 ?07 1         33
303  8 250          MLC   @001@,ED1                                             7  2326  M G47 R97           33
304  9 010          B     FPLUS1             BUILD - INTO MASK                   4  2333  B Y74               33
305  9 020  MINSRT  BCE   NUMBRT,DECSW,1     MINUS ROUTINE - KILL TO RT OF DEC   8  2337  B !76 ?12 1         34
306  9 030          BCE   NUMBRT,FLMNSW,2    IF ESTABLISHED - SLUFF              8  2345  B !76 ?11 2         34
307  9 040          BCE   MINS1,NEXT,                                           8  2353  B L94 G69           34
308  9 050          MLC   @1@,FLMNSW         SHOW REC 1ST FLOT- CHAR             7  2361  M G17 ?11           34
309  9 060          BCE   SUSPRT,ZEROSW,0    FLOATING - NEEDS ZERO SUPR          8  2368  B !13 ?10 0         34
310  9 070  MINS3   MLC   @- -@,ED2                                             7  2376  M G50 ?00           35
311  9 080          MLC   @2@,FLMNSW                                            7  2383  M G38 ?11           35
312  9 090          B     FLOT2              BUILD $ INTO MASK                   4  2390  B J91               35
313  9 100  MINS1   BCE   MINS3,FLMNSW,1                                        8  2394  B L76 ?11 1         35
314  9 110          B     FPLUS1             BUILD - INTO MASK                   4  2402  B Y74               35
315  9 120  ZERORT  BCE   ZERO1,CBLMSK-2,0   COBOL ZERO TEST FOR NEW MASK        8  2406  B M34 R92 0         35
316  9 130  ZERO2   SW    2&X2                                                   4  2414  , 0!2               36
317  9 140  ZERO3   B     MASK                                                   4  2418  B Q00               36
318  9 150          DCW   @&@                                                    1  2422                      36
319  9 160  ZERO4   S     @1@,COUNT                                              7  2423  S G17 F76           36
320  9 170          B     PICT3                                                  4  2430  B Y90               36
321  9 180  ZERO1   MLC   NAME,CBLMSK                                           7  2434  M T02 R94           36
322  9 190          A     @1@,NAME                                               7  2441  A G17 T02           36
323  9 200          B     ZERO2                                                  4  2448  B M14               37
324  9 210  BLNKRT  BCE   BLNK1,NEXT,D       COBOL BLANK OR DB                   8  2452  B M64 G69 D         37
325  9 220          B     ZERO3              BLANK - BUILD INTO MASK             4  2460  B M18               37
326  9 230  BLNK1   MLC   @D D@,ED1    SET DBIT SW & BR TO INSERT CR            7  2464  M G41 R97           37
327  9 240          B     CRED1                                                  4  2471  B K45               37
328  9 250  COMART  B     MASK               INSERT COMMA                        4  2475  B Q00               37
329 10 010          DCW   @,@                                                    1  2479                      37
330 10 020          B     ZERO4                                                  4  2480  B M23               38
331 10 030  PICT5   B     MASK                                                   4  2484  B Q00               38
332 10 040          DCW   @@@                                                    1  2488                      38
333 10 050          MLC   NAME,A/CMSK        END OF PICTURE                      7  2489  M T02 R91           38
334 10 060          A     @1@,NAME                                               7  2496  A G17 T02           38
335 10 070          BCE   PICT5A,CBLMSK-2,0                                      8  2503  B N39 R92 0         38
336 10 080  PICT5B  MLNS  COUNT,CHARCN                                          7  2511  D F76 ?03           38
337 10 090          MLNS                                                         1  2518  D                   39
338 10 100          MLNS                                                         1  2519  D                   39
339 10 110          MLC   @.PD@,CHARCN&3                                       7  2520  M G07 ?06           39
340 10 120          B     SRDESC                                                 4  2527  B X08               39
341 10 130          B     SRDECL                                                 4  2531  B N50               39
342 10 140          B     START                                                  4  2535  B T10               39
343 10 150  PICT5A  MLC   @000@,CBLMSK                                          7  2539  M G16 R94           39
344 10 160          B     PICT5B                                                 4  2546  B N11               40
345 10 170  SRDECL  SBR   XDECL&3            DECLARE MASKS                       4  2550  H O87               40
346 10 180          MLC   X2,X2SAVE#3                                            7  2554  M 094 G53           40
347 10 190          B     PLACE                                                  4  2561  B A70               40
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 200          DCW   A/CMSK                                         3  2567  R91                 40
349 10 210  DECL10  B     PLACE                                          4  2568  B A70               40
350 10 220          DCW   &@.LC@                                        3  2574  G56                 40
351 10 230          B     PLACE                                          4  2575  B A70               41
352 10 240          DCW   &@DCW@                                        3  2581  G59                 41
353 10 250          B     PLACE                                          4  2582  B A70               41
354 11 010          DCW   &@.OP@                                        3  2588  G62                 41
355 11 020  DECL12  B     PLACE                                          4  2589  B A70               41
356 11 030          DCW   COMAT                                         3  2595  F88                 41
357 11 040  XDECL4  NOP   CBLOOP                                       4  2596  N P25               41
358 11 050  DECL2   MLZS  0&X2,OUTSYM#3                                7  2600  Y 0!0 G65           42
359 11 060          MLNS  0&X2,OUTSYM                                  7  2607  D 0!0 G65           42
360 11 070          SAR   X2                                           4  2614  Q 094               42
361 11 080          B     PLACE                                        4  2618  B A70               42
362 11 090          DCW   OUTSYM                                       3  2624  G65                 42
363 11 100  XDECL3  BCE   XDECL1,OUTSYM,@                              8  2625  B O37 G65 @         42
364 11 110          B     DECL2                                        4  2633  B O00               42
365 11 120  XDECL1  B     PLACE                                        4  2637  B A70               43
366 11 130          DCW   MACSEP                                       3  2643  F91                 43
367 11 140          BCE   XDECL2,CBLMSK-2,0                            8  2644  B O77 R92 0         43
368 11 150          MLC   X2SAVE,X2                                    7  2652  M G53 094           43
369 11 160          B     PLACE                                        4  2659  B A70               43
370 11 170          DCW   CBLMSK                                       3  2665  R94                 43
371 11 180          MLC   @B@,XDECL4                                   7  2666  M G28 N96           43
372 11 190          B     DECL10                                       4  2673  B N68               44
373 11 200  XDECL2  MLC   @N@,XDECL4                                   7  2677  M G66 N96           44
374 11 210  XDECL   B     0                                            4  2684  B 000               44
375 11 220  SUPRT3  BW    SUSS,CLRBFR                                  8  2688  V !37 ?13 1         44
376 11 230          B     FCRERR                                       4  2696  B Z29               44
377 11 240  SRSNGL  SBR   XSNGL&3        SUPPLY SINGLE SYMBOL OF PICTURE 4  2700  H P24               44
378 11 250          MLC   NEXT#3,SINGLE#3                              7  2704  M G69 G72           44
379 12 010          B     GETX                                         4  2711  B 335               45
380 12 020          DCW   NEXT                                         3  2717  G69                 45
381 12 030          DCW   ERR                                          3  2720  F26                 45
382 12 040  XSNGL   B     0                                            4  2721  B 000               45
383 12 050  CBLOOP  BCE   CBLOP1,0&X2,@                                8  2725  B P63 0!0 @         45
384 12 060          BWZ   CBLOP2,0&X2,1                                8  2733  V P81 0!0 1         45
385 12 070          SBR   X2                                           4  2741  H 094               45
386 12 080          MLNS  @ @,OUTSYM                                   7  2745  D G21 G65           46
387 12 090  CBLOP3  B     PLACE                                        4  2752  B A70               46
388 12 100          DCW   OUTSYM                                       3  2758  G65                 46
389 12 110          B     CBLOOP                                       4  2759  B P25               46
390 12 120  CBLOP1  B     PLACE                                        4  2763  B A70               46
391 12 130          DCW   COMAT                                        3  2769  F88                 46
392 12 140          B     PLACE                                        4  2770  B A70               46
393 12 150          DCW   MACSEP                                       3  2776  F91                 47
394 12 160          B     XDECL2                                       4  2777  B O77               47
395 12 170  CBLOP2  CW    0&X2                                         4  2781  ) 0!0               47
396 12 180          SBR   X2                                           4  2785  H 094               47
397 12 190          MLNS  @0@,OUTSYM                                   7  2789  D G18 G65           47
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 200          B     CBLOP3                                        4  2796  B P52               47
399 12 210  MASK    SBR   X1                                            4  2800  H 089               47
400 12 220          C     X2,&EDMSKR-2                                  7  2804  C 094 G75           48
401 12 230          BE    FCRERR      MASK TOO BIG                      5  2811  B Z29 S             48
402 12 240          MLC   0&X1,2&X2                                     7  2816  M 0|0 0!2           48
403 12 250          SBR   X2                                            4  2823  H 094               48
404 13 010          B     1&X1                                          4  2827  B 0|1               48
405 13 020          DCW   @@@                                           1  2831                      48
406 13 030  EDMSKL  DA    1X122                                            2832   2953              48
407 13 040  EDMSKR  DC    @ @                                           1  2954                      49
408 13 050          DCW   @@@                                           1  2955                      49
409 13 060          DCW   @.DS@       ****                              3  2958                      49
410 13 070  DESLFT  DA    1X48        ****                                 2959   3006              49
411 13 080  SIZE          9                                                2967             SBFLD
412 13 090  DECIML        12         ****                                  2970             SBFLD
413 13 100  EDITSW        27         ****                                  2985             SBFLD
414 13 110  EDCLSW        33         ****                                  2991             SBFLD
415 13 120  PICLFT        34         ****                                  2992             SBFLD
416 13 130  LEVING        36    ****                                       2994             SBFLD
417 13 140  BLANK         30         ****                                  2988             SBFLD
418 13 150  CHARCN        45         ****                                  3003             SBFLD
419 13 160  MASK01        33         ****                                  2991             SBFLD
420 13 170  A/CMSK        33         ****                                  2991             SBFLD
421 13 180  MASKCB        36         ****                                  2994             SBFLD
422 13 190  CBLMSK        36         ****                                  2994             SBFLD
423 13 200  ED1           39           ****                                2997             SBFLD
424 13 210  ED2           42           ****                                3000             SBFLD
425 13 220  FLPLSW  DC    #1                                            1  3007                      50
426 13 230  FLOTSW  DC    #1                                            1  3008                      50
427 13 240  PROTSW  DC    #1                                            1  3009                      50
428 13 250  ZEROSW  DC    #1                                            1  3010                      50
429 14 010  FLMNSW  DC    #1                                            1  3011                      50
430 14 020  DECSW   DC    #1                                            1  3012                      50
431 14 030  CLRBFR  DC    @0@                ****                       1  3013                      50
432 14 040  EOJ     B     PLACE                                         4  3014  B A70               50
433 14 050          DCW   &@.DE@                                        3  3020  G78                 50
434 14 060          B     PLACE                                         4  3021  B A70               50
435 14 070          DCW   &@.EB@                                        3  3027  G81                 50
436 14 080          B     PUTX                                          4  3028  B 363               51
437 14 090          DCW   SX                                            3  3034  F73                 51
438 14 100          B     SUPER                                         4  3035  B 351               51
439 14 110          DCW   @D04@                                        3  3041                      51
440 14 120  PICT4   B     SRSNGL                                        4  3042  B P00               51
441 14 130  TESTN   BCE   PICT5,SINGLE,    BLANK MEANS END OF PICTURE  8  3046  B M84 G72           51
442 14 140          BCE   ZERORT,SINGLE,0                              8  3054  B M06 G72 0         51
443 14 150          BCE   BLNKRT,SINGLE,B                             8  3062  B M52 G72 B         52
444 14 160          BCE   COMART,SINGLE,,                             8  3070  B M75 G72 ,         52
445 14 170          BCE   DECRT1,SINGLE,V                            8  3078  B J48 G72 V         52
446 14 180          BCE   DECMRT,SINGLE,.                            8  3086  B J36 G72 .         52
447 14 190          BCE   PLUSRT,SINGLE,&                            8  3094  B K61 G72 &         53
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 200          BCE   MINSRT,SINGLE,-                             8  3102  B L37 G72 -         53
449 14 210          BCE   CREDRT,SINGLE,R                            8  3110  B K33 G72 R         53
450 14 220          BCE   FLOTRT,SINGLE,$                            8  3118  B J59 G72 $         53
451 14 230          BCE   PRTCRT,SINGLE,*                            8  3126  B !85 G72 *         54
452 14 240          BCE   SUSPRT,SINGLE,Z                           8  3134  B !13 G72 Z         54
453 14 250          BCE   FCRERR,SINGLE,X                           8  3142  B Z29 G72 X         54
454 15 010          BCE   FCRERR,SINGLE,A                           8  3150  B Z29 G72 A         54
455 15 020          BCE   NUMBRT,SINGLE,9                           8  3158  B !76 G72 9         55
456 15 030          B     FCRERR            BRANCH TO PUT DIAGNOSTIC AND OUT  4  3166  B Z29               55
457 15 040  PLACE   SBR   X1                                        4  3170  H 089               55
458 15 050          SBR   PLC2&3,3&X1                               7  3174  H B44 0|3           55
459 15 060          MLC   2&X1,PLC1&3                               7  3181  M 0|2 A91           55
460 15 070  PLC1    MLC   0,PLCSY                                   7  3188  M 000 C24           55
461 15 080  PLC1A   MLC   PLCSY,PLCB                                7  3195  M C24 C27           56
462 15 090          C     PLCSY,@.EB@                               7  3202  C C24 G81           56
463 15 100          BE    PLC3                                      5  3209  B B45 S             56
464 15 110          C     PLC1A&6,&PLCMAX                           7  3214  C B01 G84           56
465 15 120          BE    PLC3                                      5  3221  B B45 S             56
466 15 130          MA    @003@,PLC1A&6                                                 MACRO
467                 SW    PLC1A&6-2                                 4  3226  , A99       GEN     56
468                 A     @003@,PLC1A&6                             7  3230  A G13 B01   GEN     57
469                 CW    PLC1A&6-2                                 4  3237  ) A99       GEN     57
470 15 140  PLC2    B     0                                         4  3241  B 000               57
471 15 150  PLC3    SW    PLC5&1                                    4  3245  , C21               57
472 15 160          B     IORW                                      4  3249  B 343               57
473 15 170          RT    4,PLC5                                    8  3253  M %U4 C20 R         57
474 15 180          DCW   PLC4                                      3  3263  B68                 57
475 15 190          B     PLC3                                      4  3264  B B45               58
476 15 200  PLC4    BSP   4                                         5  3268  U %U4 B             58
477 15 210          SW    PLCMAX&1                                  4  3273  , F25               58
478 15 220          B     IORW                                      4  3277  B 343               58
479 15 230          WT    4,PLCA                                    8  3281  M %U4 C25 W         58
480 15 240          DCW   *&1                                       3  3291  B92                 58
481 15 250          WTM   4                                         5  3292  U %U4 M             58
482 16 010          BSP   4                                         5  3297  U %U4 B             59
483 16 020          MLC   &PLCB,PLC1A&6                            7  3302  M G87 B01           59
484 16 030          ZA    @0@,PLCMAX                                7  3309  ? G18 F24           59
485 16 040          B     PLC2                                      4  3316  B B41               59
486 16 050  PLC5    EQU   *&1                                          3320
487 16 060          DCW   @ }@                                      2  3321                      59
488 16 070  PLCSY   DCW   #3                                        3  3324                      59
489 16 080          DA    1X300                                        3325   3624              59
490 16 090  PLCA          1                                            3325               SBFLD
491 16 100  PLCB          3                                            3327               SBFLD
492 16 110  PLCMAX  EQU   *                                            3624
493 16 120          DC    @}@                                       1  3625                      60
494 16 130  ERR     CS    333                                       4  3626  / 333               60
495 16 140          CS                                              1  3630  /                   60
496 16 150          CC    1                                         2  3631  F 1                 60
497 16 160          MLC   DIAG,260                                  7  3633  M F70 260           60
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 170          W                                                    1  3640  2                   61
499 16 180          CC    1                                              2  3641  F 1                 61
500 16 190          B     DUMP                                           4  3643  B 359               61
501 16 200  DIAG    DCW   @SYSTEM FAILURE PHASE D03@                    24  3670                      61
502 16 210  SX      DCW   #3                                             3  3673                      61
503 16 220  COUNT   DCW   #3                                             3  3676                      61
504 16 230  NINULL  DCW   @000K KK K@   FORMERLY NINE NULLS TO INITIALIZE 9  3685                      62
505 16 240  COMAT   DCW   @  @@                                          3  3688                      62
506 16 250  MACSEP  DCW   @.MC@                                          3  3691                      62
507 17 010          LTORG                                                     3692
                    DCW   @.ED@                                          3  3694              LIT     62
                          @.LV@                                          3  3697              LIT     62
                          @.DS@                                          3  3700              LIT     62
                          @@@                                            1  3701              LIT     62
       139                &DESLFT&2                                      3  3704  R61         ADCON   63
                          @.PD@                                          3  3707              LIT     63
                          @.PC@                                          3  3710              LIT     63
                          @003@                                          3  3713              LIT     63
                          @000@                                          3  3716              LIT     63
                          @1@                                            1  3717              LIT     63
                          @0@                                            1  3718              LIT     63
                          @*@                                            1  3719              LIT     64
                          @$@                                            1  3720              LIT     64
                          @ @                                            1  3721              LIT     64
                          @  K@                                          3  3724              LIT     64
       191                &DESLFT-7                                      3  3727  R52         ADCON   64
                          @B@                                            1  3728              LIT     64
                          @.DG@                                          3  3731              LIT     64
                          @D14@                                          3  3734              LIT     65
                          @.KK@                                          3  3737              LIT     65
                          @2@                                            1  3738              LIT     65
                          @D D@                                          3  3741              LIT     65
                          @& &@                                          3  3744              LIT     65
                          @001@                                          3  3747              LIT     65
                          @- -@                                          3  3750              LIT     65
       346  X2SAVE        #03                                            3  3753              AREA    66
                          @.LC@                                          3  3756              LIT     66
                          @DCW@                                          3  3759              LIT     66
                          @.OP@                                          3  3762              LIT     66
       358  OUTSYM        #03                                            3  3765              AREA    66
                          @N@                                            1  3766              LIT     66
       378  NEXT          #03                                            3  3769              AREA    66
       378  SINGLE        #03                                            3  3772              AREA    67
       400                &EDMSKR-2                                      3  3775  R52         ADCON   67
                          @.DE@                                          3  3778              LIT     67
                          @.EB@                                          3  3781              LIT     67
       464                &PLCMAX                                        3  3784  F24         ADCON   67
       483                &PLCB                                          3  3787  C27         ADCON   67
508 17 020          DCW   @}@                GMWM                        1  3788                      67
509 17 030          END                                                       / 000 080             68
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - D04 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - D04							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	GETX	EQU	335				0335			
107	1	070	IORW	EQU	343				0343			
108	1	080	SUPER	EQU	351				0351			
109	1	090	DUMP	EQU	359				0359			
110	1	100	PUTX	EQU	363				0363			
111	1	110	CONST	EQU	188				0188			
112	1	120	SCRBKT	EQU	1126				1126			
113	1	130		ORG	1300					1300		
114	1	140		MLC	&TABLER,X2			7	1300	M R66 094		4
115	1	150	START	MLC	1&X2,0&X2			7	1307	M 0!1 0!0		4
116	1	160		SBR	X3			4	1314	H 099		4
117	1	170	AA1	B	GETX			4	1318	B 335		4
118	1	180		DCW	SX			3	1324	Q97		4
119	1	190		DCW	ERR			3	1327	R01		4
120	1	200		B	PUTX			4	1328	B 363		4
121	1	210		DCW	SX	GET AND PUT UNTIL DATA DIV		3	1334	Q97		5
122	1	220		C	SX,@/24@			7	1335	C Q97 R69		5
123	1	230		BU	AA1			5	1342	B T18 /		5
124	1	240	AA2	B	SRSKIP			4	1347	B L22		5
125	1	250		B	SRGET			4	1351	B N95		5
126	2	010		B	SRPUT			4	1355	B O13		5
127	2	020		C	SX,PROCI	IS IT THE PROCEDURE DIVISION		7	1359	C Q97 Q85		5
128	2	030		BE	EOJ1			5	1366	B K53 S		6
129	2	040		C	SX,LEVELI			7	1371	C Q97 Q73		6
130	2	050		BU	AA2			5	1378	B T47 /		6
131	2	060		B	SRGET			4	1383	B N95		6
132	2	070		C	SX,2&X3			7	1387	C Q97 0?2		6
133	2	080		BL	PLACE			5	1394	B W51 T		6
134	2	090		B	FORCE			4	1399	B U15		6
135	2	100	BB2	C	SX,2&X3			7	1403	C Q97 0?2		7
136	2	110		BL	PLACE1	PUT LEVELI AND THEN PLACE		5	1410	B W44 T		7
137	2	120	FORCE	MLC	SX,FRCLVL			7	1415	M Q97 R00		7
138	2	130		C	ZEROS4,2&X3			7	1422	C Q94 0?2		7
139	2	140		BE	FORCE2			5	1429	B V87 S		7
140	2	150		B	PUTX			4	1434	B 363		7
141	2	160		DCW	LEVELI			3	1440	Q73		7
142	2	170		MLC	2&X3,SX			7	1441	M 0?2 Q97		8
143	2	180		MLC	NULL,SX-2			7	1448	M Q52 Q95		8
144	2	190		B	SRPUT			4	1455	B O13		8
145	2	200		B	PUTX			4	1459	B 363		8
146	2	210		DCW	DESCRI			3	1465	R48		8
147	2	220		MLC	5&X3,SX			7	1466	M 0?5 Q97		8

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          MLZS  NULL,SX-1          REMOVE JUSTIFIED TAG          7  1473  Y Q52 Q96           8
149  2 240          B     SRPUT                                           4  1480  B O13               9
150  2 250          B     SROUT               SIZE                        4  1484  B L77               9
151  3 010          B     PUTX                                            4  1488  B 363               9
152  3 020          DCW   NULL                DECIM COUNT                 3  1494  Q52                 9
153  3 030          B     PUTX                                            4  1495  B 363               9
154  3 040          DCW   &@  X@       CLASS                            3  1501  R72                 9
155  3 050          B     PUTX                                            4  1502  B 363               9
156  3 060          DCW   NULL                WDMKS                       3  1508  Q52                10
157  3 070          B     PUTX                                            4  1509  B 363              10
158  3 080          DCW   &@  G@                                          3  1515  R75                10
159  3 090          BWZ   FORCE8,4&X3,2       BRANCH IF NOT A JUSTIFIED CLAUSE  8  1516  V W22 0?4 2        10
160  3 100          BWZ   FORCE9,4&X3,K       B-ZONE IS RIGHT JUST        8  1524  V W33 0?4 K        10
161  3 110          MLC   @L@,JUSTIF                                      7  1532  M R76 R51          10
162  3 120  FORCE7  B     PUTX                                            4  1539  B 363              10
163  3 130          DCW   JUSTIF                                          3  1545  R51                11
164  3 140          B     PUTX                                            4  1546  B 363              11
165  3 150          DCW   &@.KK@       NO EDIT                          3  1552  R79                11
166  3 160          B     SRSUBC                                          4  1553  B P33              11
167  3 170          B     PUTX                                            4  1557  B 363              11
168  3 180          DCW   PERODI                                          3  1563  Q67                11
169  3 190          B     SROCRS                                          4  1564  B O28              11
170  3 200          B     SRREDF                                          4  1568  B L50              12
171  3 210          B     SRZERO                                          4  1572  B M28              12
172  3 220          MLC   FRCLVL,SX                                      7  1576  M R00 Q97          12
173  3 230          B     BB2                                             4  1583  B U03              12
174  3 240  FORCE2  B     PUTX                AFTER ALL LEVELS ARE FRORCED OFF  4  1587  B 363              12
175  3 250          DCW   SXSAVE                                         3  1593  Q55                12
176  4 010          C     SXSAVE,LEVELI                                   7  1594  C Q55 Q73          12
177  4 020          BE    PLACE                                           5  1601  B W51 S            13
178  4 030          C     SXSAVE,PROCI                                    7  1606  C Q55 Q85          13
179  4 040          BE    EOJ1                                            5  1613  B K53 S            13
180  4 050          B     AA2                 HIT VERB - NOT PROC DIV     4  1618  B T47              13
181  4 060  FORCE8  MLC   @K@,JUSTIF          NO JUSTIFICATION            7  1622  M R80 R51          13
182  4 070          B     FORCE7                                          4  1629  B V39              13
183  4 080  FORCE9  MLC   @R@,JUSTIF          JUSTIFIED RIGHT             7  1633  M R81 R51          13
184  4 090          B     FORCE7                                          4  1640  B V39              14
185  4 100  PLACE1  B     PUTX                                            4  1644  B 363              14
186  4 110          DCW   LEVELI                                          3  1650  Q73                14
187  4 120  PLACE   B     SRPUT                                           4  1651  B O13              14
188  4 130  PLACE3  C     ZEROS4,2&X3              IS TABLE CLEARED       7  1655  C Q94 0?2          14
189  4 140          BE    PLACE2                                          5  1662  B W75 S            14
190  4 150  PLAC3A  SW    15&X3               SET WDMK & POINTER FOR NEXT LVL  4  1667  , 0A5              14
191  4 160          SBR   X3                                             4  1671  H 099              15
192  4 170  PLACE2  MLC   SX,2&X3       STORE LEVEL                     7  1675  M Q97 0?2          15
193  4 180  *    ANALYZE  SYMBOLS WITHIN AN ITEM
194  4 190  CC2     B     SRGET                                           4  1682  B N95              15
195  4 200          C     SX,DESCRI           DESCRIPTION RT              7  1686  C Q97 R48          15
196  4 210          BE    DESCRT                                          5  1693  B X42 S            15
197  4 220          C     SX,OCCURI                                       7  1698  C Q97 Q79          15
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         BE    OCCURT              OCCURS ROUTINE        5  1705  B K05 S             15
199  4 240         C     SX,REDEFI                                 7  1710  C Q97 Q76           16
200  4 250         BE    REDFRT              REDEFINE ROUTINE      5  1717  B J47 S             16
201  5 010         C     SX,RECLNI                                 7  1722  C Q97 Q82           16
202  5 020         BE    RECLRT              RECORD LENGTH INDICATOR 5 1729  B J28 S           16
203  5 030  CC3    B     SRPUT                                     4  1734  B O13               16
204  5 040         B     CC2                                       4  1738  B W82               16
205  5 050  DESCRT B     SRGET                                     4  1742  B N95               16
206  5 060         MLC   SX,5&X3             STORE NAME            7  1746  M Q97 0?5           17
207  5 070         B     SRGET                                     4  1753  B N95               17
208  5 080         MLNS  SX,7&X3                                   7  1757  D Q97 0?7           17
209  5 090         MLNS                                            1  1764  D                   17
210  5 100         B     SRGET                                     4  1765  B N95               17
211  5 110         MLC   SX,10&X3                                  7  1769  M Q97 0A0           17
212  5 120         B     GETX                                      4  1776  B 335               17
213  5 130         DCW   DECIML                                    3  1782  R63                 18
214  5 140         DCW   ERR                                       3  1785  R01                 18
215  5 150         B     GETX                                      4  1786  B 335               18
216  5 160         DCW   CLASS                                     3  1792  R60                 18
217  5 170         DCW   ERR                                       3  1795  R01                 18
218  5 180         B     GETX                                      4  1796  B 335               18
219  5 190         DCW   WDMKS                                     3  1802  R57                 18
220  5 200         DCW   ERR                                       3  1805  R01                 19
221  5 210         B     GETX                                      4  1806  B 335               19
222  5 220         DCW   TYPE                                      3  1812  R54                 19
223  5 230         DCW   ERR                                       3  1815  R01                 19
224  5 240         MLC   10&X3,SIZSAV                             7  1816  M 0A0 Q60           19
225  5 250         BCE   *&8,REDFSW,0                              8  1823  B Y38 Q63 0         19
226  6 010         MLZS  BELIT,10&X3       SET REDEFINES SWITCH    7  1831  Y Q89 0A0           19
227  6 020         BCE   GRPLAC,TYPE,G                             8  1838  B !23 R54 G         20
228  6 030         B     SRADD             ELEM OUT              4  1846  B M92               20
229  6 040         BCE   RLIOUT,RLISW,1                           8  1850  B K85 Q62 1         20
230  6 050         B     PUTX                                      4  1858  B 363               20
231  6 060         DCW   DESCRI                                    3  1864  R48                 20
232  6 070         MLC   5&X3,SX           NAME                  7  1865  M 0?5 Q97           20
233  6 080         B     SRPUT                                     4  1872  B O13               20
234  6 090         B     SROUT                                     4  1876  B L77               21
235  6 100         B     PUTX                                      4  1880  B 363               21
236  6 110         DCW   DECIML                                    3  1886  R63                 21
237  6 120         B     PUTX              G                       4  1887  B 363               21
238  6 130         DCW   CLASS                                     3  1893  R60                 21
239  6 140         B     PUTX                                      4  1894  B 363               21
240  6 150         DCW   WDMKS                                     3  1900  R57                 21
241  6 160         B     PUTX                                      4  1901  B 363               22
242  6 170         DCW   TYPE                                      3  1907  R54                 22
243  6 180  DESCR1 B     SRGET                                     4  1908  B N95               22
244  6 190         C     SX,PERODI                                 7  1912  C Q97 Q67           22
245  6 200         BE    DESCR2                                    5  1919  B Z32 S             22
246  6 210         B     SRPUT                                     4  1924  B O13               22
247  6 220         B     DESCR1                                    4  1928  B Z08               22
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230  DESCR2 B     SRSUBC                                            4  1932  B P33               23
249  6 240          B     PUTX                                              4  1936  B 363               23
250  6 250          DCW   PERODI                                            3  1942  Q67                 23
251  7 010          B     SROCRS                                            4  1943  B O28               23
252  7 020          B     SRREDF                                            4  1947  B L50               23
253  7 030          B     SRZERO                                            4  1951  B M28               23
254  7 040          B     FF2                                               4  1955  B Z66               23
255  7 050  FF4     B     PUTX                                              4  1959  B 363               24
256  7 060          DCW   PERODI                                            3  1965  Q67                 24
257  7 070  FF2     B     SRSWCH                                            4  1966  B M70               24
258  7 080          B     GETX                                              4  1970  B 335               24
259  7 090          DCW   SXSAVE                                           3  1976  Q55                 24
260  7 100          DCW   ERR                                             3  1979  R01                 24
261  7 110          C     SXSAVE,LEVELI                                     7  1980  C Q55 Q73           24
262  7 120          BU    GGX1                                              5  1987  B J17 /             25
263  7 130          B     SRGET                                             4  1992  B N95               25
264  7 140  GG4     C     SX,2&X3                                           7  1996  C Q97 0?2           25
265  7 150          BL    GG5                                               5  2003  B !12 T             25
266  7 160          B     FORCE                                             4  2008  B U15               25
267  7 170  GG5     B     PUTX                                              4  2012  B 363               25
268  7 180          DCW   LEVELI                                           3  2018  Q73                 25
269  7 190          B     PLACE                                             4  2019  B W51               26
270  7 200  GRPLAC  B     SRGET                                             4  2023  B N95               26
271  7 210          BCE   GRPLS1,SX,K                                       8  2027  B !57 Q97 K         26
272  7 220          MLZS  @R@,4&X3                                          7  2035  Y R81 0?4           26
273  7 230          BCE   GRPLS1,SX,R                                       8  2042  B !57 Q97 R         26
274  7 240          MLZS  *-6,4&X3                                          7  2050  Y !50 0?4           26
275  7 250  GRPLS1  B     SRGET                                             4  2057  B N95               27
276  8 010          C     SX,PERODI          SHOULD BE END OF ENTRY ELSE DROP  7  2061  C Q97 Q67           27
277  8 020          BU    GRPLS1                                            5  2068  B !57 /             27
278  8 030          B     PUTX                                              4  2073  B 363               27
279  8 040          DCW   &@#GR@                                            3  2079  R84                 27
280  8 050          MLC   5&X3,SX            NAME OUT                       7  2080  M 0?5 Q97           27
281  8 060          MLZS  NULL,SX-1                                         7  2087  Y Q52 Q96           27
282  8 070          B     SRPUT                                             4  2094  B O13               28
283  8 080          BCE   FF4,WDMKS,0                                      8  2098  B Z59 R57 0         28
284  8 090          B     PUTX                                              4  2106  B 363               28
285  8 100          DCW   &@#WM@                                            3  2112  R87                 28
286  8 110          B     FF4                                               4  2113  B Z59               28
287  8 120  GGX1    MLC   ZEROS4,SX          SET SX TO SHALLOWEST           7  2117  M Q94 Q97           28
288  8 130          B     FORCE                                             4  2124  B U15               28
289  8 140  RECLRT  BCE   CC2,RLISW,1                                       8  2128  B W82 Q62 1         29
290  8 150          MLC   ONE,RLISW     SET SWW FOR PUTTING RLI AFTER SIZEADD  7  2136  M Q61 Q62         29
291  8 160          B     CC2             GET NEXT & ANALYZE                4  2143  B W82               29
292  8 170  REDFRT  B     SRPUT                PUT REDEFINES OPER           4  2147  B O13               29
293  8 180          S     @1@,SIZSAV                                        7  2151  S R88 Q60           29
294  8 190          MLZS  @1@,SIZSAV                                        7  2158  Y R88 Q60           29
295  8 200          ZA    SIZSAV-3,SX                                       7  2165  ? Q57 Q97           30
296  8 210          MLZS  BLK,SX                                            7  2172  Y Q90 Q97           30
297  8 220          B     SRPUT                                             4  2179  B O13               30
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          MLC   SIZSAV,SX                                         7  2183  M Q60 Q97           30
299  8 240          B     SRPUT                                             4  2190  B O13               30
300  8 250          MLC   ONE,REDFSW          SET DELAYSW-REDFINE TAG @ END  7  2194  M Q61 Q63           30
301  9 010          B     CC2                 GET & ANALYZE NEXT SYMBOL     4  2201  B W82               31
302  9 020  OCCURT B     SRGET                                             4  2205  B N95               31
303  9 030          MLNS  SX,11&X3                                          7  2209  D Q97 0A1           31
304  9 040          B     SRGET                                             4  2216  B N95               31
305  9 050          MLC   SX,14&X3                                          7  2220  M Q97 0A4           31
306  9 060          BCE   *&8,SUBSW,1        SKIP IF ALREADY SUBSCRIPTED   8  2227  B K42 Q64 1         31
307  9 070          MLC   2&X3,TOPOCR#2                                     7  2235  M 0?2 R90           32
308  9 080          MLC   ONE,SUBSW                                         7  2242  M Q61 Q64           32
309  9 090          B     CC2                 GET AND ANALYZE NEXT          4  2249  B W82               32
310  9 100  EOJ1    B     GETX                 SKIP PROC DIV UNTIL END      4  2253  B 335               32
311  9 110          DCW   SX                                                3  2259  Q97                 32
312  9 120          DCW   EOJ2                                              3  2262  K74                 32
313  9 130          B     PUTX                                              4  2263  B 363               32
314  9 140          DCW   SX                                                3  2269  Q97                 33
315  9 150          B     EOJ1                                              4  2270  B K53               33
316  9 160  EOJ2    B     SRPUT                                             4  2274  B O13               33
317  9 170          B     SUPER                                             4  2278  B 351               33
318  9 180          DCW   @D05@                                            3  2284                      33
319  9 190  RLIOUT SBR   EXRLI&3                                           4  2285  H L21               33
320  9 200          B     PUTX           PUT OUT POSITION OF RLI          4  2289  B 363               33
321  9 210          DCW   RECLNI                                           3  2295  Q82                 34
322  9 220          MLC   TABLEL,X3                                         7  2296  M ?01 099           34
323  9 230          B     SROUT                                             4  2303  B L77               34
324  9 240          MLC   0&X2,0&X2                                         7  2307  M 0!0 0!0           34
325  9 250          SBR   X3                                                4  2314  H 099               34
326 10 010  EXRLI   B     0                                                 4  2318  B 000               34
327 10 020  *     SRSKIP SUB ROUTINE GETS AND PUTS UNTIL NEXT PERIOD
328 10 030  SRSKIP SBR   EXSKIP&3                                          4  2322  H L49               34
329 10 040  SKIP1  B     SRGET                                             4  2326  B N95               35
330 10 050          B     SRPUT                                             4  2330  B O13               35
331 10 060          C     SX,PERODI                                         7  2334  C Q97 Q67           35
332 10 070          BU    SKIP1                                             5  2341  B L26 /             35
333 10 080  EXSKIP B     0                                                 4  2346  B 000               35
334 10 090  *    PUT OUT ORG BLANK CUE IF AT REDEFINED LEVEL
335 10 100  SRREDF SBR   EXREDF&3                                          4  2350  H L65               35
336 10 110          BWZ   REDF1,10&X3,B                                    8  2354  V L66 0A0 B         35
337 10 120  EXREDF B     0                                                 4  2362  B 000               36
338 10 130  REDF1  B     PUTX                                              4  2366  B 363               36
339 10 140          DCW   &@/OG@             ORG BLANK OPERATOR           3  2372  R93                 36
340 10 150          B     EXREDF                                            4  2373  B L62               36
341 10 160  *    PICKS OUT &IPUTS OUT SIZE OF X3/POINTER ENTRY
342 10 170  SROUT  SBR   EXOUT&3                                           4  2377  H M27               36
343 10 180          MLC   10&X3,SIZSAV                                      7  2381  M 0A0 Q60           36
344 10 190          ZA    SIZSAV-3,SX                                       7  2388  ? Q57 Q97           36
345 10 200          MLZS  BLK,SX                                            7  2395  Y Q90 Q97           37
346 10 210          B     SRPUT                                             4  2402  B O13               37
347 10 220          MLC   SIZSAV,SX                                         7  2406  M Q60 Q97           37
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230         MLZS  BLK,SX                                            7  2413  Y Q90 Q97           37
349 10 240         B     SRPUT                                             4  2420  B O13               37
350 10 250  EXOUT  B     0                                                 4  2424  B 000               37
351 11 010  *    ZERO OUT FORCED ENTRY AND RESET SWITCHES
352 11 020  SRZERO SBR   EXZERO&3                                          4  2428  H M69               37
353 11 030         MLC   15&X3,14&X3                                       7  2432  M 0A5 0A4           38
354 11 040         C     X3,TABLEL                                         7  2439  C 099 ?01           38
355 11 050         BE    EXZERO                                            5  2446  B M66 S             38
356 11 060         CW    1&X3                                              4  2451  ) 0?1               38
357 11 070         MLC   0&X3,0&X3                                         7  2455  M 0?0 0?0           38
358 11 080         SBR   X3                                                4  2462  H 099               38
359 11 090  EXZERO B     0                                                 4  2466  B 000               38
360 11 100  SRSWCH SBR   EXSWCH&3                                          4  2470  H M91               39
361 11 110         MLC   NULL,REDFSW                                       7  2474  M Q52 Q63           39
362 11 120         MLC   NULL,RLISW                                        7  2481  M Q52 Q62           39
363 11 130  EXSWCH B     0                                                 4  2488  B 000               39
364 11 140  *    ADD  SIZSAV TO EACH LEVEL UNTIL FIRST REDEFINES
365 11 150  SRADD  SBR   EXADD&3                                           4  2492  H N94               39
366 11 160         C     X3,TABLEL                                         7  2496  C 099 ?01           39
367 11 170         BE    EXADD                                             5  2503  B N91 S             39
368 11 180         BWZ   EXADD,10&X3,B                                     8  2508  V N91 0A0 B         40
369 11 190         MLC   BELIT,ADD3                                        7  2516  M Q89 N76           40
370 11 200  ADD1   MLC   0&X3,0&X3                                         7  2523  M 0?0 0?0           40
371 11 210         SBR   X3                                                4  2530  H 099               40
372 11 220         C     TABLEL,X3                                         7  2534  C ?01 099           40
373 11 230         BU    *&8                                               5  2541  B N53 /             40
374 11 240         MLC   @N@,ADD3                                         7  2546  M R94 N76           41
375 11 250         SW    6&X3                                              4  2553  , 0?6               41
376 12 010         A     SIZSAV,10&X3                                      7  2557  A Q60 0A0           41
377 12 020         CW    6&X3                                              4  2564  ) 0?6               41
378 12 030         BWZ   ADD2,10&X3,B                                     8  2568  V N80 0A0 B         41
379 12 040  ADD3   B     ADD1                                              4  2576  B N23               41
380 12 050  ADD2   MLC   0&X2,0&X2                                         7  2580  M 0!0 0!0           42
381 12 060         SBR   X3                                                4  2587  H 099               42
382 12 070  EXADD  B     0                                                 4  2591  B 000               42
383 12 080  *    GETS SX
384 12 090  SRGET  SBR   EXGET&3                                           4  2595  H O12               42
385 12 100         B     GETX                                              4  2599  B 335               42
386 12 110         DCW   SX                                                3  2605  Q97                 42
387 12 120         DCW   ERR                                               3  2608  R01                 42
388 12 130  EXGET  B     0                                                 4  2609  B 000               43
389 12 140  *    PUT SX
390 12 150  SRPUT  SBR   EXPUT&3                                           4  2613  H O27               43
391 12 160         B     PUTX                                              4  2617  B 363               43
392 12 170         DCW   SX                                                3  2623  Q97                 43
393 12 180  EXPUT  B     0                                                 4  2624  B 000               43
394 12 190  *    OCCURS EXPAND AND ADD- PAD SIZE OUT   -SUBSCRIP DEPTH NAMES
395 12 200  SROCRS SBR   EXOCRS&3                                          4  2628  H P32               43
396 12 210         C     14&X3,ZEROS4                                      7  2632  C 0A4 Q94           43
397 12 220         BE    EXOCRS                                            5  2639  B P29 S             44
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          SW    11&X3                                             4  2644  , 0A1               44
399 12 240  EE1     S     ONE,14&X3                                         7  2648  S Q61 0A4           44
400 12 250          C     14&X3,@000A@                                      7  2655  C 0A4 R98           44
401 13 010          BE    EE2                                               5  2662  B O78 S             44
402 13 020          A     10&X3,SIZSAV                                      7  2667  A 0A0 Q60           44
403 13 030          B     EE1                                               4  2674  B O48               44
404 13 040  EE2     CW    11&X3                                             4  2678  ) 0A1               45
405 13 050          B     PUTX                                              4  2682  B 363               45
406 13 060          DCW   OCCURI                                           3  2688  Q79                 45
407 13 070          ZA    SIZSAV-3,SX                                       7  2689  ? Q57 Q97           45
408 13 080          MLZS  BLK,SX                                            7  2696  Y Q90 Q97           45
409 13 090          B     SRPUT                                             4  2703  B O13               45
410 13 100          MLC   SIZSAV,SX                                        7  2707  M Q60 Q97           45
411 13 110          B     SRPUT                                             4  2714  B O13               46
412 13 120          B     SRADD                                             4  2718  B M92               46
413 13 130          MLC   10&X3,SIZSAV                                      7  2722  M 0A0 Q60           46
414 13 140  EXOCRS B     0                                                 4  2729  B 000               46
415 13 150  *    SUBSCRIPT DEPTH NAMES OUT AND SUBSW RESWT WHEN EQU
416 13 160  SRSUBC SBR   EXSUBC&3                                          4  2733  H Q49               46
417 13 170          BCE   EXSUBC,SUBSW,0                                   8  2737  B Q46 Q64 0         46
418 13 180          B     PUTX                                              4  2745  B 363               46
419 13 190          DCW   SUBSCI                                           3  2751  Q70                 47
420 13 200  EE4     C     14&X3,ZEROS4                                      7  2752  C 0A4 Q94           47
421 13 210          BE    EE3                                               5  2759  B P82 S             47
422 13 220          MLC   5&X3,SX                                           7  2764  M 0?5 Q97           47
423 13 230          MLZS  NULL,SX-1                                         7  2771  Y Q52 Q96           47
424 13 240          B     SRPUT                                             4  2778  B O13               47
425 13 250  EE3     C     TABLEL,X3                                         7  2782  C ?01 099           48
426 14 010          BE    EE5                                               5  2789  B Q09 S             48
427 14 020          MLC   0&X3,0&X3                                         7  2794  M 0?0 0?0           48
428 14 030          SBR   X3                                                4  2801  H 099               48
429 14 040          B     EE4                                               4  2805  B P52               48
430 14 050  EE5     B     PUTX                                              4  2809  B 363               48
431 14 060          DCW   SUBSCI                                           3  2815  Q70                 48
432 14 070          MLC   0&X2,0&X2                                         7  2816  M 0!0 0!0           49
433 14 080          SBR   X3                                                4  2823  H 099               49
434 14 090          C     2&X3,TOPOCR                                       7  2827  C 0?2 R90           49
435 14 100          BU    EXSUBC                                            5  2834  B Q46 /             49
436 14 110          MLC   NULL,SUBSW                                       7  2839  M Q52 Q64           49
437 14 120  EXSUBC B     0                                                 4  2846  B 000               49
438 14 130  NULL    DCW   @000@                                           3  2852                      49
439 14 140  SXSAVE DCW   @000@                                           3  2855                      50
440 14 150  SIZSAV DCW   #5                                              5  2860                      50
441 14 160  ONE     DCW   1                                               1  2861                      50
442 14 170  RLISW   DCW   @0@                1 MEANS ENTRY A DEPENDING    1  2862                      50
443 14 180  REDFSW DCW   @0@                1 MEANS ENTRY REDEFINES PRECDING  1  2863                 50
444 14 190  SUBSW   DCW   @0@               1 IF ANY SUBSCRIPTING         1  2864                      50
445 14 200  PERODI DCW   @.PD@                                            3  2867                      50
446 14 210  SUBSCI DCW   @.SB@                                            3  2870                      51
447 14 220  LEVELI DCW   @.LV@                                            3  2873                      51
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  REDEFI DCW   @/05@                                             3  2876                      51
449 14 240  OCCURI DCW   @/14@                                             3  2879                      51
450 14 250  RECLNI DCW   @*03@                                             3  2882                      51
451 15 010  PROCI  DCW   @*01@                                             3  2885                      51
452 15 020  GROUPI DCW   @#GR@                                             3  2888                      51
453 15 030  BELIT  DCW   @B@                                               1  2889                      52
454 15 040  BLK    DCW   @ @                                               1  2890                      52
455 15 050  ZEROS4 DCW   @0000@                                            4  2894                      52
456 15 060  SX     DCW   #3                                                3  2897                      52
457 15 070  FRCLVL DCW   #3                                                3  2900                      52
458 15 080  ERR    CS    333                                               4  2901  / 333               52
459 15 090         CS                                                      1  2905  /                   52
460 15 100         CC    1                                                 2  2906  F 1                 53
461 15 110         MLC   DIAG,260                                          7  2908  M R45 260           53
462 15 120         W                                                       1  2915  2                   53
463 15 130         CC    1                                                 2  2916  F 1                 53
464 15 140         B     DUMP                                              4  2918  B 359               53
465 15 150  DIAG   DCW   @SYSTEM FAILURE PHASE D04@                       24  2945                      54
466 15 160  DESCRI DCW   @.DS@              DESCRIPTION OPERATOR           3  2948                      54
467 15 170  JUSTIF DCW   @   @              BUCKET TO LOAD JUSTIFICATION CODE  3  2951                  54
468 15 180  TYPE   DCW   #3                                                3  2954                      54
469 15 190  WDMKS  DCW   #3                                                3  2957                      54
470 15 200  CLASS  DCW   #3                                                3  2960                      54
471 15 210  DECIML DCW   #3                                                3  2963                      55
472 15 220         LTORG                                                        2964
       114         DCW   &TABLER                                           3  2966  G01         ADCON   55
                         @/24@                                             3  2969              LIT     55
                         @  X@                                             3  2972              LIT     55
                         @  G@                                             3  2975              LIT     55
                         @L@                                               1  2976              LIT     55
                         @.KK@                                             3  2979              LIT     55
                         @K@                                               1  2980              LIT     56
                         @R@                                               1  2981              LIT     56
                         @#GR@                                             3  2984              LIT     56
                         @#WM@                                             3  2987              LIT     56
                         @1@                                               1  2988              LIT     56
       307  TOPOCR       #02                                               2  2990              AREA    56
                         @/OG@                                             3  2993              LIT     56
                         @N@                                               1  2994              LIT     57
                         @000A@                                            4  2998              LIT     57
473 15 230  TABLEL DCW   *                                                 3  3001  ?01                 57
474 15 240         DA    1X700                                                3002   3701               57
475 15 250  TABLER EQU   *                                                    3701
476 16 010         DC    @0@                                               1  3702                      58
477 16 020         DCW   @}@                GMWM                           1  3703                      58
478 16 030         END                                                          / 000 080               59
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - D05
 102  1 020         CTL   631 11
 103  1 030  X1     EQU   89                                                  0089
 104  1 040  X2     EQU   94                                                  0094
 105  1 050  X3     EQU   99                                                  0099
 106  1 060  GETX   EQU   335                                                 0335
 107  1 070  IORW   EQU   343                                                 0343
 108  1 080  SUPER  EQU   351                                                 0351
 109  1 090  DUMP   EQU   359                                                 0359
 110  1 100  PUTX   EQU   363                                                 0363
 111  1 110  CONST  EQU   188                                                 0188
 112  1 120  SCRBKT EQU   1126                                                1126
 113  1 130         ORG   1300                                                      1300
 114  1 140  AA1    B     GETX                                          4  1300  B 335               4
 115  1 150         DCW   SX                                            3  1306  ?01                 4
 116  1 160         DCW   ERR                                           3  1309  B68                 4
 117  1 170         B     PUTX                                          4  1310  B 363               4
 118  1 180         DCW   SX                                            3  1316  ?01                 4
 119  1 190         C     SX,@/24@          SKIP TO DATA DIVISION       7  1317  C ?01 D85           4
 120  1 200         BU    AA1                                           5  1324  B T00 /             4
 121  1 210         B     SRSKIP            SKIP HEADER                 4  1329  B B37               5
 122  1 220         B     SRSKIP            SKIP SECTION                4  1333  B B37               5
 123  1 230  MAIN   B     SRGET                                         4  1337  B B04               5
 124  1 240         C     SX,@.LV@          LEVEL                       7  1341  C ?01 D88           5
 125  1 250         BE    LVLRT                                         5  1348  B X49 S             5
 126  2 010         C     SX,@/26@          FD                          7  1353  C ?01 D91           5
 127  2 020         BE    FDRT                                          5  1360  B V12 S             5
 128  2 030         C     SX,@/14@          OCCURRS                     7  1365  C ?01 D94           6
 129  2 040         BE    OCCURT                                        5  1372  B U79 S             6
 130  2 050         C     SX,@.DG@          DIAGNOSTIC                  7  1377  C ?01 D97           6
 131  2 060         BE    DIAGRT                                        5  1384  B J11 S             6
 132  2 070         C     SX,@/OG@          ORIGIN CUE FOR REDEFIN      7  1389  C ?01 E00           6
 133  2 080         BE    ORIGRT                                        5  1396  B U45 S             6
 134  2 090         C     SX,@*01@          PROCEDURE DIV               7  1401  C ?01 E03           7
 135  2 100         BE    VERBRT                                        5  1408  B W84 S             7
 136  2 110         C     SX,@/01@          WORKING STORAGE             7  1413  C ?01 E06           7
 137  2 120         BE    VERBRT                                        5  1420  B W84 S             7
 138  2 130         C     SX,@/09@          CONSTANT                    7  1425  C ?01 E09           7
 139  2 140         BE    VERBRT                                        5  1432  B W84 S             7
 140  2 150         B     SRPUT                                         4  1437  B B22               8
 141  2 160         B     MAIN                                          4  1441  B T37               8
 142  2 170  ORIGRT MLC   LVADRS,X1                                      7  1445  M E33 089           8
 143  2 180         MLC   TBLFT&X1,SX                                   7  1452  M CT1 ?01           8
 144  2 190         MLZS  @ @,SX-1    DROP TAG                        7  1459  Y E10 ?00           8
 145  2 200         B     OPLACE                                        4  1466  B A79               8
 146  2 210         DCW   @A@               ORG N F&1                   1  1470                      8
 147  2 220         B     SRPUT                                         4  1471  B B22               9
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     MAIN                                               4  1475  B T37               9
149  2 240  OCCURT B     GETX           OCCURS   RESERVE CORE NEEDED FOR PAD 4  1479  B 335               9
150  2 250         DCW   HOSIZE                                            3  1485  ?19                 9
151  3 010         DCW   ERR                                              3  1488  B68                 9
152  3 020         B     GETX                                             4  1489  B 335               9
153  3 030         DCW   LOSIZE                                           3  1495  ?22                 9
154  3 040         DCW   ERR                                              3  1498  B68                10
155  3 050         B     OPLACE                                           4  1499  B A79              10
156  3 060         DCW   @B@                DECLARE DS                    1  1503                     10
157  3 070         B     SRPLZS     PLACE SIZE W/ ZERO SUPPRESS           4  1504  B ?82              10
158  3 080         B     MAIN                                             4  1508  B T37              10
159  3 090  FDRT   BCE   FDRT0,FDSW,0       IF FD AND NO RLI PUT REC SIZE 8  1512  B V32 Q88 0         10
160  3 100         BCE   SRFDSZ,RLISW,0                                   8  1520  B W01 E13 0        10
161  3 110         B     SRFDDS             PLACE FD DESCR                4  1528  B O44              11
162  3 120  FDRT0  B     SRPUT                                            4  1532  B B22              11
163  3 130  FDRT1  B     GETX                                             4  1536  B 335              11
164  3 140         DCW   FDNAME                                           3  1542  ?13                11
165  3 150         DCW   ERR                                              3  1545  B68                11
166  3 160         B     PUTX                                             4  1546  B 363              11
167  3 170         DCW   FDNAME                                           3  1552  ?13                11
168  3 180         MLC   @1@,FDSW      SET FD SW                        7  1553  M E11 Q88          12
169  3 190         MLC   @0@,RLISW#1        SET RLISW                   7  1560  M E12 E13          12
170  3 200         MLC   NULL,FDSIZE#3    SET FD SIZE BUCKET             7  1567  M ?16 E16          12
171  3 210         MLC   @0000000@,O1SIZE                                 7  1574  M E22 C18          12
172  3 220         B     SRSKIP                                           4  1581  B B37              12
173  3 230         B     OPLACE                                           4  1585  B A79              12
174  3 240         DCW   @I@        L N EQU *&1                         1  1589                     12
175  3 250         B     PUTX                                             4  1590  B 363              13
176  4 010         DCW   FDNAME                                           3  1596  ?13                13
177  4 020         B     MAIN                                             4  1597  B T37              13
178  4 030  SRFDSZ SBR   XFDSZ&3            PUTX RECORD SIZE DATA FOR IOCS 4  1601  H W72              13
179  4 040         C     O1SIZE-3,NULL                                    7  1605  C C15 ?16          13
180  4 050         BE    FDRT2              DIAGNOSTIC DFOR SIZE OVER 999 5  1612  B W28 S            13
181  4 060         MLC   @1A@,ERRNUM                                      7  1617  M E24 R00          13
182  4 070         B     SRDGNS                                           4  1624  B R37              14
183  4 080  FDRT2  B     PUTX                                             4  1628  B 363              14
184  4 090         DCW   LROPER             PUTX FD SIZE OPERZTOR         3  1634  Q91                14
185  4 100         C     O1SIZE,NULL                                      7  1635  C C18 ?16          14
186  4 110         BE    FDZERO                                           5  1642  B W73 S            14
187  4 120         B     PUTX                                             4  1647  B 363              14
188  4 130         DCW   O1SIZE                                           3  1653  C18                14
189  4 140  FDRT2A B     PUTX                                             4  1654  B 363              15
190  4 150         DCW   LROPER                                           3  1660  Q91                15
191  4 160         MLC   TBLCLR,TBLCLR-1    RESET REDEF ORG TABLE         7  1661  M D82 D81          15
192  4 170         MLC                                                    1  1668  M                  15
193  4 180  XFDSZ  B     0                                                4  1669  B 000              15
194  4 190  FDZERO B     PUTX                                             4  1673  B 363              15
195  4 200         DCW   &@@@@@                                           3  1679  E27                15
196  4 210         B     FDRT2A                                           4  1680  B W54              16
197  4 220  VERBRT MLC   SX,SXSAVE#3        KEY VERB ROUTINE              7  1684  M ?01 E30          16
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          BCE   VERB1,FDSW,0      SKIP IF NOT IN FILE SECTION          8  1691  B X11 Q88 0         16
199  4 240          BCE   SRFDSZ,RLISW,0    IF NOT RLI PUT OUT LENGTH OF RECOR   8  1699  B W01 E13 0         16
200  4 250          B     SRFDDS                                                 4  1707  B O44               16
201  5 010  VERB1    MLC   @0@,FDSW            RESET FILE SWITCH               7  1711  M E12 Q88           16
202  5 020          C     SX,@*01@           PROCEDURE DIV                      7  1718  C ?01 E03           17
203  5 030          BE    EOJ1                                                   5  1725  B R57 S             17
204  5 040          MLC   TBLCLR,TBLCLR-1    RESET REDEF ORG TABLE              7  1730  M D82 D81           17
205  5 050          MLC                                                          1  1737  M                   17
206  5 060          B     PUTX                                                   4  1738  B 363               17
207  5 070          DCW   SXSAVE                                                 3  1744  E30                 17
208  5 080          B     MAIN                                                   4  1745  B T37               17
209  5 090  LVLRT    B     GETX                                                   4  1749  B 335               18
210  5 100          DCW   LVLNUM                                                3  1755  ?10                 18
211  5 110          DCW   ERR                                                    3  1758  B68                 18
212  5 120          MLC   LVLNUM,LVADRS#3      ESTABLISH TABLE ADDRESS          7  1759  M ?10 E33           18
213  5 130          A     LVADRS                                                 4  1766  A E33               18
214  5 140          A     LVLNUM,LVADRS                                          7  1770  A ?10 E33           18
215  5 150          C     LVLNUM,@001@     SKIP 01 LEVEL                       7  1777  C ?10 E36           18
216  5 160          BE    LVLRT1                                                 5  1784  B X97 S             19
217  5 170          BCE   NXTSET,NEXTSW,0    SETUP FOR WDMK CONTROL            8  1789  B Y95 C22 0         19
218  5 180  LVLRT1   B     SRGET                                                  4  1797  B B04               19
219  5 190          C     SX,@#GR@           IS THIS START OF GROUP ENTRY       7  1801  C ?01 E39           19
220  5 200          BE    LVLGRP                                                 5  1808  B J37 S             19
221  5 210          C     SX,@077@     77 INCOGNETO INDICATOR                   7  1813  C ?01 E42           19
222  5 220          BU    *&15                                                   5  1820  B Y39 /             20
223  5 230          MLC   @N@,RB77SW                                             7  1825  M E43 N10           20
224  5 240          MLC   @N@,RE77SW         RESET 77 SWITCHES                  7  1832  M E43 N70           20
225  5 250          C     SX,DESCRI          DESCRIPTION START                  7  1839  C ?01 Q94           20
226  6 010          BE    DESCRT                                                 5  1846  B K85 S             20
227  6 020          C     SX,@*03@           DEPENDING                          7  1851  C ?01 E46           20
228  6 030          BE    DPNDRT                                                 5  1858  B Z13 S             21
229  6 040          C     SX,@/05@           REDEFINES                          7  1863  C ?01 E49           21
230  6 050          BE    REDFRT                                                 5  1870  B Z83 S             21
231  6 060          C     SX,@.DG@           DIAGNOSTIC                         7  1875  C ?01 D97           21
232  6 070          BE    DIAGRT                                                 5  1882  B J11 S             21
233  6 080          B     SRPUT                                                  4  1887  B B22               21
234  6 090          B     LVLRT1                                                 4  1891  B X97               21
235  6 100  NXTSET  MLC   LVLNUM,WMLVL       SET UP WMLVL TO 1 BELOW 01 LVL     7  1895  M ?10 C27           22
236  6 110          MLC   @1@,NEXTSW                                            7  1902  M E11 C22           22
237  6 120          B     LVLRT1                                                 4  1909  B X97               22
238  6 130  DPNDRT   B     SRGET                                                  4  1913  B B04               22
239  6 140          C     SX,NULL                                                7  1917  C ?01 ?16           22
240  6 150          BE    DPNRT1                                                 5  1924  B Z40 S             22
241  6 160          MLC   @1A@,ERRNUM       I/O RECORD EXCEEDS 999             7  1929  M E24 R00           23
242  6 170          B     SRDGNS                                                 4  1936  B R37               23
243  6 180  DPNRT1   B     PUTX                                                   4  1940  B 363               23
244  6 190          DCW   LROPER                                                 3  1946  Q91                 23
245  6 200          B     PUTX                                                   4  1947  B 363               23
246  6 210          DCW   &@.RI@                                                3  1953  E52                 23
247  6 220          B     SRGET                                                  4  1954  B B04               23
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         B     PUTX                                             4  1958  B 363              24
249  6 240         DCW   SX                                               3  1964  ?01                24
250  6 250         B     PUTX                                             4  1965  B 363              24
251  7 010         DCW   LROPER                                          3  1971  Q91                24
252  7 020         MLC   @1@,RLISW          GET NEXT SYMBOL               7  1972  M E11 E13          24
253  7 030         B     LVLRT1                                           4  1979  B X97              24
254  7 040  REDFRT B     GETX    REDEFINE ROUTINE                         4  1983  B 335              24
255  7 050         DCW   HOSIZE                                           3  1989  ?19                25
256  7 060         DCW   ERR                                              3  1992  B68                25
257  7 070         B     GETX                                             4  1993  B 335              25
258  7 080         DCW   LOSIZE                                          3  1999  ?22                25
259  7 090         DCW   ERR                                              3  2002  B68                25
260  7 100         B     SRGET                                            4  2003  B B04              25
261  7 110         MLC   LVADRS,X1                                       7  2007  M E33 089          25
262  7 120         BWZ   RDFRT3,TBLFT-1&X1,K  SKIP IF TAGGED W/ B BIT     8  2014  V !52 CT0 K        26
263  7 130         MLC   SX,TBLFT&X1       SET NEW NAME ON TABLE          7  2022  M ?01 CT1          26
264  7 140         MLZS  @S@,TBLFT-1&X1  SET PRETAG                       7  2029  Y E53 CT0          26
265  7 150         B     OPLACE                                           4  2036  B A79              26
266  7 160         DCW   @E@                N F EQU *                     1  2040                     26
267  7 170         B     SRPUT                                            4  2041  B B22              26
268  7 180         MLC   LVADRS,X1                                       7  2045  M E33 089          26
269  7 190  RDFRT3 MLZS  @S@,TBLFT-1&X1    SET PRETAG                    7  2052  Y E53 CT0          27
270  7 200         B     OPLACE                                           4  2059  B A79              27
271  7 210         DCW   @F@                ORG N -                       1  2063                     27
272  7 220         B     SRPUT                                            4  2064  B B22              27
273  7 230  RDFRT2 C     HOSIZE,@000@    IS REDEF SIZE OVER 999           7  2068  C ?19 E56          27
274  7 240         BE    RDFRT1                                           5  2075  B J03 S            27
275  7 250         S     @999@,LOSIZE                                     7  2080  S E59 ?22          27
276  8 010         MLZS  @0@,LOSIZE                                       7  2087  Y E12 ?22          28
277  8 020         B     OPLACE                                           4  2094  B A79              28
278  8 030         DCW   @G@                -999 ORG * -                  1  2098                     28
279  8 040         B     RDFRT2                                           4  2099  B !68              28
280  8 050  RDFRT1 B     SRPLZS                                           4  2103  B ?82              28
281  8 060         B     LVLRT1             GET NEXT SYSMBOL              4  2107  B X97              28
282  8 070  DIAGRT B     SRGET      HANDLE DIAGNOSTICS AS THEY COME       4  2111  B B04              28
283  8 080         MLC   @D@,SX-2                                         7  2115  M E60 R99          29
284  8 090         MLC   SX,ERRNUM                                        7  2122  M ?01 R00          29
285  8 100         B     SRDGNS                                           4  2129  B R37              29
286  8 110         B     LVLRT1                                           4  2133  B X97              29
287  8 120  LVLGRP C     LVLNUM,@001@       HANDLE START-GROUP ENTRIES    7  2137  C ?10 E36          29
288  8 130         BU    DROPLV                                           5  2144  B K02 /            29
289  8 140         B     GETX                                             4  2149  B 335              29
290  8 150         DCW   O1NAME                                           3  2155  ?07                30
291  8 160         DCW   ERR                                              3  2158  B68                30
292  8 170  LVLGR1 B     SRGET                                            4  2159  B B04              30
293  8 180         C     SX,@.PD@                                         7  2163  C ?01 E63          30
294  8 190         BE    LVLGR2                                           5  2170  B K18 S            30
295  8 200         C     SX,@#WM@                                         7  2175  C ?01 E66          30
296  8 210         BU    LVLGR1             WDMKS OR NOT                  5  2182  B J59 /            30
297  8 220         MLC   @1@,WDMKSW         SET WORDMARK SWITCH           7  2187  M E11 C23          31
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         B     LVLGR1                                            4  2194  B J59               31
299  8 240  DROPL1 B     SRGET                                             4  2198  B B04               31
300  8 250  DROPLV C     SX,@.PD@                                          7  2202  C ?01 E63           31
301  9 010         BU    DROPL1                                            5  2209  B J98 /             31
302  9 020         B     MAIN                                              4  2214  B T37               31
303  9 030  LVLGR2 C     O1NAME,@   @       IF GROUP NAME BLANK, DROP DESCRIP     7  2218  C ?07 E69           31
304  9 040         BE    DROPLV                                            5  2225  B K02 S             32
305  9 050         B     SRREC              TAKE CARE OF FD-RECORD-L ADDRESS     4  2230  B K38               32
306  9 060         B     DROPLV                                            4  2234  B K02               32
307  9 070  SRREC  SBR   XREC&3             HANDLE L ADDRESS AND FD EQUATES I     4  2238  H K84               32
308  9 080         B     OPLACE                                            4  2242  B A79               32
309  9 090         DCW   @I@                L N EQU *&1                       1  2246                      32
310  9 100         B     PUTX                                              4  2247  B 363               32
311  9 110         DCW   O1NAME                                            3  2253  ?07                 33
312  9 120         BCE   XREC,FDSW,0        SKIP IF NO FDEQUS NEEDED          8  2254  B K81 Q88 0         33
313  9 130         B     OPLACE                                            4  2262  B A79               33
314  9 140         DCW   @J@                F N1 EQU I N2                     1  2266                      33
315  9 150         B     PUTX                                              4  2267  B 363               33
316  9 160         DCW   O1NAME                                            3  2273  ?07                 33
317  9 170         B     PUTX                                              4  2274  B 363               33
318  9 180         DCW   FDNAME                                            3  2280  ?13                 34
319  9 190  XREC   B     0                                                 4  2281  B 000               34
320  9 200  DESCRT MLC   @0@,DESCNT#1       DESCRIOTION ROUTINE               7  2285  M E12 E70           34
321  9 210         MLC   &NAME,DESCR1&6                                     7  2292  M E73 L09           34
322  9 220  DESCR2 B     SRGET                                             4  2299  B B04               34
323  9 230  DESCR1 MLC   SX,0                                              7  2303  M ?01 000           34
324  9 240         SBR   DESCR1&6           GET DESCRIPTION TO EDIT           4  2310  H L09               34
325  9 250         A     @1@,DESCNT                                        7  2314  A E11 E70           35
326 10 010         BCE   DESCR3,DESCNT,9                                   8  2321  B L33 E70 9         35
327 10 020         B     DESCR2                                            4  2329  B K99               35
328 10 030  DESCR3 MLC   SIZELO,LOSIZE                                     7  2333  M R24 ?22           35
329 10 040         MLC   SIZEHO,HOSIZE                                     7  2340  M R27 ?19           35
330 10 050         MLC   LVADRS,X1                                         7  2347  M E33 089           36
331 10 060         BWZ   DESC3E,TBLFT-1&X1,S   BR IF PRETAGGED - ORG BACK TBL     8  2354  V L73 CT0 S         36
332 10 070         MLZS  @ @,TBLFT-1&X1    CLEAR ANY TAG                     7  2362  Y E10 CT0           36
333 10 080         B     DESC3A                                            4  2369  B L80               36
334 10 090  DESC3E MLZS  @K@,TBLFT-1&X1     SET TAG                           7  2373  Y E74 CT0           36
335 10 100  DESC3A C     LVLNUM,@001@                                      7  2380  C ?10 E36           37
336 10 110         BE    O1DES                                             5  2387  B P74 S             37
337 10 120  SWDMKS BCE   DESCR4,WDMKSW,0   CONTROL SETTING OF WDMKS FOR          8  2392  B M83 C23 0         37
338 10 130         C     WMLVL,LVLNUM             EACH ENTRY                7  2400  C C27 ?10           37
339 10 140         BU    WDMKS1                                            5  2407  B M30 /             37
340 10 150         A     @1@,WMCNT                                         7  2412  A E11 C21           37
341 10 160         MLC   @0@,ELMYET         RESET ELEM SWITCH                 7  2419  M E12 C24           38
342 10 170         B     SETWMK                                            4  2426  B M69               38
343 10 180  WDMKS1 BCE   ELEM,TYPE,E                                        8  2430  B M54 R12 E         38
344 10 190         C     DEPLVL,LVLNUM      GROUP PROCESSING                  7  2438  C C30 ?10           38
345 10 200         BL    SETWMK                                            5  2445  B M69 T             38
346 10 210         B     DESCR4                                            4  2450  B M83               38
347 10 220  ELEM   BCE   DESCR4,ELMYET,1   BRANCH IF HAVE HIT 1ST ELEM ENTRY      8  2454  B M83 C24 1         39
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230         MLC   @1@,ELMYET         HIT FIRST ELEM - SET SWITCH     7  2462  M E11 C24          39
349 10 240  SETWMK MLC   @001@,WDMKS                                  7  2469  M E36 R15          39
350 10 250         MLC   LVLNUM,DEPLVL                                 7  2476  M ?10 C30          39
351 11 010  DESCR4 BCE   GRPEND,TYPE,G      BRANCH IF GROUP           8  2483  B P30 R12 G        39
352 11 020         C     LVLNUM,@001@                                  7  2491  C ?10 E36          40
353 11 030         BU    DSCR4A                                        5  2498  B N21 /            40
354 11 040         MLC   NAME,O1NAME                                   7  2503  M R30 ?07          40
355 11 050  RB77SW B     SRREC                                         4  2510  B K38              40
356 11 060         MLC   @B@,RB77SW                                    7  2514  M E75 N10          40
357 11 070  DSCR4A MLC   @K@,DC/DCW         SET DCW                   7  2521  M E74 N51          40
358 11 080         C     WDMKS,@000@                                   7  2528  C R15 E56          41
359 11 090         BU    DSCR4B                                        5  2535  B N47 /            41
360 11 100         MLC   @L@,DC/DCW         SET DC                    7  2540  M E76 N51          41
361 11 110  DSCR4B B     OPLACE                                        4  2547  B A79              41
362 11 120  DC/DCW DCW   @ @                DC OR DCW DECLARARION      1  2551                     41
363 11 130         B     PUTX                                          4  2552  B 363              41
364 11 140         DCW   NAME                                          3  2558  R30                41
365 11 150         B     SRPLZS                                        4  2559  B ?82              42
366 11 160  DESCR6 C     LVLNUM,@001@                                  7  2563  C ?10 E36          42
367 11 170  RE77SW BE    RECEND                                        5  2570  B P58 S            42
368 11 180         MLC   @B@,RE77SW                                    7  2575  M E75 N70          42
369 11 190  DSCR6A BCE   RLISIZ,RLISW,2                                8  2582  B O96 E13 2        42
370 11 200  DESCR7 C     NAME,@   @          NO NAME                   7  2590  C R30 E69          42
371 11 210         BE    DROPLV                                        5  2597  B K02 S            43
372 11 220         B     SRPLST                                        4  2602  B ?32              43
373 11 230  EDTOUT B     OPLACE                                        4  2606  B A79              43
374 11 240         DCW   @P@                GET AND PLACE UNTIL .PD   1  2610                     43
375 11 250  EDTOT1 B     SRGET                                         4  2611  B B04              43
376 12 010         B     SRPUT                                         4  2615  B B22              43
377 12 020         C     SX,@.PD@           GET AND PLACE EDIT AND .SB 7  2619  C ?01 E63          43
378 12 030         BE    DESCR9                                        5  2626  B O35 S            44
379 12 040         B     EDTOT1                                        4  2631  B O11              44
380 12 050  DESCR9 B     OPLACE                                        4  2635  B A79              44
381 12 060         DCW   @O@                .DS .DL                   1  2639                     44
382 12 070         B     MAIN                                          4  2640  B T37              44
383 12 080  SRFDDS SBR   XFDDS&3            PUT OUT FD DESCR ON TAPE 4 4  2644  H O95              44
384 12 090         B     OPLACE                                        4  2648  B A79              44
385 12 100         DCW   @R@      N1 EQU N2                            1  2652                     45
386 12 110         B     PUTX                                          4  2653  B 363              45
387 12 120         DCW   FDNAME                                        3  2659  ?13                45
388 12 130         B     PUTX                                          4  2660  B 363              45
389 12 140         DCW   O1NMSV                                        3  2666  E96                45
390 12 150         MLC   FDNAME,NAME                                   7  2667  M ?13 R30          45
391 12 160         MLNS  O1SIZE,SIZELO                                 7  2674  D C18 R24          45
392 12 170         MLNS                                                1  2681  D                  46
393 12 180         MLNS                                                1  2682  D                  46
394 12 190         B     SRPLST             PLACE DESCRIPTION         4  2683  B ?32              46
395 12 200         B     OPLACE                                        4  2687  B A79              46
396 12 210         DCW   @O@                .DS .DL                   1  2691                     46
397 12 220  XFDDS  B     0                                             4  2692  B 000              46
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  RLISIZ MLC   @1@,RLISW                                      7  2696  M E11 E13           46
399 12 240          C     SIZELO,@0000004@                               7  2703  C R24 E82           47
400 12 250          BE    DESCR7                                         5  2710  B N90 S             47
401 13 010          MLC   @1B@,ERRNUM                                    7  2715  M E84 R00           47
402 13 020          B     SRDGNS                                         4  2722  B R37               47
403 13 030          B     DESCR7                                         4  2726  B N90               47
404 13 040  GRPEND C     NAME,@   @  SKIP IF  NO NAME                   7  2730  C R30 E69           47
405 13 050          BE    DESCR6                                         5  2737  B N63 S             47
406 13 060          B     OPLACE                                         4  2742  B A79               48
407 13 070          DCW   @M@               N EQU *                      1  2746                      48
408 13 080          B     PUTX                                           4  2747  B 363               48
409 13 090          DCW   NAME                                           3  2753  R30                 48
410 13 100          B     DESCR6                                         4  2754  B N63               48
411 13 110  RECEND B     OPLACE                                         4  2758  B A79               48
412 13 120          DCW   @Q@               PLACE ORG BLK & GMWM         1  2762                      48
413 13 130          MLC   @R@,TYPE                                       7  2763  M E85 R12           49
414 13 140          B     DSCR6A                                         4  2770  B N82               49
415 13 150  O1DES  MLC   TBLCLR,TBLCLR-1                                7  2774  M D82 D81           49
416 13 160          BCE   O1DES1,WDMKSW,0     01 DESCRIPT UPDATE AND OUT 8  2781  B Q03 C23 0         49
417 13 170          MLC   WMCNT,WDMKS                                   7  2789  M C21 R15           49
418 13 180  WMSTUP MLC   DEPLVL&1,DEPLVL    INITIALIZE SWITCHES         7  2796  M C31 C30           50
419 13 190  O1DES1 BCE   DESCR4,FDSW,0                                  8  2803  B M83 Q88 0         50
420 13 200          C     O1SIZE,@0000000@                               7  2811  C C18 E91           50
421 13 210          BE    SETSIZ                                         5  2818  B Q70 S             50
422 13 220          C     LOSIZE,O1SIZE                                  7  2823  C ?22 C18           50
423 13 230          BE    DESCR4                                         5  2830  B M83 S             50
424 13 240          BH    DAG20                                          5  2835  B Q47 U             51
425 13 250          MLC   LOSIZE,O1SIZE                                 7  2840  M ?22 C18           51
426 14 010  DAG20  BCE   DESCR4,RLISW,1     OUT DIAGNOSTIC FOR MULTISIZE 01  8  2847  B M83 E13 1         51
427 14 020          MLC   @13@,ERRNUM                                    7  2855  M E93 R00           51
428 14 030          B     SRDGNS                                         4  2862  B R37               51
429 14 040          B     DESCR4                                         4  2866  B M83               51
430 14 050  SETSIZ MLC   LOSIZE,O1SIZE                                 7  2870  M ?22 C18           52
431 14 060          MLC   NAME,O1NMSV#3    SAVE O1NAME FOR FD EQU       7  2877  M R30 E96           52
432 14 070          B     DESCR4                                         4  2884  B M83               52
433 14 080  FDSW   DCW   @0@                                            1  2888                      52
434 14 090  LROPER DCW   @.LR@                                          3  2891                      52
435 14 100  DESCRI DCW   @.DS@                                          3  2894                      52
436 14 110  MACSEP DCW   @.MC@                                          3  2897                      52
437 14 120  ERRNUM DCW   @D00@                                          3  2900                      53
438 14 130          DCW   @.PD@    ####                                 3  2903                      53
439 14 140  EDIT   DC    #3       @@@@                                 3  2906                      53
440 14 150  JUST   DC    #3     @@@@                                   3  2909                      53
441 14 160  TYPE   DC    #3     @@@@                                   3  2912                      53
442 14 170  WDMKS  DC    #3     @@@@                                   3  2915                      53
443 14 180  CLASS  DC    #3     @@@@                                   3  2918                      53
444 14 190  DECIML DC    #3     @@@@                                   3  2921                      53
445 14 200  SIZELO DC    #3     @@@@                                   3  2924                      53
446 14 210  SIZEHO DC    #3     @@@@                                   3  2927                      53
447 14 220  NAME   DC    #3     @@@@                                   3  2930                      53
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230  DESCST DC    @.DS.DE@  #######                              6  2936                      53
449 14 240  SRDGNS SBR   XDGNS&3                                        4  2937  H R56               54
450 14 250         B     OPLACE                                        4  2941  B A79               54
451 15 010         DCW   @D@                                           1  2945                      54
452 15 020         B     PUTX                                          4  2946  B 363               54
453 15 030         DCW   ERRNUM                                        3  2952  R00                 54
454 15 040  XDGNS  B     0                                             4  2953  B 000               54
455 15 050  EOJ1   B     PUTX                                          4  2957  B 363               54
456 15 060         DCW   SXSAVE                                       3  2963  E30                 55
457 15 070  EOJ    B     GETX                                          4  2964  B 335               55
458 15 080         DCW   SX                                            3  2970  ?01                 55
459 15 090         DCW   EOJ2                                          3  2973  R85                 55
460 15 100         B     PUTX                                          4  2974  B 363               55
461 15 110         DCW   SX                                            3  2980  ?01                 55
462 15 120         B     EOJ                                           4  2981  B R64               55
463 15 130  EOJ2   B     PUTX                                          4  2985  B 363               56
464 15 140         DCW   SX                                            3  2991  ?01                 56
465 15 150         B     SUPER                                         4  2992  B 351               56
466 15 160         DCW   @D06@                                         3  2998                      56
467 15 170  SX     DCW   #3                                            3  3001                      56
468 15 180  OUTBKT DCW   #3                                            3  3004                      56
469 15 190  O1NAME DCW   #3                                            3  3007                      56
470 15 200  LVLNUM DCW   #3                                            3  3010                      57
471 15 210  FDNAME DCW   #3                                            3  3013                      57
472 15 220  NULL   DCW   @000@                                         3  3016                      57
473 15 230  HOSIZE DCW   #3       *****                                3  3019                      57
474 15 240  LOSIZE DC    #3       *****                                3  3022                      57
475 15 250  LCDSOP DCW   @.OPDS .LC@       DS FOR OCCURS              9  3031                      57
476 16 010  SRPLST SBR   XPLST&3         PLACE STRING IN XO UNTIL WDMK  4  3032  H ?81               57
477 16 020         B     OPLACE                                        4  3036  B A79               57
478 16 030         DCW   @P@                GET AND PLACE UNTIL .PD   1  3040                      58
479 16 040         MLC   &DESCST,X3                                    7  3041  M E99 099           58
480 16 050  SRPL2  MLC   0&X3,OUTBK#3                                  7  3048  M 0?0 F02           58
481 16 060         SAR   X3                                            4  3055  Q 099               58
482 16 070         B     PUTX                                          4  3059  B 363               58
483 16 080         DCW   OUTBK                                         3  3065  F02                 58
484 16 090         BWZ   XPLST,1&X3,1                                  8  3066  V ?78 0?1 1         58
485 16 100         B     SRPL2                                         4  3074  B ?48               59
486 16 110  XPLST  B     0                                             4  3078  B 000               59
487 16 120  SRPLZS SBR   XPLZS&3       PLACES WITH ZERO SUPPRESS       4  3082  H A78               59
488 16 130         B     OPLACE                                        4  3086  B A79               59
489 16 140         DCW   @H@                GET AND PUT THRU .MC      1  3090                      59
490 16 150         MLC   &HOSIZE-4,X3                                  7  3091  M F05 099           59
491 16 160         MLC   @B@,T002                                      7  3098  M E75 A28           59
492 16 170  T001   C     X3,&LOSIZE-2                                  7  3105  C 099 F08           60
493 16 180         BE    XPLZS1                                        5  3112  B A54 S             60
494 16 190         MLNS  2&X3,OUTBKT                                   7  3117  D 0?2 ?04           60
495 16 200         SAR   X3                                            4  3124  Q 099               60
496 16 210  T002   BCE   T001,OUTBKT,0                                 8  3128  B A05 ?04 0         60
497 16 220         MLC   @N@,T002                                      7  3136  M E43 A28           60
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

 498 16 230         B     PUTX                                              4  3143  B 363               61
 499 16 240         DCW   OUTBKT                                           3  3149  ?04                 61
 500 16 250         B     T001                                              4  3150  B A05               61
 501 17 010  XPLZS1 MLNS  2&X3,OUTBKT                                       7  3154  D 0?2 ?04           61
 502 17 020         B     PUTX                                              4  3161  B 363               61
 503 17 030         DCW   OUTBKT                                           3  3167  ?04                 61
 504 17 040         B     PUTX                                              4  3168  B 363               61
 505 17 050         DCW   MACSEP                                            3  3174  Q97                 62
 506 17 060  XPLZS  B     0                                                 4  3175  B 000               62
 507 17 070  *   MODIFIES OPERATOR ANF PUTX
 508 17 080  OPLACE SBR   X3                                                4  3179  H 099               62
 509 17 090         MLC   0&X3,OPOUT                                        7  3183  M 0?0 B03           62
 510 17 100         B     PUTX                                              4  3190  B 363               62
 511 17 110         DCW   OPOUT                                           3  3196  B03                 62
 512 17 120         B     1&X3                                              4  3197  B 0?1               62
 513 17 130  OPOUT  DCW   @$$ @                                            3  3203                      63
 514 17 140  *    GETS SX
 515 17 150  SRGET  SBR   EXGET&3                                          4  3204  H B21               63
 516 17 160         B     GETX                                              4  3208  B 335               63
 517 17 170         DCW   SX                                                3  3214  ?01                 63
 518 17 180         DCW   ERR                                               3  3217  B68                 63
 519 17 190  EXGET  B     0                                                 4  3218  B 000               63
 520 17 200  *    PUT SX
 521 17 210  SRPUT  SBR   EXPUT&3                                          4  3222  H B36               63
 522 17 220         B     PUTX                                              4  3226  B 363               64
 523 17 230         DCW   SX                                                3  3232  ?01                 64
 524 17 240  EXPUT  B     0                                                 4  3233  B 000               64
 525 17 250  *     SRSKIP SUB ROUTINE GETS AND PUTS UNTIL NEXT PERIOD
 526 18 010  SRSKIP SBR   EXSKIP&3                                         4  3237  H B67               64
 527 18 020  SKIP1  B     SRGET                                             4  3241  B B04               64
 528 18 030         B     PUTX                                              4  3245  B 363               64
 529 18 040         DCW   SX                                                3  3251  ?01                 64
 530 18 050         C     SX,@.PD@                                          7  3252  C ?01 E63           65
 531 18 060         BU    SKIP1                                             5  3259  B B41 /             65
 532 18 070  EXSKIP B     0                                                 4  3264  B 000               65
 533 18 080  ERR    CS    333                                               4  3268  / 333               65
 534 18 090         CS                                                      1  3272  /                   65
 535 18 100         CC    1                                                 2  3273  F 1                 65
 536 18 110         MLC   DIAG,260                                          7  3275  M C12 260           65
 537 18 120         W                                                       1  3282  2                   66
 538 18 130         CC    1                                                 2  3283  F 1                 66
 539 18 140         B     DUMP                                              4  3285  B 359               66
 540 18 150  DIAG   DCW   @SYSTEM FAILURE PHASE D05@                       24  3312                      66
 541 18 160  O1SIZE DCW   @000000@                                          6  3318                      66
 542 18 170  WMCNT  DCW   @000@         #####WORDMARK COUNT                 3  3321                      67
 543 18 180  NEXTSW DC    @0@           #####0 IF NEXT LVL IS WMLVL         1  3322                      67
 544 18 190  WDMKSW DC    @0@           ##### 1 IF 01 ENTRY GETS WDMKS      1  3323                      67
 545 18 200  ELMYET DC    @0@           ##### 0 IF HAVENT REACHED 1ST ELEM YET  1  3324                  67
 546 18 210  WMLVL  DC    @000@         ##### 1ST LEVEL BELOW 01 - W        3  3327                      67
 547 18 220  DEPLVL DC    @000@         ##### LAST LEVEL TO GET WDMKS       3  3330                      67
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230          DC    @0@               FOR SETTING             1  3331                      67
549 18 240  TBLFT   EQU   *                                           3331
550 18 250          DA    1X3     *****                             3332  3334                67
551 19 010          DA    1X147     ****                            3335  3481                67
552 19 020  TBLCLR  DC    @ @                                     1  3482                      68
553 19 030          LTORG                                             3483
                    DCW   @/24@                                   3  3485          LIT     68
                          @.LV@                                   3  3488          LIT     68
                          @/26@                                   3  3491          LIT     68
                          @/14@                                   3  3494          LIT     68
                          @.DG@                                   3  3497          LIT     69
                          @/OG@                                   3  3500          LIT     69
                          @*01@                                   3  3503          LIT     69
                          @/01@                                   3  3506          LIT     69
                          @/09@                                   3  3509          LIT     69
                          @ @                                     1  3510          LIT     69
                          @1@                                     1  3511          LIT     69
                          @0@                                     1  3512          LIT     70
       169  RLISW         #01                                     1  3513          AREA    70
       170  FDSIZE        #03                                     3  3516          AREA    70
       171                @0000000@                               6  3522          LIT     70
                          @1A@                                    2  3524          LIT     70
                          @@@@@                                   3  3527          LIT     70
       197  SXSAVE        #03                                     3  3530          AREA    70
       212  LVADRS        #03                                     3  3533          AREA    71
                          @001@                                   3  3536          LIT     71
                          @#GR@                                   3  3539          LIT     71
                          @077@                                   3  3542          LIT     71
                          @N@                                     1  3543          LIT     71
                          @*03@                                   3  3546          LIT     71
                          @/05@                                   3  3549          LIT     71
                          @.RI@                                   3  3552          LIT     72
                          @S@                                     1  3553          LIT     72
                          @000@                                   3  3556          LIT     72
                          @999@                                   3  3559          LIT     72
                          @D@                                     1  3560          LIT     72
                          @.PD@                                   3  3563          LIT     72
                          @#WM@                                   3  3566          LIT     72
                          @   @                                   3  3569          LIT     73
       320  DESCNT        #01                                     1  3570          AREA    73
       321                &NAME                                   3  3573  R30     ADCON   73
                          @K@                                     1  3574          LIT     73
                          @B@                                     1  3575          LIT     73
                          @L@                                     1  3576          LIT     73
       399                @0000004@                               6  3582          LIT     73
                          @1B@                                    2  3584          LIT     74
                          @R@                                     1  3585          LIT     74
       420                @0000000@                               6  3591          LIT     74
                          @13@                                    2  3593          LIT     74
       431  O1NMSV        #03                                     3  3596          AREA    74
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

       479          &DESCST                                         3  3599  R36         ADCON   74
       480  OUTBK   #03                                            3  3602              AREA    74
       490          &HOSIZE-4                                       3  3605  ?15         ADCON   75
       492          &LOSIZE-2                                       3  3608  ?20         ADCON   75
554 19 040          DCW   @}@               GMWM                    1  3609                          75
555 19 050          END                                                     / 000 080             76
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - D06 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - D06							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	GETX	EQU	335				0335			
107	1	070	IORW	EQU	343				0343			
108	1	080	SUPER	EQU	351				0351			
109	1	090	DUMP	EQU	359				0359			
110	1	100	PUTX	EQU	363				0363			
111	1	110	CONST	EQU	188				0188			
112	1	120	SCRBKT	EQU	1126				1126			
113	1	130		ORG	1300					1300		
114	1	140	AA1	B	GETX			4	1300	B 335		4
115	1	150		DCW	SX			3	1306	J08		4
116	1	160		DCW	ERR			3	1309	J50		4
117	1	170		B	PUTX			4	1310	B 363		4
118	1	180		DCW	SX			3	1316	J08		4
119	1	190		C	SX,@/24@	SKIP TO DATA DIVISION		7	1317	C J08 O86		4
120	1	200		BU	AA1			5	1324	B T00 /		4
121	1	210		B	PLACE			4	1329	B K28		5
122	1	220		DCW	&@.DL@			3	1335	O89		5
123	1	230	NEXT	B	GETX			4	1336	B 335		5
124	1	240		DCW	SX			3	1342	J08		5
125	1	250		DCW	ERR			3	1345	J50		5
126	2	010		BCE	SECOND,SX-1,$			8	1346	B T58 J07 $		5
127	2	020		B	NOT$			4	1354	B T66		5
128	2	030	SECOND	BCE	CHECK,SX-2,$			8	1358	B T89 J06 $		6
129	2	040	NOT$	B	PUTX			4	1366	B 363		6
130	2	050		DCW	SX			3	1372	J08		6
131	2	060		C	SX,PROCI			7	1373	C J08 J05		6
132	2	070		BE	EOJ1			5	1380	B !47 S		6
133	2	080		B	NEXT			4	1385	B T36		6
134	2	090	CHECK	BCE	ART,SX,A			8	1389	B V29 J08 A		6
135	2	100		BCE	BRT,SX,B			8	1397	B V64 J08 B		7
136	2	110		BCE	CRT,SX,C			8	1405	B V80 J08 C		7
137	2	120		BCE	DRT,SX,D			8	1413	B W15 J08 D		7
138	2	130		BCE	ERT,SX,E			8	1421	B W38 J08 E		7
139	2	140		BCE	FRT,SX,F			8	1429	B W71 J08 F		8
140	2	150		BCE	GRT,SX,G			8	1437	B X03 J08 G		8
141	2	160		BCE	HRT,SX,H			8	1445	B X31 J08 H		8
142	2	170		BCE	IRT,SX,I			8	1453	B X55 J08 I		8
143	2	180		BCE	JRT,SX,J			8	1461	B X93 J08 J		9
144	2	190		BCE	KRT,SX,K			8	1469	B Y44 J08 K		9
145	2	200		BCE	LRT,SX,L			8	1477	B Y71 J08 L		9
146	2	210		BCE	MRT,SX,M			8	1485	B Y98 J08 M		9
147	2	220		BCE	ORT,SX,O			8	1493	B Z28 J08 O		10

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         BCE   PRT,SX,P                                    8  1501  B Z41 J08 P         10
149  2 240         BCE   QRT,SX,Q                                    8  1509  B Z65 J08 Q         10
150  2 250         BCE   RRT,SX,R                                    8  1517  B !02 J08 R         10
151  3 010         B     NOT$                                        4  1525  B T66               10
152  3 020  ART    B     GETX              ORG NH&1                  4  1529  B 335               11
153  3 030         DCW   ARTN1                                       3  1535  V54                 11
154  3 040         DCW   ERR                                         3  1538  J50                 11
155  3 050         B     SRPLST                                      4  1539  B J09               11
156  3 060         DCW   ASTRG                                       3  1545  V63                 11
157  3 070  ARTN1  DCW   @.MCH&1   @                                 9  1554                      11
158  3 080  ASTRG  DC    @.OPORG.LC@                                 9  1563                      11
159  3 090  BRT    B     SRPLST            DS DECLARATION            4  1564  B J09               11
160  3 100         DCW   BSTRG                                       3  1570  V79                 12
161  3 110  BSTRG  DCW   @.OPDS .LC@                                 9  1579                      12
162  3 120  CRT    B     GETX              N EQU *&1                 4  1580  B 335               12
163  3 130         DCW   CRTN1                                       3  1586  W14                 12
164  3 140         DCW   ERR                                         3  1589  J50                 12
165  3 150         B     SRPLST                                      4  1590  B J09               12
166  3 160         DCW   CSTRG                                       3  1596  W14                 12
167  3 170  CSTRG  DCW   @.MC*&1.OPEQU.LC   @                      18  1614                      13
168  3 180  CRTN1  EQU   *                                           1614
169  3 190  DRT    B     GETX                                        4  1615  B 335               13
170  3 200         DCW   DRTN1             *** DIAG                  3  1621  W34                 13
171  3 210         DCW   ERR                                         3  1624  J50                 13
172  3 220         B     SRPLST                                      4  1625  B J09               13
173  3 230         DCW   DSTRG                                       3  1631  W37                 13
174  3 240  DRTN1  DCW   @   @                                       3  1634                      13
175  3 250  DSTRG  DC    @***@                                       3  1637                      14
176  4 010  ERT    B     SRGET             N F EQU *                 4  1638  B J95               14
177  4 020         B     SRPLAC                                      4  1642  B K13               14
178  4 030         B     SRPLST                                      4  1646  B J09               14
179  4 040         DCW   ESTRG                                       3  1652  W70                 14
180  4 050  ESTRG  DCW   @.MC  *.OPEQU.LC  H@                      18  1670                      15
181  4 060  FRT    B     GETX              ORG N-                    4  1671  B 335               15
182  4 070         DCW   FRTN1                                       3  1677  W93                 15
183  4 080         DCW   ERR                                         3  1680  J50                 15
184  4 090         B     SRPLST                                      4  1681  B J09               15
185  4 100         DCW   FSTRG                                       3  1687  X02                 15
186  4 110  FRTN1  DCW   @  -   @                                    6  1693                      16
187  4 120  FSTRG  DC    @.OPORG.LC@                                 9  1702                      16
188  4 130  GRT    B     SRPLST            999 ORG -                 4  1703  B J09               16
189  4 140         DCW   GSTRG                                       3  1709  X30                 16
190  4 150  GSTRG  DCW   @  -  *.OPORG.LC.MC999@                    21  1730                      17
191  4 160  HRT    B     SRGET             GET AND PLACE THRU .MC    4  1731  B J95               17
192  4 170         B     SRPLAC                                      4  1735  B K13               17
193  4 180         C     SX,@.MC@                                    7  1739  C J08 O92           17
194  4 190         BU    HRT                                         5  1746  B X31 /             18
195  4 200         B     NEXT                                        4  1751  B T36               18
196  4 210  IRT    B     GETX              L N EQU *&1               4  1755  B 335               18
197  4 220         DCW   IRTN1                                       3  1761  X89                 18
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          DCW   ERR                                           3  1764  J50                 18
199  4 240          B     SRPLST                                        4  1765  B J09               18
200  4 250          DCW   ISTRG                                         3  1771  X92                 18
201  5 010  IRTN1   DCW   @.MC*&1.OPEQU.LC   @                        18  1789                      19
202  5 020  ISTRG   DC    @  L@                                         3  1792                      19
203  5 030  JRT     B     GETX              FN1 EQU IN2                 4  1793  B 335               19
204  5 040          DCW   JRTN1                                         3  1799  Y40                 19
205  5 050          DCW   ERR                                           3  1802  J50                 19
206  5 060          B     GETX                                          4  1803  B 335               19
207  5 070          DCW   JRTN2                                         3  1809  Y25                 19
208  5 080          DCW   ERR                                           3  1812  J50                 20
209  5 090          B     SRPLST                                        4  1813  B J09               20
210  5 100          DCW   JSTRG                                         3  1819  Y43                 20
211  5 110  JRTN2   DCW   @.MC   @                                     6  1825                      20
212  5 120  JRTN1   DC    @  I.OPEQU.LC   @                           15  1840                      20
213  5 130  JSTRG   DC    @  F@                                         3  1843                      20
214  5 140  KRT     B     SRGET             DCW DECLARATION             4  1844  B J95               20
215  5 150          B     SRPLAC                                        4  1848  B K13               21
216  5 160          B     SRPLST                                        4  1852  B J09               21
217  5 170          DCW   KSTRG                                         3  1858  Y70                 21
218  5 180  KSTRG   DCW   @  #.OPDCW.LC@                              12  1870                      21
219  5 190  LRT     B     SRGET             DC DECLARATION              4  1871  B J95               21
220  5 200          B     SRPLAC                                        4  1875  B K13               21
221  5 210          B     SRPLST                                        4  1879  B J09               21
222  5 220          DCW   LSTRG                                         3  1885  Y97                 22
223  5 230  LSTRG   DCW   @  #.OPDC .LC@                              12  1897                      22
224  5 240  MRT     B     SRGET             N EAU *                     4  1898  B J95               22
225  5 250          B     SRPLAC                                        4  1902  B K13               22
226  6 010          B     SRPLST                                        4  1906  B J09               22
227  6 020          DCW   MSTRG                                         3  1912  Z27                 22
228  6 030  MSTRG   DCW   @.MC  *.OPEQU.LC@                           15  1927                      23
229  6 040  ORT     B     SRPLST            .DS .DL                     4  1928  B J09               23
230  6 050          DCW   OSTRG                                         3  1934  Z40                 23
231  6 060  OSTRG   DCW   @.DL.DS@                                     6  1940                      23
232  6 070  PRT     B     SRGET             GET AND PLACE UNTIL .PD     4  1941  B J95               23
233  6 080          C     SX,@.PD@                                      7  1945  C J08 O95           23
234  6 090          BE    NEXT                                          5  1952  B T36 S             24
235  6 100          B     SRPLAC                                        4  1957  B K13               24
236  6 110          B     PRT                                           4  1961  B Z41               24
237  6 120  QRT     B     SRPLST            ORG BLK & GMWM              4  1965  B J09               24
238  6 130          DCW   QSTRG                                         3  1971  !01                 24
239  6 140  QSTRG   DCW   @.MC  @ GM  @.OPDCW.LC.MCORG.LC@             30  2001                      25
240  6 150  RRT     B     GETX                                          4  2002  B 335               25
241  6 160          DCW   RRTN1        N1 EQU N2                      3  2008  !46                 25
242  6 170          DCW   ERR                                           3  2011  J50                 26
243  6 180          B     GETX                                          4  2012  B 335               26
244  6 190          DCW   RRTN2                                         3  2018  !34                 26
245  6 200          DCW   ERR                                           3  2021  J50                 26
246  6 210          B     SRPLST                                        4  2022  B J09               26
247  6 220          DCW   RSTRG                                         3  2028  !46                 26
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230  RRTN2   DCW   @.MC   @                                       6  2034                    26
249  6 240  RRTN1   DC    @.OPEQU.LC   @                                12  2046                    27
250  6 250  RSTRG   EQU   *                                              2046
251  7 010  EOJ1    B     GETX                                          4  2047  B 335             27
252  7 020         DCW   SX                                            3  2053  J08               27
253  7 030         DCW   EOJ2                                          3  2056  !68               27
254  7 040         B     PUTX                                          4  2057  B 363             27
255  7 050         DCW   SX                                            3  2063  J08               28
256  7 060         B     EOJ1                                          4  2064  B !47             28
257  7 070  EOJ2    B     PUTX                                          4  2068  B 363             28
258  7 080         DCW   SX                                            3  2074  J08               28
259  7 090         B     PLACE                                         4  2075  B K28             28
260  7 100         DCW   &@.DE@                                        3  2081  O98               28
261  7 110         B     PLACE                                         4  2082  B K28             28
262  7 120         DCW   &@.LD@                                        3  2088  P01               29
263  7 130         B     PLACE                                         4  2089  B K28             29
264  7 140         DCW   &@.EB@                                        3  2095  P04               29
265  7 150         B     SUPER                                         4  2096  B 351             29
266  7 160         DCW   @E01@                                        3  2102                    29
267  7 170  PROCI   DCW   @*01@                                        3  2105                    29
268  7 180  SX      DCW   #3                                           3  2108                    29
269  7 190  SRPLST  SBR   X2                 PLACE STRING UNTIL WDMS   4  2109  H 094             30
270  7 200         MLC   2&X2,X3                                       7  2113  M 0!2 099         30
271  7 210  PLST1   MLC   0&X3,OUTBKT#3                               7  2120  M 0?0 P07         30
272  7 220         SAR   X3                                           4  2127  Q 099             30
273  7 230         B     PLACE                                         4  2131  B K28             30
274  7 240         DCW   OUTBKT                                       3  2137  P07               30
275  7 250         BWZ   NEXT,1&X3,1                                   8  2138  V T36 0?1 1       30
276  8 010         B     PLST1                                         4  2146  B J20             31
277  8 020  ERR     CS    333                                           4  2150  / 333             31
278  8 030         CS                                                  1  2154  /                 31
279  8 040         CC    1                                             2  2155  F 1               31
280  8 050         MLC   DIAG,260                                      7  2157  M J94 260         31
281  8 060         W                                                   1  2164  2                 31
282  8 070         CC    1                                             2  2165  F 1               31
283  8 080         B     DUMP                                          4  2167  B 359             32
284  8 090  DIAG    DCW   @SYSTEM FAILURE PHASE D06@                  24  2194                    32
285  8 100  SRGET   SBR   XGET&3                                       4  2195  H K12             32
286  8 110         B     GETX                                          4  2199  B 335             32
287  8 120         DCW   SX                                            3  2205  J08               32
288  8 130         DCW   ERR                                           3  2208  J50               33
289  8 140  XGET    B     0                                             4  2209  B 000             33
290  8 150  SRPLAC  SBR   XPLAC&3                                      4  2213  H K27             33
291  8 160         B     PLACE                                         4  2217  B K28             33
292  8 170         DCW   SX                                            3  2223  J08               33
293  8 180  XPLAC   B     0                                             4  2224  B 000             33
294  8 190  PLACE   SBR   X1                                          4  2228  H 089             33
295  8 200         SBR   PLC2&3,3&X1                                  7  2232  H L02 0|3         34
296  8 210         MLC   2&X1,PLC1&3                                   7  2239  M 0|2 K49         34
297  8 220  PLC1    MLC   0,PLCSY                                      7  2246  M 000 L82         34
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230  PLC1A  MLC   PLCSY,PLCB                                     7  2253  M L82 L85          34
299  8 240         C     PLCSY,@.EB@                                   7  2260  C L82 P04          34
300  8 250         BE    PLC3                                          5  2267  B L03 S            35
301  9 010         C     PLC1A&6,&PLCMAX                               7  2272  C K59 P10          35
302  9 020         BE    PLC3                                          5  2279  B L03 S            35
303  9 030         MA    @003@,PLC1A&6                                            MACRO
304                SW    PLC1A&6-2                                     4  2284  , K57       GEN    35
305                A     @003@,PLC1A&6                                 7  2288  A P13 K59   GEN    35
306                CW    PLC1A&6-2                                     4  2295  ) K57       GEN    35
307  9 040  PLC2   B     0                                             4  2299  B 000              35
308  9 050  PLC3   SW    PLC5&1                                        4  2303  , L79              36
309  9 060         B     IORW                                          4  2307  B 343              36
310  9 070         RT    4,PLC5                                        8  2311  M %U4 L78 R        36
311  9 080         DCW   PLC4                                        3  2321  L26                36
312  9 090         B     PLC3                                          4  2322  B L03              36
313  9 100  PLC4   BSP   4                                             5  2326  U %U4 B            36
314  9 110         SW    PLCMAX&1                                      4  2331  , O83              36
315  9 120         B     IORW                                          4  2335  B 343              37
316  9 130         WT    4,PLCA                                        8  2339  M %U4 L83 W        37
317  9 140         DCW   *&1                                         3  2349  L50                37
318  9 150         WTM   4                                             5  2350  U %U4 M            37
319  9 160         BSP   4                                             5  2355  U %U4 B            37
320  9 170         MLC   &PLCB,PLC1A&6                                 7  2360  M P16 K59          37
321  9 180         ZA    @0@,PLCMAX                                    7  2367  ? P17 O82          37
322  9 190         B     PLC2                                          4  2374  B K99              38
323  9 200  PLC5   EQU   *&1                                             2378
324  9 210         DCW   @ }@                                          2  2379                     38
325  9 220  PLCSY  DCW   #3                                            3  2382                     38
326  9 230         DA    1X300                                           2383   2682              38
327  9 240  PLCA          1                                             2383              SBFLD
328  9 250  PLCB          3                                             2385              SBFLD
329 10 010  PLCMAX EQU   *                                               2682
330 10 020         DC    @}@                                         1  2683                     39
331 10 030         LTORG                                                      2684
                   DCW   @/24@                                       3  2686              LIT    39
                         @.DL@                                       3  2689              LIT    39
                         @.MC@                                       3  2692              LIT    39
                         @.PD@                                       3  2695              LIT    39
                         @.DE@                                       3  2698              LIT    40
                         @.LD@                                       3  2701              LIT    40
                         @.EB@                                       3  2704              LIT    40
       271  OUTBKT        #03                                         3  2707              AREA   40
       301                &PLCMAX                                     3  2710  O82         ADCON  40
                          @003@                                       3  2713              LIT    40
       320                &PLCB                                       3  2716  L85         ADCON  40
                          @0@                                         1  2717              LIT    41
332 10 040         DCW   @}@                GMWM                     1  2718                     41
333 10 050         END                                                        / 000 080          42
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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1401 COBOL - E01 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - E01							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	IORW	EQU	343				0343			
107	1	070	GETX	EQU	335				0335			
108	1	080	PUTX	EQU	363				0363			
109	1	090	SUPER	EQU	351				0351			
110	1	100		ORG	1300					1300		
111	1	110	BEGIN	B	PLACE			4	1300	B X45		4
112	1	120		DCW	&@.IC@			3	1306	Z02		4
113	1	130		B	PLACE			4	1307	B X45		4
114	1	140		DCW	&@.CC@			3	1313	Z05		4
115	1	150		B	PLACE	START JOB CARD		4	1314	B X45		4
116	1	160		DCW	VLC			3	1320	U38		4
117	1	170		B	PLACE			4	1321	B X45		4
118	1	180		DCW	&@JOB@			3	1327	Z08		5
119	1	190		B	PLACE			4	1328	B X45		5
120	1	200		DCW	VOP			3	1334	U41		5
121	1	210	JOB1	B	GETSX			4	1335	B Z25		5
122	1	220		C	SX,VJOB			7	1339	C Z59 U35		5
123	1	230		BU	START1			5	1346	B T97 /		5
124	1	240	START	B	GETSX			4	1351	B Z25		5
125	1	250		C	SX,VJOB			7	1355	C Z59 U35		6
126	2	010		BE	JOB1			5	1362	B T35 S		6
127	2	020		C	LNGTH,@50@			7	1367	C U43 Z10		6
128	2	030		BE	START			5	1374	B T51 S		6
129	2	040		A	@1@,LNGTH			7	1379	A Z11 U43		6
130	2	050		B	PLACE	PUT OUT JOB CARD		4	1386	B X45		6
131	2	060		DCW	SX			3	1392	Z59		6
132	2	070		B	START			4	1393	B T51		7
133	2	080	START1	C	SX,ENV	LOOK FOR ENVIRONMENT		7	1397	C Z59 U32		7
134	2	090		BU	JOB1			5	1404	B T35 /		7
135	2	100		B	PLACE	END JOB CARD		4	1409	B X45		7
136	2	110		DCW	VMC			3	1415	Z62		7
137	2	120		B	PLACE			4	1416	B X45		7
138	2	130		DCW	&@.EB@			3	1422	Z14		7
139	2	140		B	SUPER			4	1423	B 351		8
140	2	150		DCW	@E02@			3	1429			8
141	2	160	ENV	DCW	@*91@			3	1432			8
142	2	170	VJOB	DCW	@.JB@			3	1435			8
143	2	180	VLC	DCW	@.LC@			3	1438			8
144	2	190	VOP	DCW	@.OP@			3	1441			8
145	2	200	LNGTH	DCW	@00@			2	1443			8
146	2	220		DA	1X300				1444	1743		9
147	2	230	PLCA		1				1444		SBFLD	

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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 240  PLCB         3                                                    1446              SBFLD
149  2 250  PLCMAX EQU    *                                                    1743
150  3 010          DC    @}@                                             1    1744                    10
151  3 030  PLACE  SBR    X1               SUBROUTINE                     4    1745  H 089             10
152  3 040          SBR    PLC2&3,3&X1          PLACE ON TAPE 4            7    1749  H Y19 0|3         10
153  3 050          MLC    2&X1,PLC1&3                                     7    1756  M 0|2 X66         10
154  3 060  PLC1   MLC    0,PLCSY                                         7    1763  M 000 Y99         10
155  3 070  PLC1A  MLC    PLCSY,PLCB           PLACE SYMBOL               7    1770  M Y99 U46         11
156  3 080          C      PLCSY,@.EB@          LOOK FOR .EB               7    1777  C Y99 Z14         11
157  3 090          BE     PLC3                                            5    1784  B Y20 S           11
158  3 100          C      PLC1A&6,&PLCMAX      LOOK FOR FULL BUFFER       7    1789  C X76 Z17         11
159  3 110          BE     PLC3                                            5    1796  B Y20 S           11
160  3 120          MA     @003@,PLC1A&6                                                              MACRO
161                 SW     PLC1A&6-2                                       4    1801  , X74             GEN  11
162                 A      @003@,PLC1A&6                                   7    1805  A Z20 X76         GEN  12
163                 CW     PLC1A&6-2                                       4    1812  ) X74             GEN  12
164  3 130  PLC2   B      0                                               4    1816  B 000                  12
165  3 140  PLC3   SW     PLC5&1                                          4    1820  , Y96                  12
166  3 150          B      IORW                                            4    1824  B 343                  12
167  3 160          RT     4,PLC5               LOOK FOR END OF TAPE       8    1828  M %U4 Y95 R            12
168  3 170          DCW    PLC4                                            3    1838  Y43                    12
169  3 180          B      PLC3                                            4    1839  B Y20                  13
170  3 190  PLC4   BSP    4                                               5    1843  U %U4 B                13
171  3 200          SW     PLCMAX&1                                        4    1848  , X44                  13
172  3 210          B      IORW                                            4    1852  B 343                  13
173  3 220          WT     4,PLCA               WRITE BUFFER               8    1856  M %U4 U44 W            13
174  3 230          DCW    *&1                                             3    1866  Y67                    13
175  3 240          WTM    4                    END TAPE                   5    1867  U %U4 M                13
176  3 250          BSP    4                                               5    1872  U %U4 B                14
177  4 010          MLC    &PLCB,PLC1A&6                                   7    1877  M Z23 X76              14
178  4 020          ZA     @0@,PLCMAX                                      7    1884  ? Z24 X43              14
179  4 030          B      PLC2                                            4    1891  B Y16                  14
180  4 040  PLC5   EQU    *&1                                                  1895
181  4 050          DCW    @ }@                                            2    1896                    14
182  4 060  PLCSY  DCW    #3                                              3    1899                    14
183  4 070          LTORG  *                                                          1900
                    DCW    @.IC@                                           3    1902              LIT  14
                           @.CC@                                           3    1905              LIT  15
                           @JOB@                                           3    1908              LIT  15
                           @50@                                            2    1910              LIT  15
                           @1@                                             1    1911              LIT  15
                           @.EB@                                           3    1914              LIT  15
       158                 &PLCMAX                                         3    1917  X43         ADCON  15
                           @003@                                           3    1920              LIT  15
       177                 &PLCB                                           3    1923  U46         ADCON  16
                           @0@                                             1    1924              LIT  16
184  4 080  GETSX  SBR    GETSX1&3             SUBROUTINE                 4    1925  H Z42                  16
185  4 090          B      GETX                                            4    1929  B 335                  16
186  4 100          DCW    SX                                              3    1935  Z59                    16
187  4 110          DCW    EOJ                                             3    1938  Z43                    16
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

188  4 120  GETSX1 B     0                                           4  1939  B 000               16
189  4 130  EOJ    B     PUTX                                        4  1943  B 363               17
190  4 140         DCW   SX                                          3  1949  Z59                 17
191  4 150         B     SUPER                                       4  1950  B 351               17
192  4 160         DCW   @F01@                                      3  1956                      17
193  4 170  SX     DCW   #3                                          3  1959                      17
194  4 180  VMC    DCW   @.MC@                                      3  1962                      17
195  4 190         DCW   @}@                                        1  1963                      17
196  4 200         END   BEGIN                                            / T00 080             18
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - E02 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - E02							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	GETX	EQU	335				0335			
107	1	070	SUPER	EQU	351				0351			
108	1	080		ORG	1300					1300		
109	1	090	FIRSTN	DCW	#3			3	1302			4
110	1	100		DC	#47			47	1349			6
111	1	110		DCW	#50			50	1399			8
112	1	120		DCW	#50			50	1449			10
113	1	130		DCW	#50			50	1499			12
114	1	140		DCW	#50			50	1549			14
115	1	150		DCW	#50			50	1599			16
116	1	160		DCW	#50			50	1649			18
117	1	170		DCW	#50			50	1699			20
118	1	180		DCW	#50			50	1749			22
119	1	190	NOOVLP	DC	#1	WORD-MARK		1	1750			22
120	1	200	ASGN	EQU	*	ZONE			1750			
121	1	210	ORIGIN	DC	#5	NUMERICS		5	1755			22
122	1	220	SOURCE	DC	#1	NUMERIC		1	1756			22
123	1	230	OBJECT	DC	#1	NUMERIC		1	1757			22
124	1	240		DC	#4			4	1761			22
125	1	250	NEXTTE	DCW	FIRSTN			3	1764	T02		22
126	2	010	SPRD	DCW	#1	SPECIAL-NAMES-READER		1	1765			22
127	2	020	SPPN	DCW	#1	-PUNCH		1	1766			22
128	2	030	SPPT	DCW	#1	-PRINTER		1	1767			22
129	2	040	SLCCNT	DCW	@01@	SELECT-COUTER		2	1769			23
130	2	050	NORELS	EQU	NOOVLP&1	WORD-MARK			1751			
131	2	060	FILEN	EQU	0&X3	3-CH. SYMBOL			0000			
132	2	070	DEVICE	EQU	1&X3	ZONE-NUMERIC			0001			
133	2	080	OPN	EQU	1&X3	WORD-MARK			0001			
134	2	090	CLOS	EQU	2&X3	WORD-MARK			0002			
135	2	100	INPT	EQU	2&X3	ZONE			0002			
136	2	110	UNIT	EQU	2&X3	NUMERIC			0002			
137	2	120	RSRV	EQU	3&X3	WORD-MARK			0003			
138	2	130	OUTP	EQU	3&X3	ZONE			0003			
139	2	140	ALT	EQU	3&X3	NUMERIC			0003			
140	2	150	BFRCDS	EQU	8&X3	WORD-MARK			0008			
141	2	160	RECSIZ	EQU	9&X3	NUMERICS			0009			
142	2	170	VARIBL	EQU	11&X3	WORD-MARK			0011			
143	2	180	STND	EQU	12&X3	WORD-MARK			0012			
144	2	190	LOCK	EQU	14&X3	WORD-MARK			0014			
145	2	200	NORWD	EQU	15&X3	WORD-MARK			0015			
146	2	210	IDHDBL	EQU	4&X3	WORD-MARK			0004			
147	2	220		ORG	1800					1800		

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  BEGIN  MLNS  1126,SOURCE                                7  1800  D /26 X56          24
149  2 231  LL00   B     GETSX                                      4  1807  B G15              24
150  2 232         C     SX,VOCOMP                                  7  1811  C G35 Z38          24
151  2 233         BE    OCOMP                                      5  1818  B !71 S            24
152  2 234         C     SX,VNORLS                                  7  1823  C G35 J50          24
153  2 235         BE    SNORLS                                     5  1830  B Y39 S            24
154  2 236         B     LL00                                       4  1835  B Y07              24
155  2 237  SNORLS SW    1752                                       4  1839  , X52              25
156  2 238         B     LL00                                       4  1843  B Y07              25
157  2 240  START  B     GETSX              GENERAL CONTROL         4  1847  B G15              25
158  3 020  START1 C     SX,VSLCT                                   7  1851  C G35 Z41          25
159  3 030         BE    SELECT                                     5  1858  B L36 S            25
160  3 040         C     SX,VDATA                                   7  1863  C G35 Z44          25
161  3 050         BE    DATA                                       5  1870  B Z54 S            25
162  3 060         C     SX,VRDR            COLLECT                 7  1875  C G35 Z47          26
163  3 070         BU    START2              USE                    5  1882  B Y94 /            26
164  3 080         MLC   @1@,SPRD              OF                   7  1887  M G38 X65          26
165  3 090  START2 C     SX,VPNCH               H/W                  7  1894  C G35 Z50          26
166  3 100         BU    START3                  DEVICES             5  1901  B Z13 /            26
167  3 110         MLC   @1@,SPPN                  IN               7  1906  M G38 X66          26
168  3 120  START3 C     SX,VPRNTR                   SPECIAL-NAMES   7  1913  C G35 Z53          27
169  3 130         BU    START                        SECTION        5  1920  B Y47 /            27
170  3 140         MLC   @1@,SPPT                                   7  1925  M G38 X67          27
171  3 150         B     START                                      4  1932  B Y47              27
172  3 160  VOCOMP DCW   @*97@                                      3  1938                     27
173  3 170  VSLCT  DCW   @*77@                                      3  1941                     27
174  3 180  VDATA  DCW   @/24@                                      3  1944                     27
175  3 190  VRDR   DCW   @*80@                                      3  1947                     28
176  3 200  VPNCH  DCW   @*88@                                      3  1950                     28
177  3 210  VPRNTR DCW   @*83@                                      3  1953                     28
178  3 220  DATA   B     GETSX              GENERAL CONTROL         4  1954  B G15              28
179  3 230         C     SX,VFD              DATA                   7  1958  C G35 Z88          28
180  3 240         BE    FD                   DIVISION              5  1965  B P04 S            28
181  3 250         C     SX,VPROC                                   7  1970  C G35 Z91          28
182  4 010         BE    PROC                                       5  1977  B Z92 S            29
183  4 020         B     DATA                                       4  1982  B Z54              29
184  4 030  VFD    DCW   @/26@                                      3  1988                     29
185  4 040  VPROC  DCW   @*01@                                      3  1991                     29
186  4 050  PROC   MLC   @B@,NOTFND          GENERAL CONTROL         7  1992  M G39 F73          29
187  4 060  PROC1  B     GETSX               PROCEDURE              4  1999  B G15              29
188  4 070  PROC2  C     SX,VOPEN             DIVISION              7  2003  C G35 !33          29
189  4 080         BE    OPEN                                       5  2010  B A70 S            30
190  4 090         C     SX,VCLOSE                                  7  2015  C G35 !36          30
191  4 100         BE    CLOSE                                      5  2022  B B72 S            30
192  4 110         B     PROC1                                      4  2027  B Z99              30
193  4 120  VOPEN  DCW   @)14@                                      3  2033                     30
194  4 130  VCLOSE DCW   @)09@                                      3  2036                     30
195  4 140  EOJ    MLNS  PDNFCT,1761                                7  2037  D G37 X61          30
196  4 150         CHAIN 1                                                                MACRO
197               MLNS                                             1  2044  D           GEN    31
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 160          C     FIRSTN,@   @                              7  2045  C T02 G42           31
199  4 170          BE    EOJ1                ROUTINE                5  2052  B !64 S             31
200  4 180          B     SUPER                                      4  2057  B 351               31
201  4 190          DCW   @E03@                                      3  2063                      31
202  4 200  EOJ1    B     SUPER                                      4  2064  B 351               31
203  4 210          DCW   @E04@                                      3  2070                      31
204  4 220  OCOMP   B     GETSX              OBJECT-COMPUTER         4  2071  B G15               32
205  4 230          C     SX,VASGN            PARAGRAPH              7  2075  C G35 J41           32
206  4 240          BE    ASSIGN                                     5  2082  B J54 S             32
207  4 250          C     SX,VMEM                                    7  2087  C G35 J44           32
208  5 010          BE    MEM                                        5  2094  B J77 S             32
209  5 020          C     SX,VNOOV                                   7  2099  C G35 J47           32
210  5 030          BE    NOOV                                       5  2106  B K92 S             33
211  5 040          C     SX,VNORLS                                  7  2111  C G35 J50           33
212  5 050          BE    NORLS                                      5  2118  B J69 S             33
213  5 060          C     SX,VPRD                                    7  2123  C G35 J53           33
214  5 070          BE    START                                      5  2130  B Y47 S             33
215  5 080          B     OCOMP                                      4  2135  B !71               33
216  5 090  VASGN   DCW   @*75@                                      3  2141                      33
217  5 100  VMEM    DCW   @*76@                                      3  2144                      34
218  5 110  VNOOV   DCW   @*72@                                      3  2147                      34
219  5 120  VNORLS  DCW   @*90@                                      3  2150                      34
220  5 130  VPRD    DCW   @.PD@                                      3  2153                      34
221  5 140  ASSIGN  MLZS  &1,ASGN              ASSIGN                 7  2154  Y G43 X50           34
222  5 150          SW    085                                        4  2161  , 085               34
223  5 160          B     OCOMP               ROUTINE                4  2165  B !71               34
224  5 170  NORLS   SW    NORELS             NO-RELEASE              4  2169  , X51               35
225  5 180          B     OCOMP               ROUTINE                4  2173  B !71               35
226  5 190  MEM     B     GETSX              MEMORY CLAUSE           4  2177  B G15               35
227  5 200          C     SX,VADDR            OF OBJECT-COMPUTER     7  2181  C G35 K41           35
228  5 210          BE    ADDR                 ROUTINE               5  2188  B K42 S             35
229  5 220          B     GETSX                                      4  2193  B G15               35
230  5 230          C     SX-2,@1@                                   7  2197  C G33 G38           35
231  5 240          BU    MEM1                                       5  2204  B K16 /             36
232  5 250          MLNS  SX-1,SX-2                                  7  2209  D G34 G33           36
233  6 010  MEM1    MLNS  SX-2,OBJECT                                7  2216  D G33 X57           36
234  6 020  MEM2    B     GETSX                                      4  2223  B G15               36
235  6 030          BCE   OCOMP,SX-2,.                               8  2227  B !71 G33 .         36
236  6 040          B     MEM2                                       4  2235  B K23               36
237  6 050  VADDR   DCW   @*74@                                      3  2241                      36
238  6 060  ADDR    B     GETSX              ADDRESS OPTION          4  2242  B G15               37
239  6 070          B     GETSX               OF MEMORY CLAUSE       4  2246  B G15               37
240  6 080          MLNS  SX,ORIGIN-3                                7  2250  D G35 X52           37
241  6 090          MLNS                                             1  2257  D                   37
242  6 100          MLNS                                             1  2258  D                   37
243  6 110  ADDR01  B     GETSX                                      4  2259  B G15               37
244  6 120          BCE   ADDR02,SX-2,.                             8  2263  B K84 G33 .         37
245  6 130          MLNS  SX,ORIGIN                                  7  2271  D G35 X55           38
246  6 140          MLNS                                             1  2278  D                   38
247  6 150          MLNS                                             1  2279  D                   38
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 160         B     ADDR01                                     4  2280  B K59              38
249  6 170  ADDR02 B     GETSX                                      4  2284  B G15              38
250  6 180         B     MEM                                        4  2288  B J77              38
251  6 190  NOOV   SW    NOOVLP              NO-OVERLAP ENTRY       4  2292  , X50              38
252  6 200         B     OCOMP                OF OBJECT-COMPUTER    4  2296  B !71              39
253  6 210  NEWFIL SBR   NWFLEX&3                                   4  2300  H L35              39
254  6 220         A     &1,SLCCNT            OF FILE-CONTROL       7  2304  A G43 X69          39
255  6 230         MLC   NEXTTE,X3             PARAGRAPH            7  2311  M X64 099          39
256  6 240         SBR   NEXTTE,50&X3                               7  2318  H X64 0E0          39
257  6 250         MLC   SX,FILEN                                   7  2325  M G35 0?0          39
258  7 010  NWFLEX B     0                                          4  2332  B 000              40
259  7 020  SELECT BCE   START,SLCCNT-1,1    SELECT ROUTINE         8  2336  B Y47 X68 1        40
260  7 030         B     GETSX                                      4  2344  B G15              40
261  7 040         B     NEWFIL                                     4  2348  B L00              40
262  7 050         B     GETSX                                      4  2352  B G15              40
263  7 060         B     GETSX                                      4  2356  B G15              40
264  7 070         C     SX,VRDR                                    7  2360  C G35 Z47          40
265  7 080         BE    RDR                                        5  2367  B M18 S            41
266  7 090         C     SX,VPNCH                                   7  2372  C G35 Z50          41
267  7 100         BE    PNCH                                       5  2379  B M36 S            41
268  7 110         C     SX,VPRNTR           ASSIGN TO              7  2384  C G35 Z53          41
269  7 120         BE    PRNTR                                      5  2391  B M07 S            41
270  7 130         MLNS  @1@,DEVICE           -TAPE                7  2396  D G38 0?1          41
271  7 140         B     NXT                                        4  2403  B M43              42
272  7 150  PRNTR  MLNS  @2@,DEVICE           -PRINTER             7  2407  D G44 0?1          42
273  7 160         B     NXT                                        4  2414  B M43              42
274  7 170  RDR    MLNS  @3@,DEVICE           -READER              7  2418  D G45 0?1          42
275  7 171         MLCWA 0&X3,195                                   7  2425  L 0?0 195          42
276  7 180         B     NXT                                        4  2432  B M43              42
277  7 190  PNCH   MLNS  @4@,DEVICE                                 7  2436  D G46 0?1          43
278  7 200  NXT    B     GETSX                                      4  2443  B G15              43
279  7 210         C     SX,VNL                                     7  2447  C G35 M77          43
280  7 220         BE    NL1                                        5  2454  B M81 S            43
281  7 230  NXT2   C     SX,VRSRV                                   7  2459  C G35 M80          43
282  7 240         BE    RESERV                                     5  2466  B O80 S            43
283  7 250         B     START1                                     4  2471  B Y51              43
284  8 010  VNL    DCW   @.NL@                                      3  2477                     44
285  8 020  VRSRV  DCW   @*70@                                      3  2480                     44
286  8 021  NL1    B     GETSX                                      4  2481  B G15              44
287  8 022         BCE   NXT2,DEVICE,2                             8  2485  B M59 0?1 2        44
288  8 023         BCE   TSTRDR,DEVICE,3                           8  2493  B O03 0?1 3        44
289  8 024         BCE   TSTPNC,DEVICE,4                           8  2501  B N68 0?1 4        44
290  8 025  TSTTAP BCE   OK,SX-2,1                                 8  2509  B O34 G33 1        45
291  8 026         BCE   OK,SX-2,2                                 8  2517  B O34 G33 2        45
292  8 026         BCE   OK,SX-2,3                                 8  2525  B O34 G33 3        45
293  8 028         BCE   OK,SX-2,4                                 8  2533  B O34 G33 4        45
294  8 029         BCE   OK,SX-2,5                                 8  2541  B O34 G33 5        46
295  8 030         BCE   OK,SX-2,6                                 8  2549  B O34 G33 6        46
296  8 031         MLC   @6  @,SX                                   7  2557  M G49 G35          46
297  8 032         B     OK                                         4  2564  B O34              46
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 033  TSTPNC BCE   OK,SX-2,0                                 8  2568  B O34 G33 0         46
299  8 034         BCE   OK,SX-2,4                                 8  2576  B O34 G33 4         47
300  8 035         BCE   OK,SX-2,8                                 8  2584  B O34 G33 8         47
301  8 036         MLC   @4  @,SX                                  7  2592  M G52 G35           47
302  8 037         B     OK                                        4  2599  B O34               47
303  8 038  TSTRDR BCE   OK,SX-2,0                                 8  2603  B O34 G33 0         47
304  8 039         BCE   OK,SX-2,1                                 8  2611  B O34 G33 1         48
305  8 040         BCE   OK,SX-2,2                                 8  2619  B O34 G33 2         48
306  8 041         MLC   @1  @,SX                                  7  2627  M G55 G35           48
307  8 042  OK     MLNS  SX-2,UNIT                                 7  2634  D G33 0?2           48
308  8 050         B     GETSX                                     4  2641  B G15               48
309  8 060         B     GETSX                                     4  2645  B G15               48
310  8 070         C     SX,VNL                                    7  2649  C G35 M77           49
311  8 080         BU    NXT2                                      5  2656  B M59 /             49
312  8 090         B     GETSX              ALT. UNIT NUMBER       4  2661  B G15               49
313  8 100         MLNS  SX-2,ALT                                  7  2665  D G33 0?3           49
314  8 110         B     GETSX                                     4  2672  B G15               49
315  8 120         B     NXT                                       4  2676  B M43               49
316  8 130  RESERV B     GETSX              RESERVE ROUTINE        4  2680  B G15               49
317  8 140         C     SX,VNL                                    7  2684  C G35 M77           50
318  8 150         BU    START                                     5  2691  B Y47 /             50
319  8 160         SW    RSRV                                      4  2696  , 0?3               50
320  8 170         B     START                                     4  2700  B Y47               50
321  8 180  FD     B     GETSX              FD ROUTINE             4  2704  B G15               50
322  8 190         B     FINDSX              GENERAL CONTROL       4  2708  B F23               50
323  8 200  FD1    B     GETSX                                     4  2712  B G15               50
324  8 210  FD2    C     SX,VLBL                                   7  2716  C G35 Q14           51
325  8 220         BE    LABEL                                     5  2723  B R01 S             51
326  8 230         C     SX,VRCDNG                                 7  2728  C G35 Q17           51
327  8 240         BE    RCDNG                                     5  2735  B Q70 S             51
328  8 250         C     SX,VVALUE                                 7  2740  C G35 Q20           51
329  9 010         BE    VALUE                                     5  2747  B R47 S             51
330  9 020         C     SX,VDATA                                  7  2752  C G35 Z44           52
331  9 030         BU    FD3                                       5  2759  B P72 /             52
332  9 040         B     GETSX                                     4  2764  B G15               52
333  9 050         B     FD1                                       4  2768  B P12               52
334  9 060  FD3    C     SX,VBLOCK                                 7  2772  C G35 Q23           52
335  9 070         BE    BLOCK                                     5  2779  B A14 S             52
336  9 080         C     SX,VRECRD                                 7  2784  C G35 Q26           52
337  9 090         BE    FD1                                       5  2791  B P12 S             53
338  9 100         C     SX,VRECL                                  7  2796  C G35 Q29           53
339  9 110         BE    EOFD                                      5  2803  B Q30 S             53
340  9 120         B     FD1                                       4  2808  B P12               53
341  9 130  VLBL   DCW   @/19@                                     3  2814                      53
342  9 140  VRCDNG DCW   @/06@                                     3  2817                      53
343  9 150  VVALUE DCW   @/13@                                     3  2820                      53
344  9 160  VBLOCK DCW   @/16@                                     3  2823                      54
345  9 170  VRECRD DCW   @/11@                                     3  2826                      54
346  9 180  VRECL  DCW   @.LR@                                     3  2829                      54
347  9 190  EOFD   B     GETSX              END-OF-FD ROUTINE      4  2830  B G15               54
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348  9 200         C     SX,VRLI             GET RECORD SIZE       7  2834  C G35 Q69           54
349  9 210         BE    VAR                                       5  2841  B Q59 S             54
350  9 220         MLNS  SX,RECSIZ                                 7  2846  D G35 0?9           54
351  9 230         MLNS                                            1  2853  D                   55
352  9 240         MLNS                                            1  2854  D                   55
353  9 250         B     DATA                                      4  2855  B Z54               55
354 10 010  VAR    SW    VARIBL                                    4  2859  , 0A1               55
355 10 020         B     EOFD                                      4  2863  B Q30               55
356 10 030  VRLI   DCW   @.RI@                                     3  2869                      55
357 10 040  RCDNG  B     GETSX                                     4  2870  B G15               55
358 10 050         C     SX,VNL                                    7  2874  C G35 M77           56
359 10 060         BU    RCDNG                                     5  2881  B Q70 /             56
360 10 070         B     GETSX                                     4  2886  B G15               56
361 10 080         MLNS  SX-2,15&X3                                7  2890  D G33 0A5           56
362 10 090         B     FD1                                       4  2897  B P12               56
363 10 100  LABEL  B     GETSX             LABEL RECORDS ENTRY     4  2901  B G15               56
364 10 110         C     SX,VSTND                                  7  2905  C G35 R43           56
365 10 120         BU    LBL1                                      5  2912  B R25 /             57
366 10 130         SW    STND                                      4  2917  , 0A2               57
367 10 140         B     FD1                                       4  2921  B P12               57
368 10 150  LBL1   C     SX,VOMITT                                 7  2925  C G35 R46           57
369 10 160         BU    LABEL                                     5  2932  B R01 /             57
370 10 170         B     FD1                                       4  2937  B P12               57
371 10 180  VSTND  DCW   @/08@                                     3  2943                      57
372 10 190  VOMITT DCW   @*14@                                     3  2946                      58
373 10 200  VALUE  B     GETSX             VALUE OF CLAUSE         4  2947  B G15               58
374 10 210         C     SX,VID             OF LABEL RECORDS       7  2951  C G35 ?17           58
375 10 220         BE    ID                   IN FD                5  2958  B ?30 S             58
376 10 230         C     SX,VCD                 GENERAL CONTROL    7  2963  C G35 ?20           58
377 10 240         BE    CD                                        5  2970  B ?45 S             58
378 10 250         C     SX,VRC                                    7  2975  C G35 ?23           58
379 11 010         BE    RC                                        5  2982  B ?56 S             59
380 11 020         C     SX,VFSN                                   7  2987  C G35 ?26           59
381 11 030         BE    FSN                                       5  2994  B ?67 S             59
382 11 040         C     SX,VRSEQ                                  7  2999  C G35 ?29           59
383 11 050         BE    RSEQ                                      5  3006  B ?78 S             59
384 11 060         B     FD2                                       4  3011  B P16               59
385 11 070  VID    DCW   @/25@                                     3  3017                      59
386 11 080  VCD    DCW   @/32@                                     3  3020                      60
387 11 090  VRC    DCW   @/02@                                     3  3023                      60
388 11 100  VFSN   DCW   @/31@                                     3  3026                      60
389 11 110  VRSEQ  DCW   @/30@                                     3  3029                      60
390 11 120  ID     MLC   IDF,FACTOR          COLLECT               7  3030  M ?93 F20           60
391 11 130  ID1    B     GETLIT              SPECIFIC              4  3037  B C94               60
392 11 140         B     VALUE                VALUES               4  3041  B R47               60
393 11 150  CD     MLC   CDF,FACTOR            OF                 7  3045  M ?98 F20           61
394 11 160         B     ID1                    LABEL              4  3052  B ?37               61
395 11 170  RC     MLC   RCF,FACTOR              RECORD             7  3056  M A03 F20           61
396 11 180         B     ID1                      ENTRIES          4  3063  B ?37               61
397 11 190  FSN    MLC   FSNF,FACTOR                               7  3067  M A08 F20           61
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 11 200          B     ID1                                        4  3074  B ?37               61
399 11 210  RSEQ    MLC   RSEQF,FACTOR                              7  3078  M A13 F20           62
400 11 220          B     ID1                                        4  3085  B ?37               62
401 11 230  IDF     DCW   @01610@                                    5  3093                      62
402 11 240  CDF     DCW   @02605@                                    5  3098                      62
403 11 250  RCF     DCW   @03103@                                    5  3103                      62
404 12 010  FSNF    DCW   @03405@                                    5  3108                      62
405 12 020  RSEQF   DCW   @03905@                                    5  3113                      62
406 12 030  BLOCK   MLC   BLOCKF,FACTOR       BLOCK OPTION           7  3114  M A69 F20           63
407 12 040          B     GETLIT               OF FD                  4  3121  B C94               63
408 12 050          B     GETSX                                       4  3125  B G15               63
409 12 060          C     SX,VRECRD                                  7  3129  C G35 Q26           63
410 12 070          BU    FD2                                        5  3136  B P16 /             63
411 12 080          B     GETSX                                       4  3141  B G15               63
412 12 090          C     SX,VNL                                     7  3145  C G35 M77           63
413 12 100          BE    FD1                                        5  3152  B P12 S             64
414 12 110          SW    BFRCDS                                     4  3157  , 0?8               64
415 12 120          B     FD2                                        4  3161  B P16               64
416 12 130  BLOCKF  DCW   @01005@                                    5  3169                      64
417 12 140  OPEN    B     GETSX                OPEN ROUTINE          4  3170  B G15               64
418 12 150          C     SX,VINPUT                                  7  3174  C G35 B65           64
419 12 160          BE    OPEN1                                      5  3181  B A98 S             64
420 12 170          C     SX,VOUTPT                                  7  3186  C G35 B68           65
421 12 180          BU    OPEN2                                      5  3193  B B09 /             65
422 12 190  OPEN1   MLC   SX,MODE                                    7  3198  M G35 B71           65
423 12 200          B     OPEN                                       4  3205  B A70               65
424 12 210  OPEN2   C     SX-2,@A@                                   7  3209  C G33 G56           65
425 12 220          BH    PROC2                                      5  3216  B !03 U             65
426 12 230          B     FINDSX                                     4  3221  B F23               65
427 12 240          C     MODE,VINPUT                                7  3225  C B71 B65           66
428 12 250          BU    OPEN3                                      5  3232  B B48 /             66
429 13 010          MLZS  &1,INPT                                    7  3237  Y G43 0?2           66
430 13 020          B     OPEN4                                      4  3244  B B55               66
431 13 030  OPEN3   MLZS  &1,OUTP                                    7  3248  Y G43 0?3           66
432 13 040  OPEN4   SW    OPN                                        4  3255  , 0?1               66
433 13 050          B     OPEN                                       4  3259  B A70               66
434 13 060  VINPUT  DCW   @*20@                                     3  3265                      67
435 13 070  VOUTPT  DCW   @*15@                                     3  3268                      67
436 13 080  MODE    DCW   #3                                         3  3271                      67
437 13 090  CLOSE   B     GETSX                CLOSE ROUTINE         4  3272  B G15               67
438 13 100          MLC   @N@,NTFD2                                  7  3276  M G57 G07           67
439 13 110          C     SX-2,@A@                                   7  3283  C G33 G56           67
440 13 120          BH    CLOSE1                                     5  3290  B C07 U             67
441 13 130          B     FINDSX                                     4  3295  B F23               68
442 13 140          SW    CLOS                                       4  3299  , 0?2               68
443 13 150          B     CLOSE                                      4  3303  B B72               68
444 13 160  CLOSE1  C     SX,VLOCK                                   7  3307  C G35 C87           68
445 13 170          BU    CLOSE2                                     5  3314  B C27 /             68
446 13 180          SW    LOCK                                       4  3319  , 0A4               68
447 13 190          B     CLOSE                                      4  3323  B B72               68
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 13 200  CLOSE2 C     SX,VNO                                      7  3327  C G35 C90           69
449 13 210         BU    CLOSE3                                      5  3334  B C47 /             69
450 13 220         SW    NORWD                                       4  3339  , 0A5               69
451 13 230         B     CLOSE                                       4  3343  B B72               69
452 13 240  CLOSE3 C     SX,VRWD                                     7  3347  C G35 C93           69
453 13 250         BE    CLOSE                                       5  3354  B B72 S             69
454 14 010         C     SX,VAND                                     7  3359  C G35 C84           69
455 14 020         BE    CLOSE                                       5  3366  B B72 S             70
456 14 030         MLC   @B@,NTFD2                                  7  3371  M G39 G07           70
457 14 040         B     PROC2                                       4  3378  B !03               70
458 14 050  VAND   DCW   @$32@                                      3  3384                      70
459 14 060  VLOCK  DCW   @*26@                                      3  3387                      70
460 14 070  VNO    DCW   @*33@                                      3  3390                      70
461 14 080  VRWD   DCW   @*13@                                      3  3393                      70
462 14 090  GETLIT SBR   GTLTXT&3                                   4  3394  H F00               71
463 14 100         B     GETSX                                       4  3398  B G15               71
464 14 110         MLNS  FACTOR-2,GTLT01&6                           7  3402  D F18 D17           71
465 14 120         MLNS                                            1  3409  D                   71
466 14 130         MLNS                                            1  3410  D                   71
467 14 140  GTLT01 SBR   X2,0&X3                                    7  3411  H 094 0?0           71
468 14 150  GTLT02 MLC   @00@,GTLTCT                               7  3418  M G59 F22           71
469 14 160         BCE   ALFTST,FACTOR-1,1                         8  3425  B E16 F19 1         72
470 14 170  GTLT03 B     GETSX                                       4  3433  B G15               72
471 14 180         BCE   GTLTXT,SX-2,.                             8  3437  B E97 G33 .         72
472 14 190         B     BMPTST                                      4  3445  B D89               72
473 14 200         MLNS  SX-2,0&X2                                   7  3449  D G33 0!0           72
474 14 210         B     BMPTST                                      4  3456  B D89               72
475 14 220         MLNS  SX-1,1&X2                                   7  3460  D G34 0!1           73
476 14 230         B     BMPTST                                      4  3467  B D89               73
477 14 240         MLNS  SX,2&X2                                     7  3471  D G35 0!2           73
478 14 250         SBR   X2,3&X2                                    7  3478  H 094 0!3           73
479 15 010         B     GTLT03                                      4  3485  B D33               73
480 15 020  BMPTST SBR   BMPEX&3                                    4  3489  H E15               73
481 15 030         C     FACTOR,GTLTCT                               7  3493  C F20 F22           74
482 15 040         BE    GTLTEX                                      5  3500  B E73 S             74
483 15 050         A     &1,GTLTCT                                   7  3505  A G43 F22           74
484 15 060  BMPEX  B     0                                           4  3512  B 000               74
485 15 070  ALFTST BCE   GTLT03,SX-2,.                             8  3516  B D33 G33 .         74
486 15 080  GTLT04 B     GETSX                                       4  3524  B G15               74
487 15 090         BCE   GTLTXT,SX,@                               8  3528  B E97 G35 @         75
488 15 100         B     BMPTST                                      4  3536  B D89               75
489 15 110         BCE   IDERR,SX,                                 8  3540  B F01 G35           75
490 15 120  GTLT05 MLNS  SX,0&X2                                   7  3548  D G35 0!0           75
491 15 130         MLZS  SX,0&X2                                   7  3555  Y G35 0!0           75
492 15 140         SBR   X2,1&X2                                   7  3562  H 094 0!1           76
493 15 150         B     GTLT04                                      4  3569  B E24               76
494 15 160  GTLTEX B     GETSX                                       4  3573  B G15               76
495 15 170         BCE   GTLTXT,SX-2,.                             8  3577  B E97 G33 .         76
496 15 180         BCE   GTLTXT,SX,@                               8  3585  B E97 G35 @         76
497 15 190         B     GTLTEX                                      4  3593  B E73               76
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 15 200  GTLTXT  B     0                                         4  3597  B 000              76
499 15 210  IDERR   SW    IDHDBL                                    4  3601  , 0?4              77
500 15 220          MLC   @.@,SX                                    7  3605  M G60 G35          77
501 15 230          B     GTLT05                                    4  3612  B E48              77
502 15 240  FACTOR  DCW   @00000@                                   5  3620                     77
503 15 250  GTLTCT  DCW   @00@                                      2  3622                     77
504 16 010  FINDSX  SBR   FNDSXX&3                                  4  3623  H F72              77
505 16 020          MLC   &FIRSTN,X3                                7  3627  M G63 099          77
506 16 030  FND01   C     X3,NEXTTE                                 7  3634  C 099 X64          78
507 16 040          BE    NOTFND                                    5  3641  B F73 S            78
508 16 050          C     FILEN,SX                                  7  3646  C 0?0 G35          78
509 16 060          BE    FNDSXX                                    5  3653  B F69 S            78
510 16 070          SBR   X3,50&X3                                  7  3658  H 099 0E0          78
511 16 080          B     FND01                                     4  3665  B F34              78
512 16 090  FNDSXX  B     0                                         4  3669  B 000              78
513 16 100  NOTFND  NOP   NTFD1                                     4  3673  N G00              79
514 16 110          BCE   DATA,SLCCNT-1,1                           8  3677  B Z54 X68 1        79
515 16 120          B     NEWFIL                                    4  3685  B L00              79
516 16 130          MLZS  &1,10&X3                                  7  3689  Y G43 0A0          79
517 16 140          B     FNDSXX                                    4  3696  B F69              79
518 16 150  NTFD1   A     &1,PDNFCT                                 7  3700  A G43 G37          79
519 16 160  NTFD2   B     OPEN                                      4  3707  B A70              79
520 16 170          B     CLOSE                                     4  3711  B B72              80
521 16 180  GETSX   SBR   GETSXX&3                                  4  3715  H G32              80
522 16 190          B     GETX                                      4  3719  B 335              80
523 16 200          DCW   SX                                        3  3725  G35                80
524 16 210          DCW   EOJ                                       3  3728  !37                80
525 16 220  GETSXX  B     0                                         4  3729  B 000              80
526 16 230  SX      DCW   #3                                        3  3735                     80
527 16 240  PDNFCT  DCW   #2                                        2  3737                     81
528 16 250          LTORG                                                  3738
                    DCW   @1@                                       1  3738          LIT      81
                          @B@                                       1  3739          LIT      81
                          @   @                                     3  3742          LIT      81
                          &1                                        1  3743          LIT      81
                          @2@                                       1  3744          LIT      81
                          @3@                                       1  3745          LIT      81
                          @4@                                       1  3746          LIT      82
                          @6  @                                     3  3749          LIT      82
                          @4  @                                     3  3752          LIT      82
                          @1  @                                     3  3755          LIT      82
                          @A@                                       1  3756          LIT      82
                          @N@                                       1  3757          LIT      82
                          @00@                                      2  3759          LIT      82
                          @.@                                       1  3760          LIT      83
       505                &FIRSTN                                   3  3763  T02         ADCON  83
529 17 010          ORG   3798                                                 3798
530 17 020          DCW   @}@                                       1  3798                     84
531 17 030          END   BEGIN                                           / Y00 080            85
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - E03 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - E03					
102	1	020		CTL	631 11					
103	1	030	X1	EQU	89			0089		
104	1	040	X2	EQU	94			0094		
105	1	050	X3	EQU	99			0099		
106	1	060	SUPER	EQU	351			0351		
107	1	070	NEXTTE	EQU	1764			1764		
108	1	080	DVC	EQU	1&X3			0001		
109	1	090	TAPE	EQU	1753			1753		
110	1	100	READER	EQU	1754			1754		
111	1	110	PRINTR	EQU	1755			1755		
112	1	120	PUNCH	EQU	1753			1753		
113	1	130	INPUT	EQU	2&X3			0002		
114	1	140	TPIN	EQU	1756			1756		
115	1	150	OUTPUT	EQU	3&X3			0003		
116	1	160	TPOUT	EQU	1757			1757		
117	1	170	ALT	EQU	3&X3			0003		
118	1	180	ALTTAP	EQU	1754			1754		
119	1	190	LCK	EQU	14&X3			0014		
120	1	200	LOCK	EQU	1756			1756		
121	1	210	NOR	EQU	15&X3			0015		
122	1	220	NORWD	EQU	1757			1757		
123	1	230	STND	EQU	12&X3			0012		
124	1	240	STNDRD	EQU	1758			1758		
125	1	250	CHKA	EQU	13&X3			0013		
126	2	010	CHKALL	EQU	1758			1758		
127	2	020	FSTFN	EQU	34&X3			0034		
128	2	030	FSTRS	EQU	39&X3			0039		
129	2	040	FSTCD	EQU	26&X3			0026		
130	2	050	FSTRC	EQU	31&X3			0031		
131	2	060	BLOCK	EQU	10&X3			0010		
132	2	070	WORKA	EQU	7&X3			0007		
133	2	080	RESRV	EQU	3&X3			0003		
134	2	090	BLKSIZ	EQU	14&X3			0014		
135	2	100	BFRCDS	EQU	8&X3			0008		
136	2	110	RECSIZ	EQU	9&X3			0009		
137	2	120		ORG	1800				1800	
138	2	130	START	B	GETFIL		4	1800	B Y85	4
139	2	140		B	DEVICE		4	1804	B Z22	4
140	2	150		B	TAPUSE		4	1808	B Z85	4
141	2	160		B	LABELS		4	1812	B !90	4
142	2	170		B	CHECKA		4	1816	B J33	4
143	2	180		B	BLCKNG		4	1820	B J60	4
144	2	190		B	WKAREA		4	1824	B J88	4
145	2	200		B	CONVNM		4	1828	B K28	5
146	2	210		B	START		4	1832	B Y00	5
147	2	220	ORGTST	DCW	#1		1	1836		5

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SEQ PG LIN  LABEL    OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  EOJ      MLNS  1750,ORGTST                                7  1837  D X50 Y36          5
149  2 240          BCE   EOJ1,ORGTST,                               8  1844  B Y78 Y36          5
150  2 250          MLNS  1754,CNVGT5                                7  1852  D X54 L29          5
151  3 010          CHAIN 4                                                                MACRO
152                 MLNS                                           1  1859  D          GEN     5
153                 MLNS                                           1  1860  D          GEN     6
154                 MLNS                                           1  1861  D          GEN     6
155                 MLNS                                           1  1862  D          GEN     6
156  3 020          B     FIX                                      4  1863  B M29              6
157  3 030          MLNS  CNVGT5,1754                              7  1867  D L29 X54          6
158  3 040          CHAIN 4                                                                MACRO
159                 MLNS                                           1  1874  D          GEN     6
160                 MLNS                                           1  1875  D          GEN     6
161                 MLNS                                           1  1876  D          GEN     7
162                 MLNS                                           1  1877  D          GEN     7
163  3 050  EOJ1     B     SUPER                                    4  1878  B 351              7
164  3 060          DCW   @E04@                                    3  1884                     7
165  3 070  GETFIL   SBR   GTFLEX&3          DEVELOPS ADDRESSES     4  1885  H Z18              7
166  3 080          MLC   NXTADR,X3          OF FILE DESCRIPTIONS   7  1889  M Z21 099          7
167  3 090          C     X3,NEXTTE          SEQUENTIALLY           7  1896  C 099 X64          7
168  3 100          BE    EOJ                THEN BRANCHES          5  1903  B Y37 S            8
169  3 110          SBR   NXTADR,50&X3          TO EOJ              7  1908  H Z21 0E0          8
170  3 120  GTFLEX   B     0                                        4  1915  B 000              8
171  3 130  NXTADR   DCW   @T02@                                    3  1921                     8
172  3 140  DEVICE   SBR   DVCEX&3            RELATES DEVICES OF     4  1922  H Z84              8
173  3 150          BCE   DVRDR,DVC,3        EACH FD TO             8  1926  B Z58 0?1 3        8
174  3 160          BCE   DVPNT,DVC,2          DIOCS INFO           8  1934  B Z66 0?1 2        8
175  3 170          BCE   DVPNC,DVC,4                               8  1942  B Z74 0?1 4        9
176  3 180          SW    TAPE                                     4  1950  , X53              9
177  3 190          B     DVCEX                                    4  1954  B Z81              9
178  3 200  DVRDR    SW    READER                                   4  1958  , X54              9
179  3 210          B     DVCEX                                    4  1962  B Z81              9
180  3 220  DVPNT    SW    PRINTR                                   4  1966  , X55              9
181  3 230          B     DVCEX                                    4  1970  B Z81              9
182  3 240  DVPNC    MLZS  &1,PUNCH                                 7  1974  Y M94 X53         10
183  3 250  DVCEX    B     0                                        4  1981  B 000             10
184  4 010  TAPUSE   SBR   TPUSEX&3           RELATES TAPE FILE      4  1985  H !00             10
185  4 020          BCE   TPUS01,DVC,1       INFO TO DIOCS          8  1989  B !01 0?1 1       10
186  4 030  TPUSEX   B     0                    -TAPE USE            4  1997  B 000             10
187  4 040  TPUS01   BWZ   TPUS02,INPUT,2       -ALT TAPE            8  2001  V !13 0?2 2       10
188  4 050          SW    TPIN                 -RWD OPTIONS           4  2009  , X56             10
189  4 060  TPUS02   BWZ   ALTT03,OUTPUT,2                           8  2013  V !25 0?3 2       11
190  4 070          SW    TPOUT                                    4  2021  , X57             11
191  4 080  ALTT03   MLNS  ALT,TPTEST                              7  2025  D 0?3 !89         11
192  4 090          BCE   RWD04,TPTEST,                            8  2032  B !47 !89         11
193  4 100          MLZS  &1,ALTTAP                                7  2040  Y M94 X54         11
194  4 110  RWD04    BW    RWD06,LCK                                8  2047  V !67 0A4 1       12
195  4 120  RWD05    BW    RWD07,NOR                                8  2055  V !78 0A5 1       12
196  4 130          B     TPUSEX                                   4  2063  B Z97             12
197  4 140  RWD06    MLZS  &1,LOCK                                  7  2067  Y M94 X56         12
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 150         B     RWD05                                      4  2074  B !55              12
199  4 160  RWD07  MLZS  &1,NORWD                                   7  2078  Y M94 X57          12
200  4 170         B     TPUSEX                                     4  2085  B Z97              13
201  4 180  TPTEST DCW   #1                                        1  2089                     13
202  4 190  LABELS SBR   LBLEX&3            RELATES F-D           4  2090  H J24              13
203  4 200         BW    LBL01,STND          LABEL INFO            8  2094  V J25 0A2 1        13
204  4 210         BCE   LBL02,DVC,1                               8  2102  B J14 0?1 1        13
205  4 220         B     LBLEX                                      4  2110  B J21              13
206  4 230  LBL02  MLZS  &1,1759                                   7  2114  Y M94 X59          13
207  4 240  LBLEX  B     0                     TO DIOCS              4  2121  B 000              14
208  4 250  LBL01  SW    STNDRD                                     4  2125  , X58              14
209  5 010         B     LBLEX                                      4  2129  B J21              14
210  5 020  CHECKA SBR   CHKEX&3                                    4  2133  H J59              14
211  5 030         BCE   CHKEX,FSTFN,                               8  2137  B J56 0C4          14
212  5 040         SW    CHKA                                       4  2145  , 0A3              14
213  5 050         MLZS  &1,CHKALL                                  7  2149  Y M94 X58          14
214  5 060  CHKEX  B     0                                          4  2156  B 000              15
215  5 070  BLCKNG SBR   BLKEX&3            SETS                  4  2160  H J86              15
216  5 080         MLNS  BLOCK,BLKTST         BLOCKING SWITCH      7  2164  D 0A0 J87          15
217  5 090         BCE   BLKEX,BLKTST,        IF BLOCK OPTION      8  2171  B J83 J87          15
218  5 100         SW    BLOCK                 WAS USED IN FD       4  2179  , 0A0              15
219  5 110  BLKEX  B     0                                          4  2183  B 000              15
220  5 120  BLKTST DCW   #1                                        1  2187                     15
221  5 130  WKAREA SBR   WKAEX&3            SETS                  4  2188  H K19              16
222  5 140         BW    WKA01,BLOCK         WORKAREA SWITCH       8  2192  V K20 0A0 1        16
223  5 150         BCE   WKA01,DVC,3         IF BLOCKED            8  2200  B K20 0?1 3        16
224  5 160         BW    WKA01,RESRV         OR READER             8  2208  V K20 0?3 1        16
225  5 170  WKAEX  B     0                   OR EXTRA AREA         4  2216  B 000              16
226  5 180  WKA01  SW    WORKA                                      4  2220  , 0?7              16
227  5 190         B     WKAEX                                      4  2224  B K16              17
228  5 200  CONVNM SBR   CNVEX&3            NUMERIC CONVERSIONS   4  2228  H K85              17
229  5 210         BW    CNV01,BLOCK         GO IF BLOCKED         8  2232  V K44 0A0 1        17
230  5 220         B     CNVEX                                      4  2240  B K82              17
231  5 230  CNV01  MLNS  BLKSIZ,CNVGT5                             7  2244  D 0A4 L29          17
232  5 240         CHAIN 4                                                                    MACRO
233                MLNS                                           1  2251  D                  GEN  17
234                MLNS                                           1  2252  D                  GEN  17
235                MLNS                                           1  2253  D                  GEN  18
236                MLNS                                           1  2254  D                  GEN  18
237  5 250  CNV02  BW    CNV04,BFRCDS        GO IF B.F. IN RECORDS 8  2255  V K86 0?8 1        18
238  6 010         BCE   FIX,CNVGT5,                               8  2263  B M29 L29          18
239  6 020  CNV03  MLNS  CNVGT5,BLKSIZ                            7  2271  D L29 0A4          18
240  6 030         CHAIN 4                                                                    MACRO
241                MLNS                                           1  2278  D                  GEN  18
242                MLNS                                           1  2279  D                  GEN  18
243                MLNS                                           1  2280  D                  GEN  19
244                MLNS                                           1  2281  D                  GEN  19
245  6 040  CNVEX  B     0                                          4  2282  B 000              19
246  6 050  CNV04  BCE   CNV05,CNVGT5-3,                           8  2286  B K98 L26          19
247  6 060         B     CNV07                                      4  2294  B L30              19
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 070  CNV05  BCE   CNV06,CNVGT5-4,1    GO ONLY IF 1 RECORD        8  2298  B L10 L25 1         19
249  6 080         B     CNV07              ELSE COMPUTE REAL BLOCKSIZE  4  2306  B L30               19
250  6 090  CNV06  CW    BLOCK                                         4  2310  ) 0A0               20
251  6 100         MLNS  @ @,CNVGT5-4                                  7  2314  D M95 L25           20
252  6 110         B     CNV03                                         4  2321  B K71               20
253  6 120  CNVGT5 DCW   @     @                                       5  2329                      20
254  6 130  CNV07  MLC   &CNVGT5,X2                                   7  2330  M M98 094           20
255  6 140  CNV08  BCE   CNV09,0&X2,                                  8  2337  B L49 0!0           20
256  6 150         B     CNV10                                         4  2345  B L64               20
257  6 160  CNV09  MLNS  0&X2,0&X2                                    7  2349  D 0!0 0!0           21
258  6 170         SBR   X2                                          4  2356  H 094               21
259  6 180         B     CNV08                                         4  2360  B L37               21
260  6 190  CNV10  ZA    0&X2,CNVGT1                                   7  2364  ? 0!0 M85           21
261  6 200         MLNS  RECSIZ,CNVGT2                               7  2371  D 0?9 M88           21
262  6 210         CHAIN 2                                                                 MACRO
263                MLNS                                              1  2378  D                   GEN  21
264                MLNS                                              1  2379  D                   GEN  21
265  6 220  CNV11  C     CNVGT1,&00000                                 7  2380  C M85 N03           22
266  6 230         BE    CNV12                                         5  2387  B M10 S             22
267  6 240         A     CNVGT2,CNVGT3                                 7  2392  A M88 M93           22
268  6 250         S     &1,CNVGT1                                     7  2399  S M94 M85           22
269  7 010         B     CNV11                                         4  2406  B L80               22
270  7 020  CNV12  MLNS  CNVGT3,CNVGT5                                 7  2410  D M93 L29           22
271  7 030         CHAIN 4                                                                 MACRO
272                MLNS                                              1  2417  D                   GEN  22
273                MLNS                                              1  2418  D                   GEN  23
274                MLNS                                              1  2419  D                   GEN  23
275                MLNS                                              1  2420  D                   GEN  23
276  7 040         S     CNVGT3                                        4  2421  S M93               23
277  7 050         B     CNV03                                         4  2425  B K71               23
278  7 060  FIX    SBR   FIXEX&3                                       4  2429  H M65               23
279  7 070         MLC   &CNVGT5,X2                                   7  2433  M N06 094           23
280  7 080  FIX1   BCE   DECR,0&X2,                                   8  2440  B M66 0!0           24
281  7 090         ZA    0&X2,CNVGT5                                   7  2448  ? 0!0 L29           24
282  7 100         MLZS  @ @,CNVGT5                                    7  2455  Y M95 L29           24
283  7 110  FIXEX  B     0                                             4  2462  B 000               24
284  7 120  DECR   MLNS  0&X2,0&X2                                    7  2466  D 0!0 0!0           24
285  7 130         SBR   X2                                          4  2473  H 094               24
286  7 140         B     FIX1                                          4  2477  B M40               25
287  7 150  CNVGT1 DCW   #5                                           5  2485                      25
288  7 160  CNVGT2 DCW   #3                                           3  2488                      25
289  7 170  CNVGT3 DCW   #5                                           5  2493                      25
290  7 180         LTORG                                                   2494
                   DCW   &1                                          1  2494                LIT  25
                         @ @                                         1  2495                LIT  25
       254               &CNVGT5                                     3  2498  L29           ADCON  25
                         &00000                                      5  2503                LIT  26
       279               &CNVGT5                                     3  2506  L29           ADCON  26
291  7 190         ORG   3798                                                3798
292  7 200         DCW   @}@                                         1  3798                      27
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
293	7	210		END	START				/ Y00 080	28

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - E04							
102	1	020		CTL	631 11							
103	1	030	X1	EQU	89				0089			
104	1	040	X2	EQU	94				0094			
105	1	050	X3	EQU	99				0099			
106	1	060	SUPER	EQU	351				0351			
107	1	070	NEXTTE	EQU	1764				1764			
108	1	080	DEVICE	EQU	1&X3				0001			
109	1	090		ORG	1800					1800		
110	1	100	START	B	TSTORG			4	1800	B Y58		4
111	1	110	START2	B	TSTIOC			4	1804	B Z67		4
112	1	120	TSTFIL	B	GETFIL			4	1808	B P53		4
113	1	130		BCE	TAPES,DEVICE,1			8	1812	B Z87 0?1 1		4
114	1	140		BCE	DIAE07,DEVICE,			8	1820	B Y36 0?1		4
115	1	150		B	UNITRC			4	1828	B K79		4
116	1	160	RETURN	B	TSTALL			4	1832	B M05		4
117	1	170	DIAE07	MLZS	&1,10&X3			7	1836	Y Q85 0A0		5
118	1	180		B	RETURN			4	1843	B Y32		5
119	1	190	EOJ	B	TSTDVC			4	1847	B P90		5
120	1	200	EOJ1	B	SUPER			4	1851	B 351		5
121	1	210		DCW	@E05@			3	1857			5
122	1	220	TSTORG	MLNS	1750,TSTCH			7	1858	D X50 Z66		5
123	1	230		BCE	START2,TSTCH,			8	1865	B Y04 Z66		5
124	1	240		MLNS	1755,GT1			7	1873	D X55 Z65		6
125	1	250		CHAIN	5						MACRO	
126				MLNS				1	1880	D	GEN	6
127				MLNS				1	1881	D	GEN	6
128				MLNS				1	1882	D	GEN	6
129				MLNS				1	1883	D	GEN	6
130				MLNS				1	1884	D	GEN	6
131	2	010		SBR	X3,GT1			7	1885	H 099 Z65		6
132	2	020	LBL01	BCE	LBL02,0&X3,			8	1892	B Z19 0?0		7
133	2	030		S	&334,0&X3			7	1900	S Q88 0?0		7
134	2	040		BM	DIAE17,0&X3			8	1907	V Z34 0?0 K		7
135	2	050		B	START2			4	1915	B Y04		7
136	2	060	LBL02	MLNS	0&X3,0&X3			7	1919	D 0?0 0?0		7
137	2	070		SBR	X3			4	1926	H 099		7
138	2	080		B	LBL01			4	1930	B Y92		8
139	2	090	DIAE17	SW	1759	E17- ORG ADDR LESS THAN 334		4	1934	, X59		8
140	2	100		MLNS	BLANKS,1755			7	1938	D Z59 X55		8
141	2	110		CHAIN	5						MACRO	
142				MLNS				1	1945	D	GEN	8
143				MLNS				1	1946	D	GEN	8
144				MLNS				1	1947	D	GEN	8
145				MLNS				1	1948	D	GEN	8
146				MLNS				1	1949	D	GEN	9
147	2	120		B	START2			4	1950	B Y04		9

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 130  BLANKS DCW   #6                                            6  1959                       9
149  2 140  GT1    DCW   #6                                            6  1965                       9
150  2 150  TSTCH  DCW   #1                                            1  1966                       9
151  2 160  TSTIOC C     1302,BLANKS-3                                 7  1967  C T02 Z56            9
152  2 170        BE    EOJ                                           5  1974  B Y47 S              9
153  2 180        SW    86                                            4  1979  , 086               10
154  2 190        B     TSTFIL                                        4  1983  B Y08               10
155  2 200  TAPES  BCE   TAP02,16&X3,                                  8  1987  B !33 0A6           10
156  2 210        SBR   X2,25&X3                                      7  1995  H 094 0B5           10
157  2 220  TAP01  BCE   HASBL,0&X2,                                   8  2002  B !14 0!0           10
158  2 230        B     TAP02                                         4  2010  B !33               10
159  2 240  HASBL  MLC   @.@,0&X2                                      7  2014  M Q89 0!0           11
160  2 250        SBR   X2                                            4  2021  H 094               11
161  3 010        SW    4&X3                                          4  2025  , 0?4               11
162  3 020        B     TAP01                                         4  2029  B !02               11
163  3 030  TAP02  BW    TAP03,10&X3         GO IF BLOCKED             8  2033  V !45 0A0 1         11
164  3 040        B     RETURN                                        4  2041  B Y32               11
165  3 050  TAP03  MLNS  14&X3,BLKSIZ                                  7  2045  D 0A4 P27           11
166  3 060        CHAIN 4                                                                MACRO
167               MLNS                                                1  2052  D           GEN     12
168               MLNS                                                1  2053  D           GEN     12
169               MLNS                                                1  2054  D           GEN     12
170               MLNS                                                1  2055  D           GEN     12
171  3 070        MLC   BLKSIZ,GT2                                    7  2056  M P27 P32           12
172  3 080        MLNS  9&X3,RECSIZ                                   7  2063  D 0?9 M04           12
173  3 090        CHAIN 2                                                                MACRO
174               MLNS                                                1  2070  D           GEN     12
175               MLNS                                                1  2071  D           GEN     13
176  3 100        S     RECSIZ,GT2                                    7  2072  S M04 P32           13
177  3 110        BM    DIAE09,GT2                                    8  2079  V P38 P32 K         13
178  3 120        MLC   BLKSIZ,GT2                                    7  2087  M P27 P32           13
179  3 130        BCE   TAP04,GT2,                                    8  2094  B J17 P32           13
180  3 140        BCE   TAP04,GT2-4,0                                 8  2102  B J17 P28 0         13
181  3 150  DIAE08 MLZS  &1,6&X3                                       7  2110  Y Q85 0?6           14
182  3 160  TAP04  MLNS  1757,GT3-3          OBJECT                    7  2117  D X57 P34           14
183  3 170        BCE   ADJUST,GT3-3,                                 8  2124  B J59 P34           14
184  3 180  TAP4A  BCE   TAP05,GT3-3,2                                 8  2132  B J70 P34 2         14
185  3 190        BCE   TAP05,GT3-3,6                                 8  2140  B J70 P34 6         14
186  3 200        MLC   @0@,GT3-4                                     7  2148  M Q90 P33           15
187  3 210        B     TAP06                                         4  2155  B J77               15
188  3 220  ADJUST MLNS  @4@,GT3-3                                     7  2159  D Q91 P34           15
189  3 230        B     TAP4A                                         4  2166  B J32               15
190  3 240  TAP05  MLC   @1@,GT3-4                                     7  2170  M Q92 P33           15
191  3 250  TAP06  MLC   &GT2,X2                                       7  2177  M Q95 094           15
192  4 010  TAP6A  BCE   DECR,0&X2,                                    8  2184  B K30 0!0           16
193  4 020        S     0&X2,GT3                                      7  2192  S 0!0 P37           16
194  4 030        BM    DIAE02,GT3                                    8  2199  V K57 P37 K         16
195  4 040  TAP07  S     GT3                                           4  2207  S P37               16
196  4 050        MLZS  @ @,GT3                                       7  2211  Y Q96 P37           16
197  4 060        BW    TAP08,11&X3         VARIABLE                  8  2218  V K45 0A1 1         17
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SEQ PG LIN  LABEL  OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 070         B     RETURN                         4  2226  B Y32              17
199  4 080  DECR   MLNS  0&X2,0&X2                      7  2230  D 0!0 0!0          17
200  4 090         SBR   X2                             4  2237  H 094              17
201  4 100         B     TAP6A                          4  2241  B J84              17
202  4 110  TAP08  BW    DIAE06,8&X3                    8  2245  V K68 0?8 1        17
203  4 120         B     RETURN                         4  2253  B Y32              17
204  4 130  DIAE02 MLNS  &1,4&X3                        7  2257  D Q85 0?4          18
205  4 140         B     TAP07                          4  2264  B K07              18
206  4 150  DIAE06 MLNS  &1,5&X3                        7  2268  D Q85 0?5          18
207  4 160         B     RETURN                         4  2275  B Y32              18
208  4 170  UNITRC BW    DIAE13,3&X3                    8  2279  V L64 0?3 1        18
209  4 180  UNT01  BW    DIAE11,12&X3                   8  2287  V L72 0A2 1        18
210  4 190  UNT02  BW    DIAE10,10&X3                   8  2295  V L80 0A0 1        19
211  4 200  UNT02A MLNS  9&X3,RECSIZ                    7  2303  D 0?9 M04          19
212  4 210         CHAIN 2                                                 MACRO
213                MLNS                                 1  2310  D           GEN    19
214                MLNS                                 1  2311  D           GEN    19
215  4 220         BCE   PRINTR,DEVICE,2                8  2312  B L36 0?1 2        19
216  4 230         C     RECSIZ,@080@                   7  2320  C M04 Q99          19
217  4 240         BU    DIAE05                         5  2327  B L91 /            19
218  4 250         B     UNT03                          4  2332  B L60              20
219  5 010  PRINTR C     RECSIZ,@100@                   7  2336  C M04 R02          20
220  5 020         BE    UNT03                          5  2343  B L60 S            20
221  5 030         C     RECSIZ,@132@                   7  2348  C M04 R05          20
222  5 040         BU    DIAE05                         5  2355  B L91 /            20
223  5 050  UNT03  B     RETURN                         4  2360  B Y32              20
224  5 060  DIAE13 SW    5&X3                           4  2364  , 0?5              20
225  5 070         B     UNT01                          4  2368  B K87              21
226  5 080  DIAE11 SW    6&X3                           4  2372  , 0?6              21
227  5 090         B     UNT02                          4  2376  B K95              21
228  5 100  DIAE10 MLZS  &1,4&X3                       7  2380  Y Q85 0?4          21
229  5 110         B     UNT02A                         4  2387  B L03              21
230  5 120  DIAE05 MLZS  &1,5&X3                       7  2391  Y Q85 0?5          21
231  5 130         B     UNT03                          4  2398  B L60              21
232  5 140  RECSIZ DCW   #3                             3  2404                     22
233  5 150  TSTALL MLNS  15&X3,TSTCH                    7  2405  D 0A5 Z66          22
234  5 160         BCE   ALL01,TSTCH,                   8  2412  B M35 Z66          22
235  5 170         BCE   ALL01,TSTCH,1                  8  2420  B M35 Z66 1        22
236  5 180  DIAE14 MLNS  &1,6&X3                       7  2428  D Q85 0?6          22
237  5 190  ALL01  BW    ALL01A,10&X3                   8  2435  V M51 0A0 1        23
238  5 200         BW    DIAE03,11&X3                   8  2443  V O95 0A1 1        23
239  5 210  ALL01A BW    ALL03,1&X3                     8  2451  V M66 0?1 1        23
240  5 220  DIAE12 MLZS  &1,7&X3                       7  2459  Y Q85 0?7          23
241  5 230  ALL03  BW    ALL04,2&X3                     8  2466  V M81 0?2 1        23
242  5 240  DIAE15 MLZS  &1,8&X3                       7  2474  Y Q85 0?8          24
243  5 250  ALL04  BW    ALL05,1750                     8  2481  V M93 X50 1        24
244  6 010         B     ALL06                          4  2489  B N01              24
245  6 020  ALL05  BW    DIAE16,3&X3                    8  2493  V P06 0?3 1        24
246  6 030  ALL06  BCE   TAPE,DEVICE,1                  8  2501  B N48 0?1 1        24
247  6 040         BCE   READER,DEVICE,3                8  2509  B O73 0?1 3        25
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 050         BCE   PUNCH,DEVICE,4                              8  2517  B O84 0?1 4         25
249  6 060         BCE   PRNTR,DEVICE,2                              8  2525  B N37 0?1 2         25
250  6 070         B     ALL07                                       4  2533  B O91               25
251  6 080  PRNTR  A     &1,PRNTFL                                   7  2537  A Q85 P14           25
252  6 090         B     ALL07                                       4  2544  B O91               25
253  6 100  TAPE   MLNS  2&X3,TSTCH                                  7  2548  D 0?2 Z66           26
254  6 110         BCE   TAP1,TSTCH,1                                8  2555  B O07 Z66 1         26
255  6 120         BCE   TAP2,TSTCH,2                                8  2563  B O18 Z66 2         26
256  6 130         BCE   TAP3,TSTCH,3                                8  2571  B O29 Z66 3         26
257  6 140         BCE   TAP4,TSTCH,4                                8  2579  B O40 Z66 4         26
258  6 150         BCE   TAP5,TSTCH,5                                8  2587  B O51 Z66 5         27
259  6 160         BCE   TAP6,TSTCH,6                                8  2595  B O62 Z66 6         27
260  6 170         B     ALL07                                       4  2603  B O91               27
261  6 180  TAP1   A     &1,TAPE1                                    7  2607  A Q85 P15           27
262  6 190         B     ALL07                                       4  2614  B O91               27
263  6 200  TAP2   A     &1,TAPE2                                    7  2618  A Q85 P16           27
264  6 210         B     ALL07                                       4  2625  B O91               28
265  6 220  TAP3   A     &1,TAPE3                                    7  2629  A Q85 P17           28
266  6 230         B     ALL07                                       4  2636  B O91               28
267  6 240  TAP4   A     &1,TAPE4                                    7  2640  A Q85 P18           28
268  6 250         B     ALL07                                       4  2647  B O91               28
269  7 010  TAP5   A     &1,TAPE5                                    7  2651  A Q85 P19           28
270  7 020         B     ALL07                                       4  2658  B O91               28
271  7 030  TAP6   A     &1,TAPE6                                    7  2662  A Q85 P20           29
272  7 040         B     ALL07                                       4  2669  B O91               29
273  7 050  READER A     &1,RDRFIL                                   7  2673  A Q85 P21           29
274  7 060         B     ALL07                                       4  2680  B O91               29
275  7 070  PUNCH  A     &1,PNCHFL                                   7  2684  A Q85 P22           29
276  7 080  ALL07  B     TSTFIL                                      4  2691  B Y08               29
277  7 090  DIAE03 MLZS  &1,9&X3                                     7  2695  Y Q85 0?9           30
278  7 100         B     ALL01A                                      4  2702  B M51               30
279  7 110  DIAE16 SW    9&X3                                        4  2706  , 0?9               30
280  7 120         B     ALL06                                       4  2710  B N01               30
281  7 130  PRNTFL DCW   @0@                                         1  2714                      30
282  7 140  TAPE1  DCW   @0@                                         1  2715                      30
283  7 150  TAPE2  DCW   @0@                                         1  2716                      30
284  7 160  TAPE3  DCW   @0@                                         1  2717                      31
285  7 170  TAPE4  DCW   @0@                                         1  2718                      31
286  7 180  TAPE5  DCW   @0@                                         1  2719                      31
287  7 190  TAPE6  DCW   @0@                                         1  2720                      31
288  7 200  RDRFIL DCW   @0@                                         1  2721                      31
289  7 210  PNCHFL DCW   @0@                                         1  2722                      31
290  7 220  BLKSIZ DCW   #5                                          5  2727                      31
291  7 230  GT2    DCW   #5                                          5  2732                      32
292  7 240  GT3    DCW   @00000@                                     5  2737                      32
293  7 250  DIAE09 SBR   DG09EX&3                                    4  2738  H P52               32
294  8 010         MLZS  &1,11&X3                                   7  2742  Y Q85 0A1           32
295  8 020  DG09EX B     0                                           4  2749  B 000               32
296  8 030  GETFIL SBR   GTFLEX&3                                    4  2753  H P86               32
297  8 040         MLC   NXTADR,X3                                   7  2757  M P89 099           32
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 050          C     X3,NEXTTE                           7  2764  C 099 X64           33
299  8 060          BE    EOJ                                 5  2771  B Y47 S             33
300  8 070          SBR   NXTADR,50&X3                        7  2776  H P89 0E0           33
301  8 080  GTFLEX B     0                                   4  2783  B 000               33
302  8 090  NXTADR DCW   @T02@                               3  2789                      33
303  8 100  TSTDVC MLC   &PNCHFL,X2                          7  2790  M R08 094           33
304  8 110  TSTD01 C     X2,&PRNTFL                          7  2797  C 094 R11           34
305  8 120          BE    TSTD02                              5  2804  B Q29 S             34
306  8 130          C     0&X2,@1@                            7  2809  C 0!0 Q92           34
307  8 140          SAR   X2                                  4  2816  Q 094               34
308  8 150          BL    DIAE01                              5  2820  B Q77 T             34
309  8 160          B     TSTD01                              4  2825  B P97               34
310  8 170  TSTD02 BCE   TSTD03,PRNTFL,0                     8  2829  B Q45 P14 0         35
311  8 180          BCE   DIAE01,1767,1                       8  2837  B Q77 X67 1         35
312  8 190  TSTD03 BCE   TSTD04,RDRFIL,0                     8  2845  B Q61 P21 0         35
313  8 200          BCE   DIAE01,1765,1                       8  2853  B Q77 X65 1         35
314  8 210  TSTD04 BCE   EOJ1,PNCHFL,0                       8  2861  B Y51 P22 0         36
315  8 220          BCE   EOJ1,1766,                          8  2869  B Y51 X66           36
316  8 230  DIAE01 SW    1760                                4  2877  , X60               36
317  8 240          B     EOJ1                                4  2881  B Y51               36
318  8 250          LTORG                                          2885
                    DCW   &1                                  1  2885              LIT   36
                          &334                                3  2888              LIT   36
                          @.@                                 1  2889              LIT   36
                          @0@                                 1  2890              LIT   37
                          @4@                                 1  2891              LIT   37
                          @1@                                 1  2892              LIT   37
       191                &GT2                                3  2895  P32         ADCON 37
                          @ @                                 1  2896              LIT   37
                          @080@                               3  2899              LIT   37
                          @100@                               3  2902              LIT   37
                          @132@                               3  2905              LIT   38
       303                &PNCHFL                             3  2908  P22         ADCON 38
       304                &PRNTFL                             3  2911  P14         ADCON 38
319  9 010          ORG   3798                                       3798
320  9 020          DCW   @}@                                 1  3798              LIT   39
321  9 030          END   START                                    / Y00 080           40
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - E05 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - E05						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89			0089			
104	1	040	X2	EQU	94			0094			
105	1	050	X3	EQU	99			0099			
106	1	060	SUPER	EQU	351			0351			
107	1	070	IORW	EQU	343			0343			
108	1	080		ORG	1800				1800		
109	1	090	START	MLNS	1756,TSTCH		7	1800	D X56 Q64		4
110	1	100		BCE	OBJ,TSTCH,4		8	1807	B Y72 Q64 4		4
111	1	110		BCE	SRC8,TSTCH,8		8	1815	B Y43 Q64 8		4
112	1	120		BCE	SRC2,TSTCH,2		8	1823	B Y54 Q64 2		4
113	1	130		BCE	SRC6,TSTCH,6		8	1831	B Y65 Q64 6		4
114	1	140		B	OBJ		4	1839	B Y72		5
115	1	150	SRC8	MLNS	@4@,SOURCE		7	1843	D C75 N46		5
116	1	160		B	OBJ		4	1850	B Y72		5
117	1	170	SRC2	MLNS	@5@,SOURCE		7	1854	D C76 N46		5
118	1	180		B	OBJ		4	1861	B Y72		5
119	1	190	SRC6	MLNS	@6@,SOURCE		7	1865	D C77 N46		5
120	1	200	OBJ	MLNS	1757,TSTCH		7	1872	D X57 Q64		6
121	1	210		BCE	ASGN,TSTCH,6		8	1879	B Z51 Q64 6		6
122	1	220		BCE	OBJ4,TSTCH,4		8	1887	B Z15 Q64 4		6
123	1	230		BCE	OBJ8,TSTCH,8		8	1895	B Z33 Q64 8		6
124	1	240		BCE	OBJ2,TSTCH,2		8	1903	B Z44 Q64 2		6
125	1	250		B	ASGN		4	1911	B Z51		7
126	2	010	OBJ4	MLNS	@3@,OBJECT		7	1915	D C78 N47		7
127	2	011		MLC	@ @,MODADD		7	1922	M C79 N51		7
128	2	020		B	ASGN		4	1929	B Z51		7
129	2	030	OBJ8	MLNS	@4@,OBJECT		7	1933	D C75 N47		7
130	2	040		B	ASGN		4	1940	B Z51		7
131	2	050	OBJ2	MLNS	@5@,OBJECT		7	1944	D C76 N47		8
132	2	060	ASGN	BWZ	RLS,1750,2		8	1951	V Z66 X50 2		8
133	2	070		MLNS	@2@,ASSIGN		7	1959	D C80 N48		8
134	2	080	RLS	BW	EOCTL,1752		8	1966	V Z81 X52 1		8
135	2	090		MLNS	@1@,RELEAS		7	1974	D C81 N57		8
136	2	100	EOCTL	B	PLACES		4	1981	B Q65		9
137	2	110		DCW	CTLST		3	1987	N37		9
138	2	120		MLNS	1750,TSTCH		7	1988	D X50 Q64		9
139	2	130		BCE	NOORG,TSTCH,		8	1995	B !28 Q64		9
140	2	140		MLNS	1754,GT5		7	2003	D X54 N15		9
141	2	150		CHAIN	4					MACRO	
142				MLNS			1	2010	D	GEN	9
143				MLNS			1	2011	D	GEN	9
144				MLNS			1	2012	D	GEN	10
145				MLNS			1	2013	D	GEN	10
146	2	160		MLCWA	MASK,ORGVAL&14		7	2014	L N30 N84		10
147	2	170		MCE	GT5,ORGVAL&14		7	2021	E N15 N84		10

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 180  NOORG   BW    IOCSYS,86                                  8  2028  V !72 086 1         10
149  2 190          B     PLACES                                     4  2036  B Q65               10
150  2 200          DCW   ORGST                                    3  2042  N61                 10
151  2 210          B     PLACES                                     4  2043  B Q65               11
152  2 220          DCW   EONOIO                                   3  2049  N88                 11
153  2 230          B     SUPER                                      4  2050  B 351               11
154  2 240          DCW   @F01@                                    3  2056                      11
155  2 250  DG01    SBR   DG01EX&3                                   4  2057  H !71               11
156  3 010          B     PLACES                                     4  2061  B Q65               11
157  3 020          DCW   DIAE01                                   3  2067  O87                 11
158  3 030  DG01EX  B     0                                          4  2068  B 000               12
159  3 040  IOCSYS  B     PLACES              DIOCS                  4  2072  B Q65               12
160  3 050          DCW   YESST                                    3  2078  N31                 12
161  3 060          B     PLACES                                     4  2079  B Q65               12
162  3 070          DCW   DIOCST              DIOCSORG               3  2085  N97                 12
163  3 080          B     PLACES                                     4  2086  B Q65               12
164  3 090          DCW   ORGVAL                                   3  2092  N70                 12
165  3 100          BW    NOOVL,1750                                 8  2093  V J08 X50 1         13
166  3 110          B     PLACES                                     4  2101  B Q65               13
167  3 120          DCW   FEATST                                   3  2107  O63                 13
168  3 130  NOOVL   B     PLACES                                     4  2108  B Q65               13
169  3 140          DCW   IODVST                                   3  2114  O21                 13
170  3 150          BW    RDRYES,1754                                8  2115  V J27 X54 1         13
171  3 160          B     PNCTST                                     4  2123  B J76               13
172  3 170  RDRYES  B     PLACES                                     4  2127  B Q65               14
173  3 180          DCW   READST                                   3  2133  O33                 14
174  3 190          BWZ   COMMA,1753,B                             8  2134  V J69 X53 B         14
175  3 200          BW    COMMA,1755                                 8  2142  V J69 X55 1         14
176  3 210          BW    COMMA,1753                                 8  2150  V J69 X53 1         14
177  3 220  EODVCS  B     PLACES                                     4  2158  B Q65               14
178  3 230          DCW   RELEAS&1                                 3  2164  N58                 14
179  3 240          B     RESTOF                                     4  2165  B K79               15
180  3 250  COMMA   B     PLACE                                      4  2169  B B20               15
181  4 010          DCW   &@  ,@                                    3  2175  C84                 15
182  4 020  PNCTST  BWZ   PTTST,1753,2                             8  2176  V K18 X53 2         15
183  4 030          B     PLACES                                     4  2184  B Q65               15
184  4 040          DCW   PUNCHS                                   3  2190  O39                 15
185  4 050          BW    COMMA2,1755                                8  2191  V K11 X55 1         15
186  4 060          BW    COMMA2,1753                                8  2199  V K11 X53 1         16
187  4 070          B     EODVCS                                     4  2207  B J58               16
188  4 080  COMMA2  B     PLACE                                      4  2211  B B20               16
189  4 090          DCW   &@  ,@                                    3  2217  C84                 16
190  4 100  PTTST   BW    PTRYES,1755                                8  2218  V K30 X55 1         16
191  4 110          B     TAPTST                                     4  2226  B K56               16
192  4 120  PTRYES  B     PLACES                                     4  2230  B Q65               16
193  4 130          DCW   PRINTS                                   3  2236  O48                 17
194  4 140          BW    COMMA3,1753                                8  2237  V K49 X53 1         17
195  4 150          B     EODVCS                                     4  2245  B J58               17
196  4 160  COMMA3  B     PLACE                                      4  2249  B B20               17
197  4 170          DCW   &@  ,@                                    3  2255  C84                 17
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 180  TAPTST BW    TAPYES,1753                               8  2256  V K68 X53 1         17
199  4 190         B     EODVCS                                    4  2264  B J58               17
200  4 200  TAPYES B     PLACES                                    4  2268  B Q65               18
201  4 210         DCW   TAPEST                                   3  2274  O57                 18
202  4 220         B     EODVCS                                    4  2275  B J58               18
203  4 230  RESTOF BW    GOON,1753                                 8  2279  V L16 X53 1         18
204  4 240  EOJ    BW    DG01,1760                                 8  2287  V !57 X60 1         18
205  4 250         B     PLACE                                     4  2295  B B20               18
206  5 010         DCW   &@.DE@                                   3  2301  C87                 18
207  5 020         B     PLACE                                     4  2302  B B20               19
208  5 030         DCW   &@.EB@                                   3  2308  C90                 19
209  5 040         B     SUPER                                     4  2309  B 351               19
210  5 050         DCW   @E06@                                    3  2315                      19
211  5 060  GOON   BW    LBLS,1758                                 8  2316  V L28 X58 1         19
212  5 070         B     TPUSE                                     4  2324  B M01               19
213  5 080  LBLS   B     PLACES                                    4  2328  B Q65               19
214  5 090         DCW   LBLDST                                   3  2334  O93                 20
215  5 100         BWZ   LBLS1,1759,2                             8  2335  V L54 X59 2         20
216  5 110         B     PLACES                                    4  2343  B Q65               20
217  5 120         DCW   MIXDST                                   3  2349  P05                 20
218  5 130         B     LBLS2                                     4  2350  B L61               20
219  5 140  LBLS1  B     PLACES                                    4  2354  B Q65               20
220  5 150         DCW   STNDST                                   3  2360  P11                 20
221  5 160  LBLS2  BWZ   IDENT,1758,2                             8  2361  V L87 X58 2         21
222  5 170         B     PLACES                                    4  2369  B Q65               21
223  5 180         DCW   CHECST                                   3  2375  P20                 21
224  5 190         B     PLACES                                    4  2376  B Q65               21
225  5 200         DCW   RDLNST                                   3  2382  P29                 21
226  5 210         B     LBLS3                                     4  2383  B L94               21
227  5 220  IDENT  B     PLACES                                    4  2387  B Q65               21
228  5 230         DCW   IDNTST                                   3  2393  P35                 22
229  5 240  LBLS3  B     PLACES                                    4  2394  B Q65               22
230  5 250         DCW   RELEAS&1                                 3  2400  N58                 22
231  6 010  TPUSE  BW    TPIN,1756                                 8  2401  V M13 X56 1         22
232  6 020         B     TP01                                      4  2409  B M39               22
233  6 030  TPIN   B     PLACES                                    4  2413  B Q65               22
234  6 040         DCW   RDERST                                   3  2419  P41                 22
235  6 050         BW    RWDOP,1757                                8  2420  V M58 X57 1         23
236  6 060         B     PLACES                                    4  2428  B Q65               23
237  6 070         DCW   TPUIST                                   3  2434  P62                 23
238  6 080         B     RWDOP                                     4  2435  B M58               23
239  6 090  TP01   BW    TPOUT,1757                                8  2439  V M51 X57 1         23
240  6 100         B     RWDOP                                     4  2447  B M58               23
241  6 110  TPOUT  B     PLACES                                    4  2451  B Q65               23
242  6 120         DCW   TPUOST                                   3  2457  P83                 24
243  6 130  RWDOP  BWZ   NOLOCK,1756,2                            8  2458  V M77 X56 2         24
244  6 140         B     PLACES                                    4  2466  B Q65               24
245  6 150         DCW   UNLDST                                   3  2472  Q04                 24
246  6 160         B     ALTT                                      4  2473  B M92               24
247  6 170  NOLOCK BWZ   ALTT,1757,2                              8  2477  V M92 X57 2         24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 180         B     PLACES                                       4  2485  B Q65               24
249  6 190         DCW   NORWST                                      3  2491  Q25                 25
250  6 200  ALTT   BWZ   EOJ,1754,2                                  8  2492  V K87 X54 2         25
251  6 210         B     PLACES                                       4  2500  B Q65               25
252  6 220         DCW   ALTDST                                     3  2506  Q46                 25
253  6 230         B     EOJ                                          4  2507  B K87               25
254  6 240  GT5    DCW   #5                                           5  2515                      25
255  6 250  MASK   DCW   @&& && && && && @                          15  2530                      26
256  7 010  YESST  EQU   *&1                                           2531
257  7 020         DCW   @.DE.DI@                                     6  2536                      26
258  7 030  CTLST  EQU   *&1                                           2537
259  7 040         DCW   @.LCCTL.OP@                                  9  2545                      26
260  7 050  SOURCE DC    @3@                                          1  2546                      26
261  7 060  OBJECT DC    @6@                                          1  2547                      26
262  7 070  ASSIGN DC    @1@                                          1  2548                      26
263  7 080  MODADD DC    @  1@                                        3  2551                      26
264  7 090         DC    @   @                                        3  2554                      26
265  7 100  RELEAS DC    @   @                                        3  2557                      27
266  7 110         DC    @.MC@                                        3  2560                      27
267  7 120  ORGST  EQU   *&1                                           2561
268  7 130         DCW   @.LCORG.OP@                                  9  2569                      27
269  7 140  ORGVAL EQU   *&1                                           2570
270  7 150         DC    @  0  0  3  3  3.MC@                        18  2587                      27
271  7 160  EONOIO EQU   *&1                                           2588
272  7 170         DCW   @.DE.IS.EB@                                  9  2596                      28
273  7 180  DIOCST EQU   *&1                                           2597
274  7 190         DCW   @.LCDIOCS .MCDIOCSORG .OP@                  24  2620                      28
275  7 200  IODVST EQU   *&1                                           2621
276  7 210         DCW   @IODEVICES.OP@                              12  2632                      29
277  7 220  READST EQU   *&1                                           2633
278  7 230         DCW   @READER@                                     6  2638                      29
279  7 240  PUNCHS EQU   *&1                                           2639
280  7 250         DCW   @PUN  C  H@                                  9  2647                      29
281  8 010  PRINTS EQU   *&1                                           2648
282  8 020         DCW   @PRINTE  R@                                  9  2656                      29
283  8 030  TAPEST EQU   *&1                                           2657
284  8 040         DCW   @TAP  E@                                     6  2662                      30
285  8 050  FEATST EQU   *&1                                           2663
286  8 060         DCW   @FEATURES .OPOVERLAP  .MC@                  24  2686                      30
287  8 070  DIAE01 EQU   *&1                                           2687
288  8 080         DCW   @***E0A@                                     6  2692                      30
289  8 090  LBLDST EQU   *&1                                           2693
290  8 100         DCW   @LABELDEF .OP@                              12  2704                      31
291  8 110  MIXDST EQU   *&1                                           2705
292  8 120         DCW   @MIXED,@                                     6  2710                      31
293  8 130  STNDST EQU   *&1                                           2711
294  8 140         DCW   @STANDARD,@                                  9  2719                      31
295  8 150  CHECST EQU   *&1                                           2720
296  8 160         DCW   @CHE  C  K@                                  9  2728                      31
297  8 170  RDLNST EQU   *&1                                           2729
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 180         DCW   @,RDLIN@                                      6  2734                      32
299  8 190  IDNTST EQU   *&1                                            2735
300  8 200         DCW   @IDENT @                                      6  2740                      32
301  8 210  RDERST EQU   *&1                                            2741
302  8 220         DCW   @READERROR.OPSCAN  .MC@                      21  2761                      32
303  8 230  TPUIST EQU   *&1                                            2762
304  8 240         DCW   @TAPEUSE  .OPINPUT .MC@                      21  2782                      33
305  8 250  TPUOST EQU   *&1                                            2783
306  9 010         DCW   @TAPEUSE  .OPOUTPUT.MC@                      21  2803                      34
307  9 020  UNLDST EQU   *&1                                            2804
308  9 030         DCW   @RWDOPTION.OPUNLOAD.MC@                      21  2824                      35
309  9 040  NORWST EQU   *&1                                            2825
310  9 050         DCW   @RWDOPTION.OPNORWD .MC@                      21  2845                      36
311  9 060  ALTDST EQU   *&1                                            2846
312  9 070         DCW   @ALTDRIVE .OPYES.MC@                         18  2863                      36
313  9 080  TSTCH  DCW   #1                                            1  2864                      37
314  9 090  PLACES SBR   X2                                           4  2865  H 094               37
315  9 100         SBR   PLCSEX&3,3&X2                                7  2869  H R00 0!3           37
316  9 110         MLC   2&X2,X2                                      7  2876  M 0!2 094           37
317  9 120  PLCAA  MLC   2&X2,PLCGT                                   7  2883  M 0!2 R18           37
318  9 130         B     PLACE                                       4  2890  B B20               37
319  9 140         DCW   PLCGT                                       3  2896  R18                 37
320  9 150  PLCSEX BW    0,3&X2                                      8  2897  V 000 0!3 1         38
321  9 160         SBR   X2,3&X2                                     7  2905  H 094 0!3           38
322  9 170         B     PLCAA                                       4  2912  B Q83               38
323  9 180  PLCGT  DCW   #3                                          3  2918                      38
324  9 190         DA    1X300                                          2919   3218               38
325  9 200  PLCA          1                                              2919              SBFLD
326  9 210  PLCB          3                                              2921              SBFLD
327  9 220  PLCMAX EQU   *                                              3218
328  9 230         DC    @}@                                         1  3219                      39
329  9 240  PLACE  SBR   X1              SUBROUTINE                    4  3220  H 089               39
330  9 250         SBR   PLC2&3,3&X1          PLACE ON TAPE 4         7  3224  H B94 0|3           39
331 10 010         MLC   2&X1,PLC1&3                                  7  3231  M 0|2 B41           39
332 10 020  PLC1   MLC   0,PLCSY                                      7  3238  M 000 C74           39
333 10 030  PLC1A  MLC   PLCSY,PLCB           PLACE SYMBOL            7  3245  M C74 R21           40
334 10 040         C     PLCSY,@.EB@          LOOK FOR .EB            7  3252  C C74 C90           40
335 10 050         BE    PLC3                                        5  3259  B B95 S             40
336 10 060         C     PLC1A&6,&PLCMAX      LOOK FOR FULL BUFFER    7  3264  C B51 C93           40
337 10 070         BE    PLC3                                        5  3271  B B95 S             40
338 10 080         MA    @003@,PLC1A&6                                                    MACRO
339                SW    PLC1A&6-2                                   4  3276  , B49        GEN     40
340                A     @003@,PLC1A&6                               7  3280  A C96 B51    GEN     41
341                CW    PLC1A&6-2                                   4  3287  ) B49        GEN     41
342 10 090  PLC2   B     0                                           4  3291  B 000               41
343 10 100  PLC3   SW    PLC5&1                                      4  3295  , C71               41
344 10 110         B     IORW                                        4  3299  B 343               41
345 10 120         RT    4,PLC5               LOOK FOR END OF TAPE   8  3303  M %U4 C70 R         41
346 10 130         DCW   PLC4                                        3  3313  C18                 41
347 10 140         B     PLC3                                        4  3314  B B95               42
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 150  PLC4   BSP   4                                         5  3318  U %U4 B             42
349 10 160         SW    PLCMAX&1                                  4  3323  , B19               42
350 10 170         B     IORW                                      4  3327  B 343               42
351 10 180         WT    4,PLCA              WRITE BUFFER          8  3331  M %U4 R19 W         42
352 10 190         DCW   *&1                                       3  3341  C42                 42
353 10 200         WTM   4                   END TAPE              5  3342  U %U4 M             42
354 10 210         BSP   4                                         5  3347  U %U4 B             43
355 10 220         MLC   &PLCB,PLC1A&6                             7  3352  M C99 B51           43
356 10 230         ZA    @0@,PLCMAX                                7  3359  ? D00 B18           43
357 10 240         B     PLC2                                      4  3366  B B91               43
358 10 250  PLC5   EQU   *&1                                        3370
359 11 010         DCW   @ }@                                      2  3371                      43
360 11 020  PLCSY  DCW   #3                                        3  3374                      43
361 11 030         LTORG                                                  3375
                   DCW   @4@                                       1  3375              LIT     43
                         @5@                                       1  3376              LIT     44
                         @6@                                       1  3377              LIT     44
                         @3@                                       1  3378              LIT     44
                         @ @                                       1  3379              LIT     44
                         @2@                                       1  3380              LIT     44
                         @1@                                       1  3381              LIT     44
                         @  ,@                                     3  3384              LIT     44
                         @.DE@                                     3  3387              LIT     45
                         @.EB@                                     3  3390              LIT     45
       336               &PLCMAX                                   3  3393  B18         ADCON   45
                         @003@                                     3  3396              LIT     45
       355               &PLCB                                     3  3399  R21         ADCON   45
                         @0@                                       1  3400              LIT     45
362 11 040         ORG   3798                                                3798
363 11 050         DCW   @}@                                       1  3798                      46
364 11 060         END   START                                              / Y00 080           47
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - E06
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                                  0089
 104  1 040  X2      EQU   94                                                  0094
 105  1 050  X3      EQU   99                                                  0099
 106  1 060  SUPER   EQU   351                                                 0351
 107  1 070  IORW    EQU   343                                                 0343
 108  1 080  NEXTTE  EQU   1764                                                1764
 109  1 090          ORG   1800                                                      1800
 110  1 091          MLC   3798,1800                                      7    1800  M G98 Y00            4
 111  1 092          MLNS  445,WT1&3                                      7    1807  D 445 Y21            4
 112  1 093          B     IORW                                           4    1814  B 343                4
 113  1 094  WT1     WTW   5,1750                                         8    1818  L %U5 X50 W          4
 114  1 095          DCW   *&1                                            3    1828  Y29                  4
 115  1 100  START   B     PLACE                                          4    1829  B R84                4
 116  1 110          DCW   &@.DA@                                         3    1835  A42                  4
 117  1 120  START1  B     GETFIL                                         4    1836  B N92                5
 118  1 130          B     DAPLAC                                         4    1840  B Z74                5
 119  1 140          B     START1                                         4    1844  B Y36                5
 120  1 150  EOJ     B     PLACE                                          4    1848  B R84                5
 121  1 160          DCW   &@.DE@                                         3    1854  A45                  5
 122  1 170          B     PLACE                                          4    1855  B R84                5
 123  1 180          DCW   &@.EB@                                         3    1861  A48                  5
 124  1 190          MLNS  445,WT&3                                       7    1862  D 445 Y97            6
 125  1 200          SBR   X2,1300                                        7    1869  H 094 T00            6
 126  1 210  EOJ1    MLC   50&X2,SAVE                                     7    1876  M 0N0 A39            6
 127  1 220          MLC   3798,50&X2                                     7    1883  M G98 0N0            6
 128  1 230          B     IORW                                           4    1890  B 343                6
 129  1 240  WT      WTW   5,0&X2                                         8    1894  L %U5 0!0 W          7
 130  1 250          DCW   *&1                                            3    1904  Z05                  7
 131  2 010          MLCWA SAVE,50&X2                                     7    1905  L A39 0N0            7
 132  2 020          BCE   EOJ2,SAVE,                                     8    1912  B Z43 A39            7
 133  2 030          SBR   X2,50&X2                                       7    1920  H 094 0N0            7
 134  2 040          C     X2,@X50@                                       7    1927  C 094 A51            8
 135  2 050          BE    EOJ2                                           5    1934  B Z43 S              8
 136  2 060          B     EOJ1                                           4    1939  B Y76                8
 137  2 070  EOJ2    MLNS  445,WTM&3                                      7    1943  D 445 Z60            8
 138  2 080          MLNS  445,RWD&3                                      7    1950  D 445 Z65            8
 139  2 090  WTM     WTM   5                                              5    1957  U %U5 M              8
 140  2 100  RWD     RWD   5                                              5    1962  U %U5 R              9
 141  2 110          B     SUPER                                          4    1967  B 351                9
 142  2 120          DCW   @E07@                                          3    1973                       9
 143  2 130  DAPLAC  SBR   DAPEX&3                                       4    1974  H !89                9
 144  2 140          BWZ   OUTPUT,2&X3,2                                  8    1978  V !38 0?2 2          9
 145  2 150  INPUT   BW    INBLKD,10&X3        INPUT                      8    1986  V !14 0A0 1          9
 146  2 160  INUNBL  BW    INURSV,3&X3         UNBLOCKED                  8    1994  V !06 0?3 1         10
 147  2 170  INUNOA  B     DAPEX                NO ALT. AREA              4    2002  B !86               10
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 180  INURSV B     PLC2DA              1  ALT. AREA             4  2006  B !90              10
149  2 190         B     DAPEX                                        4  2010  B !86              10
150  2 200  INBLKD BW    INBRSV,3&X3        BLOCKED                   8  2014  V !30 0?3 1        10
151  2 210  INBNOA B     PLC1DA              NO ALT. AREA             4  2022  B J05              10
152  2 220         B     DAPEX                                        4  2026  B !86              10
153  2 230  INBRSV B     PLC2DA              1  ALT. AREA             4  2030  B !90              11
154  2 240         B     DAPEX                                        4  2034  B !86              11
155  2 250  OUTPUT BW    OUTBLK,10&X3      OUTPUT                     8  2038  V !66 0A0 1        11
156  3 010  OTUNBL BW    OTURSV,3&X3        UNBLOCKED                 8  2046  V !58 0?3 1        11
157  3 020  OTUNNO B     DAPEX               NO ALT. AREA             4  2054  B !86              11
158  3 030  OTURSV B     PLC2DA              1  ALT. AREA             4  2058  B !90              11
159  3 040         B     DAPEX                                        4  2062  B !86              11
160  3 050  OUTBLK BW    OTBRSV,3&X3        BLOCKED                   8  2066  V !82 0?3 1        12
161  3 060  OTBNOA B     PLC1DA              NO ALT. AREA             4  2074  B J05              12
162  3 070         B     DAPEX                                        4  2078  B !86              12
163  3 080  OTBRSV B     PLC2DA              1  ALT. AREA             4  2082  B !90              12
164  3 090  DAPEX  B     0                                            4  2086  B 000              12
165  3 100  PLC2DA SBR   DAEX&3                                       4  2090  H L89              12
166  3 110         MLC   @N@,DASW                                     7  2094  M A52 L56          12
167  3 120         B     DA01                                         4  2101  B J16              13
168  3 130  PLC1DA SBR   DAEX&3                                       4  2105  H L89              13
169  3 140         MLC   @B@,DASW                                     7  2109  M A53 L56          13
170  3 150  DA01   MLC   @0@,RMTST                                    7  2116  M A54 M14          13
171  3 152         BW    DA02,10&X3        GO IF BLOCKED             8  2123  V J35 0A0 1        13
172  3 154         B     DA03                                         4  2131  B J58              13
173  3 156  DA02   BW    DA03,11&X3        GO IF VARIABLE            8  2135  V J58 0A1 1        14
174  3 158         BWZ   DA03,3&X3,2       GO IF INPUT               8  2143  V J58 0?3 2        14
175  3 160         MLC   @1@,RMTST                                    7  2151  M A55 M14          14
176  3 162  DA03   MLC   @00000@,DABF                                 7  2158  M A60 M29          14
177  3 164         B     MVDANM                                       4  2165  B L90              14
178  3 166         B     MVNM1                                        4  2169  B N32              14
179  3 168         B     PLACES                                       4  2173  B O29              15
180  3 170         DCW   DAST                                         3  2179  N62                15
181  3 172         BW    DA04,10&X3        GO IF BLOCKED             8  2180  V K12 0A0 1        15
182  3 174         A     &1,DABF                                      7  2188  A A61 M29          15
183  3 176         MLNS  9&X3,DARSIZ                                  7  2195  D 0?9 M19          15
184  3 178         CHAIN 2                                                                       MACRO
185                MLNS                                             1  2202  D                  GEN   15
186                MLNS                                             1  2203  D                  GEN   15
187  3 180         MLC   @00@                                         4  2204  M A63              16
188  3 181         B     DA06                                         4  2208  B K97              16
189  3 182  DA04   MLNS  14&X3,DABSIZ                                 7  2212  D 0A4 M24          16
190  3 184         CHAIN 7                                                                       MACRO
191                MLNS                                             1  2219  D                  GEN   16
192                MLNS                                             1  2220  D                  GEN   16
193                MLNS                                             1  2221  D                  GEN   16
194                MLNS                                             1  2222  D                  GEN   16
195                MLNS                                             1  2223  D                  GEN   17
196                MLNS                                             1  2224  D                  GEN   17
197                MLNS                                             1  2225  D                  GEN   17
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  3 186         MLC   @00@                                        4  2226  M A63               17
199  3 187  DA05   A     &1,DABF                                     7  2230  A A61 M29           17
200  3 188         S     DARSIZ,DABSIZ                               7  2237  S M19 M24           17
201  3 190         MLZS  @ @,DABSIZ                                  7  2244  Y A64 M24           17
202  3 192         C     DARSIZ,DABSIZ                               7  2251  C M19 M24           18
203  3 194         BH    DA05                                        5  2258  B K30 U             18
204  3 195         BU    *&8                                         5  2263  B K75 /             18
205  3 196         A     &1,DABF                                     7  2268  A A61 M29           18
206  3 197         BCE   DA06,RMTST,0                                8  2275  B K97 M14 0         18
207  3 198         S     &1,DARSIZ                                   7  2283  S A61 M19           18
208  3 200         MLZS  @ @,DARSIZ                                  7  2290  Y A64 M19           19
209  3 202  DA06   S     DAGT1                                       4  2297  S M34               19
210  3 204         MLC   DABF,DAGT1                                  7  2301  M M29 M34           19
211  3 206         B     PLCGT1                                      4  2308  B M74               19
212  3 207         B     PLACE                                       4  2312  B R84               19
213  3 208         DCW   &@  X@                                      3  2318  A67                 19
214  3 210         S     DAGT1                                       4  2319  S M34               19
215  3 212         MLC   DARSIZ,DAGT1                                7  2323  M M19 M34           20
216  3 214         B     PLCGT1                                      4  2330  B M74               20
217  3 216         BCE   DA07,RMTST,0                                8  2334  B L49 M14 0         20
218  3 218         B     PLACES                                      4  2342  B O29               20
219  3 220         DCW   RMST                                        3  2348  M50                 20
220  3 222  DA07   B     PLACES                                      4  2349  B O29               20
221  3 224         DCW   GMST                                        3  2355  M56                 20
222  3 226  DASW   B     DAEX                                        4  2356  B L86               21
223  3 228         B     MVDANM                                      4  2360  B L90               21
224  3 230         B     MVNM2                                       4  2364  B N47               21
225  3 232         B     PLACES                                      4  2368  B O29               21
226  3 234         DCW   DAST                                        3  2374  N62                 21
227  3 236         MLC   @B@,DASW                                    7  2375  M A53 L56           21
228  3 240         B     DA06                                        4  2382  B K97               21
229  3 250  DAEX   B     000                                         4  2386  B 000               22
230  4 010  MVDANM SBR   MDNEX&3                                     4  2390  H M11               22
231  4 020         A     &1,GNID                                     7  2394  A A61 M13           22
232  4 030         MLC   GNID,GNAME                                  7  2401  M M13 N67           22
233  4 040  MDNEX  B     0                                           4  2408  B 000               22
234  4 050  GNID   DCW   @O0@                                       2  2413                      22
235  4 060  RMTST  DCW   @0@                                        1  2414                      22
236  4 061  DARSIZ DCW   #5                                         5  2419                      23
237  4 062  DABSIZ DCW   #5                                         5  2424                      23
238  4 063  DABF   DCW   #5                                         5  2429                      23
239  4 064  DAGT1  DCW   #5                                         5  2434                      23
240  4 065  DAGT2  DCW   #15                                       15  2449                      23
241  4 066  RMST   EQU   *&1                                          2450
242  4 067         DCW   @  ,  |@                                   6  2455                      24
243  4 068  GMST   EQU   *&1                                          2456
244  4 069         DCW   @  ,  G.MC.OP1,1.MC@                      18  2473                      24
245  4 070  PLCGT1 SBR   PLGTEX&3                                    4  2474  H N31               24
246  4 080         MLCWA MASK,DAGT2                                  7  2478  L N91 M49           24
247  4 090         MCE   DAGT1,DAGT2                                 7  2485  E M34 M49           25
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  4 100          MLC   &DAGT2-18,X1                                   7  2492  M A70 089           25
249  4 105  PLGT01  SBR   X1,3&X1                                        7  2499  H 089 0|3           25
250  4 110          BCE   PLGT01,3&X1,0                                 8  2506  B M99 0|3 0         25
251  4 115          SBR   PLGT02,1&X1                                   7  2514  H N27 0|1           25
252  4 120          B     PLACES                                        4  2521  B O29               26
253  4 125  PLGT02  DCW   *                                             3  2527  N27                 26
254  4 130  PLGTEX  B     000                                           4  2528  B 000               26
255  4 140  MVNM1   SBR   MV1EX&3                                      4  2532  H N46               26
256  4 150          MLC   GNID,45&X3                                    7  2536  M M13 0D5           26
257  4 160  MV1EX   B     0                                             4  2543  B 000               26
258  4 170  MVNM2   SBR   MV2EX&3                                      4  2547  H N61               26
259  4 180          MLC   GNID,47&X3                                    7  2551  M M13 0D7           27
260  4 190  MV2EX   B     0                                             4  2558  B 000               27
261  4 200  DAST    EQU   *&1                                             2562
262  4 205  GNAME   DCW   @  LI  @                                      6  2567                      27
263  4 210          DC    @.LCDA .OP@                                   9  2576                      27
264  4 240  MASK    DCW   @&& && && && && @                            15  2591                      28
265  4 250  GETFIL  SBR   GTFLEX&3            DEVELOPS ADDRESSES       4  2592  H O25               28
266  5 010          MLC   NXTADR,X3            OF FILE DESCRIPTIONS     7  2596  M O28 099           28
267  5 020          C     X3,NEXTTE             SEQUENTIALLY            7  2603  C 099 X64           28
268  5 030          BE    EOJ                   THEN BRANCHES           5  2610  B Y48 S             28
269  5 040          SBR   NXTADR,50&X3            TO EOJ                7  2615  H O28 0E0           29
270  5 050  GTFLEX  B     0                                             4  2622  B 000               29
271  5 060  NXTADR  DCW   @T02@                                         3  2628                      29
272  5 070  PLACES  SBR   X2                                            4  2629  H 094               29
273  5 080          SBR   PLCSEX&3,3&X2                                7  2633  H O64 0!3           29
274  5 090          MLC   2&X2,X2                                      7  2640  M 0!2 094           29
275  5 100  PLCAA   MLC   2&X2,PLCGT                                    7  2647  M 0!2 O82           29
276  5 110          B     PLACE                                         4  2654  B R84               30
277  5 120          DCW   PLCGT                                        3  2660  O82                 30
278  5 130  PLCSEX  BW    0,3&X2                                        8  2661  V 000 0!3 1         30
279  5 140          SBR   X2,3&X2                                      7  2669  H 094 0!3           30
280  5 150          B     PLCAA                                         4  2676  B O47               30
281  5 160  PLCGT   DCW   #3                                           3  2682                      30
282  5 170          DA    1X300                                         2683   2982               30
283  5 180  PLCA    1                                                   2683               SBFLD
284  5 190  PLCB    3                                                   2685               SBFLD
285  5 200  PLCMAX  EQU   *                                             2982
286  5 210          DC    @}@                                           1  2983                      31
287  5 220  PLACE   SBR   X1                SUBROUTINE                  4  2984  H 089               31
288  5 230          SBR   PLC2&3,3&X1           PLACE ON TAPE 4         7  2988  H ?58 0|3           31
289  5 240          MLC   2&X1,PLC1&3                                   7  2995  M 0|2 ?05           31
290  5 250  PLC1    MLC   0,PLCSY                                       7  3002  M 000 A38           31
291  6 010  PLC1A   MLC   PLCSY,PLCB            PLACE SYMBOL            7  3009  M A38 O85           32
292  6 020          C     PLCSY,@.EB@           LOOK FOR .EB            7  3016  C A38 A48           32
293  6 030          BE    PLC3                                          5  3023  B ?59 S             32
294  6 040          C     PLC1A&6,&PLCMAX       LOOK FOR FULL BUFFER    7  3028  C ?15 A73           32
295  6 050          BE    PLC3                                          5  3035  B ?59 S             32
296  6 060          MA    @003@,PLC1A&6                                                   MACRO
297                 SW    PLC1A&6-2                                     4  3040  , ?13         GEN   32
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298                A     @003@,PLC1A&6                             7  3044  A A76 ?15   GEN     33
299                CW    PLC1A&6-2                                 4  3051  ) ?13       GEN     33
300  6 070  PLC2   B     0                                         4  3055  B 000               33
301  6 080  PLC3   SW    PLC5&1                                    4  3059  , A35               33
302  6 090         B     IORW                                      4  3063  B 343               33
303  6 100         RT    4,PLC5              LOOK FOR END OF TAPE  8  3067  M %U4 A34 R         33
304  6 110         DCW   PLC4                                      3  3077  ?82                 33
305  6 120         B     PLC3                                      4  3078  B ?59               34
306  6 130  PLC4   BSP   4                                         5  3082  U %U4 B             34
307  6 140         SW    PLCMAX&1                                  4  3087  , R83               34
308  6 150         B     IORW                                      4  3091  B 343               34
309  6 160         WT    4,PLCA              WRITE BUFFER          8  3095  M %U4 O83 W         34
310  6 170         DCW   *&1                                       3  3105  A06                 34
311  6 180         WTM   4                   END TAPE              5  3106  U %U4 M             34
312  6 190         BSP   4                                         5  3111  U %U4 B             35
313  6 200         MLC   &PLCB,PLC1A&6                             7  3116  M A79 ?15           35
314  6 210         ZA    @0@,PLCMAX                                7  3123  ? A54 R82           35
315  6 220         B     PLC2                                      4  3130  B ?55               35
316  6 230  PLC5   EQU   *&1                                          3134
317  6 240         DCW   @ }@                                      2  3135                      35
318  6 250  PLCSY  DCW   #3                                        3  3138                      35
319  7 010  SAVE   DCW   #1                                        1  3139                      35
320  7 020         LTORG                                                  3140
                   DCW   @.DA@                                     3  3142            LIT     36
                         @.DE@                                     3  3145            LIT     36
                         @.EB@                                     3  3148            LIT     36
                         @X50@                                     3  3151            LIT     36
                         @N@                                       1  3152            LIT     36
                         @B@                                       1  3153            LIT     36
                         @0@                                       1  3154            LIT     36
                         @1@                                       1  3155            LIT     37
       176               @000000@                                  5  3160            LIT     37
                         &1                                        1  3161            LIT     37
                         @00@                                      2  3163            LIT     37
                         @ @                                       1  3164            LIT     37
                         @  X@                                     3  3167            LIT     37
       248               &DAGT2-18                                 3  3170  M31       ADCON   37
       294               &PLCMAX                                   3  3173  R82       ADCON   38
                         @003@                                     3  3176            LIT     38
       313               &PLCB                                     3  3179  O85       ADCON   38
321  7 030         ORG   3798                                             3798
322  7 040         DCW   @}@                                       1  3798                      39
323  7 050         END   START                                            / Y29 080           40
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - E07 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - E07
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                              0089
 104  1 040  X2      EQU   94                                              0094
 105  1 050  X3      EQU   99                                              0099
 106  1 060  SUPER   EQU   351                                             0351
 107  1 070  IORW    EQU   343                                             0343
 108  1 080          ORG   1300                                                 1300
 109  1 081          SBR   GTFLEX&3,INIT                                7  1300  H A08 T22           4
 110  1 082          SBR   RT&6,DIOCS                                   7  1307  H A00 F95           4
 111  1 083          SW    DIOGM                                       4  1314  , G45               4
 112  1 084          B     RTALT                                       4  1318  B ?83               4
 113  1 085  INIT    SBR   RT&6,200                                    7  1322  H A00 200           4
 114  1 090  START   B     PLACE                                       4  1329  B D64               4
 115  1 100          DCW   &@.DT@                                      3  1335  F21                 4
 116  1 110  START0  B     GETFIL                                      4  1336  B ?65               5
 117  1 120          B     DECLAR                                      4  1340  B T82               5
 118  1 130  START1  B     DIAGNS                                      4  1344  B K53               5
 119  1 140  START2  B     START0                                      4  1348  B T36               5
 120  1 150  EOJ     B     PLACES                                      4  1352  B A09               5
 121  1 160          DCW   ENDST                                       3  1358  N53                 5
 122  1 170          MLNS  445,RWDI&3                                  7  1359  D 445 T69           5
 123  1 180  RWDI    RWD   5                                           5  1366  U %U5 R             6
 124  1 190          CS    299                                         4  1371  / 299               6
 125  1 200          B     SUPER                                       4  1375  B 351               6
 126  1 210          DCW   @F01@                                       3  1381                      6
 127  1 220  DECLAR  MLC   0&X3,FILENM                                 7  1382  M 0?0 N76           6
 128  1 230          B     PLACES                                      4  1389  B A09               6
 129  1 240          DCW   DTFST                                       3  1395  N62                 6
 130  1 250          BCE   TAPE,1&X3,1                                 8  1396  B V21 0?1 1         7
 131  2 010          BCE   READ,1&X3,3                                 8  1404  B U31 0?1 3         7
 132  2 020          BCE   PNCH,1&X3,4                                 8  1412  B U50 0?1 4         7
 133  2 030  PRNT    B     PLACES                                      4  1420  B A09               7
 134  2 040          DCW   PRNTST                                      3  1426  N92                 7
 135  2 050          B     ALL01                                       4  1427  B !87               7
 136  2 060  READ    B     PLACES                                      4  1431  B A09               7
 137  2 070          DCW   READST                                      3  1437  O04                 8
 138  2 080          BW    CARD,DIOCS                                  8  1438  V U57 F95 1         8
 139  2 090          B     ALL01                                       4  1446  B !87               8
 140  2 100  PNCH    B     PLACES                                      4  1450  B A09               8
 141  2 110          DCW   PNCHST                                      3  1456  O28                 8
 142  2 120  CARD    MLNS  2&X3,POC                                    7  1457  D 0?2 O51           8
 143  2 130          BCE   CARD2,POC,                                  8  1464  B U91 O51           8
 144  2 140          BCE   ALL01,POC,0                                 8  1472  B !87 O51 0         9
 145  2 150  CARD1   B     PLACES                                      4  1480  B A09               9
 146  2 160          DCW   POCKST                                      3  1486  O37                 9
 147  2 161          B     ALL01                                       4  1487  B !87               9
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
148	2	162	CARD2	BCE	CARD3,1&X3,4		8	1491	B V10 0?1 4		9
149	2	163		MLC	@1@,POC		7	1499	M F22 O51		9
150	2	164		B	CARD1		4	1506	B U80		9
151	2	165	CARD3	MLC	@4@,POC		7	1510	M F23 O51		10
152	2	166		B	CARD1		4	1517	B U80		10
153	2	170	TAPE	BWZ	OUTPUT,2&X3,2		8	1521	V V40 0?2 2		10
154	2	180		B	PLACES		4	1529	B A09		10
155	2	190		DCW	TPINST		3	1535	O55		10
156	2	200		B	TAPE01		4	1536	B V47		10
157	2	210	OUTPUT	B	PLACES		4	1540	B A09		10
158	2	220		DCW	TPOTST		3	1546	O88		11
159	2	230	TAPE01	MLNS	2&X3,UNIT		7	1547	D 0?2 P20		11
160	2	240		B	PLACES		4	1554	B A09		11
161	2	250		DCW	CHNDST		3	1560	P06		11
162	3	010		MLNS	3&X3,ALT		7	1561	D 0?3 P38		11
163	3	020		BCE	RWD,ALT,		8	1568	B V83 P38		11
164	3	030		B	PLACES		4	1576	B A09		11
165	3	040		DCW	ALTDST		3	1582	P24		12
166	3	050	RWD	BW	LOCK,14&X3		8	1583	V W03 0A4 1		12
167	3	060		BW	NORW,15&X3		8	1591	V W14 0A5 1		12
168	3	070		B	RECFRM		4	1599	B W21		12
169	3	080	LOCK	B	PLACES		4	1603	B A09		12
170	3	090		DCW	UNLDST		3	1609	P42		12
171	3	100		B	RECFRM		4	1610	B W21		12
172	3	110	NORW	B	PLACES		4	1614	B A09		13
173	3	120		DCW	NORWST		3	1620	P60		13
174	3	130	RECFRM	BW	BLOCKD,10&X3		8	1621	V W33 0A0 1		13
175	3	140		B	TYPLBL		4	1629	B W81		13
176	3	150	BLOCKD	B	PLACES		4	1633	B A09		13
177	3	160		DCW	RCFBLK		3	1639	P78		13
178	3	170		BW	VARIBL,11&X3		8	1640	V W52 0A1 1		13
179	3	180		B	V01		4	1648	B W59		14
180	3	190	VARIBL	B	PLACES		4	1652	B A09		14
181	3	200		DCW	VRBLST		3	1658	P99		14
182	3	210	V01	B	PLACES		4	1659	B A09		14
183	3	220		DCW	BLKSZS		3	1665	Q08		14
184	3	230		MLNS	14&X3,FIVER		7	1666	D 0A4 R43		14
185	3	231		CHAIN	4					MACRO	
186				MLNS			1	1673	D	GEN	14
187				MLNS			1	1674	D	GEN	15
188				MLNS			1	1675	D	GEN	15
189				MLNS			1	1676	D	GEN	15
190	3	240		B	DOFIVE		4	1677	B Y72		15
191	4	020	TYPLBL	BW	STANDD,12&X3		8	1681	V W93 0A2 1		15
192	4	030		B	ALLFLS		4	1689	B !59		15
193	4	040	STANDD	BWZ	STND1,2&X3,B		8	1693	V X05 0?2 B		15
194	4	044		SW	TYPLST&24		4	1701	, Q65		16
195	4	045	STND1	B	PLACES		4	1705	B A09		16
196	4	046		DCW	TYPLST		3	1711	Q41		16
197	4	050		CW	TYPLST&24		4	1712	) Q65		16

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SEQ PG LIN  LABEL  OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 060         BW    ALL,13&X3                     8  1716  V X43 0A3 1         16
199  4 065         BWZ   HDR,2&X3,2                   8  1724  V Y12 0?2 2         16
200  4 070         B     PLACES                        4  1732  B A09               16
201  4 080         DCW   IDNTST                       3  1738  Q80                 17
202  4 090         B     HDR                           4  1739  B Y12               17
203  4 100  ALL    BWZ   ALL1,2&X3,2                   8  1743  V X58 0?2 2         17
204  4 101         B     PLACES                        4  1751  B A09               17
205  4 110         DCW   ALLST                        3  1757  Q89                 17
206  4 120  ALL1   MLNS  41&X3,RSQ                     7  1758  D 0D1 R09           17
207  4 130         CHAIN 2                                                 MACRO
208               MLNS                                1  1765  D           GEN     17
209               MLNS                                1  1766  D           GEN     18
210  4 140         BCE   SNM,RSQ-2,                    8  1767  B X94 R07           18
211  4 150         C     RSQ,@001@                     7  1775  C R09 F26           18
212  4 160         BE    SNM                           5  1782  B X94 S             18
213  4 170         B     PLACES                        4  1787  B A09               18
214  4 180         DCW   RLSQST                       3  1793  Q95                 18
215  4 190  SNM    B     PLACES                        4  1794  B A09               18
216  4 200         DCW   SRLNST                       3  1800  R13                 19
217  4 201         MLC   38&X3,FIVER                   7  1801  M 0C8 R43           19
218  4 202         B     DOFIVE                        4  1808  B Y72               19
219  4 240  HDR    BCE   NOID,16&X3,                   8  1812  B Y31 0A6           19
220  4 250         MLC   25&X3,TEMP                    7  1820  M 0B5 R37           19
221  5 010         B     HDR01                         4  1827  B Y42               19
222  5 020  NOID   MLC   @.@,TEMP                      7  1831  M F27 R37           20
223  5 030         MLC   TEMP                          4  1838  M R37               20
224  5 040  HDR01  B     PLACES                        4  1842  B A09               20
225  5 050         DCW   HDRST                        3  1848  R45                 20
226  5 060         MLC   &LTEMP,X2                     7  1849  M F30 094           20
227  5 070         B     PTCHSY                        4  1856  B Y98               20
228  5 080         BW    HDR04,1&X3                    8  1860  V Z45 0?1 1         20
229  5 090         B     HDR05                         4  1868  B Z90               21
230  5 091  DOFIVE SBR   DOFEX&3                      4  1872  H Y97               21
231  5 092         MLC   &FIVER-5,X2                   7  1876  M F33 094           21
232  5 093         B     PTCHSY                        4  1883  B Y98               21
233  5 094         B     PLACE                         4  1887  B D64               21
234  5 095         DCW   LTEMP                        3  1893  R27                 21
235  5 096  DOFEX  B     000                           4  1894  B 000               21
236  5 100  PTCHSY SBR   PTCS01&3                     4  1898  H Z05               22
237  5 110  PTCS01 BCE   0,1&X2,|                     8  1902  B 000 0!1 |         22
238  5 120         MLNS  1&X2,CHXX                     7  1910  D 0!1 Z44           22
239  5 130         MLZS  1&X2,CHXX                     7  1917  Y 0!1 Z44           22
240  5 140         B     PLACE                         4  1924  B D64               22
241  5 150         DCW   CHXX                         3  1930  Z44                 22
242  5 160         SBR   X2,1&X2                       7  1931  H 094 0!1           23
243  5 170         B     PTCS01                        4  1938  B Z02               23
244  5 180  CHXX   DCW   #3                           3  1944                      23
245  5 190  HDR04  BWZ   HDR05,3&X3,B                  8  1945  V Z90 0?3 B         23
246  5 200         MLNS  30&X3,CDATE                   7  1953  D 0C0 ?57           23
247  5 210         CHAIN 4                                                 MACRO
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
248                MLNS                                        1  1960  D           GEN     23
249                MLNS                                        1  1961  D           GEN     23
250                MLNS                                        1  1962  D           GEN     24
251                MLNS                                        1  1963  D           GEN     24
252  5 220         BCE   HDR05,CDATE-4,                        8  1964  B Z90 ?53           24
253  5 230         B     PLACE                                 4  1972  B D64               24
254  5 240         DCW   COMMA                                 3  1978  R56                 24
255  5 250         MLC   &LCDAT,X2                             7  1979  M F36 094           24
256  6 010         B     PTCHSY                                4  1986  B Y98               24
257  6 020  HDR05  BWZ   HDR06,3&X3,B                          8  1990  V !21 0?3 B         25
258  6 030         BW    HDR06,13&X3                           8  1998  V !21 0A3 1         25
259  6 040         B     REST                                  4  2006  B !52               25
260  6 050  HDR55  MLC   @999@,RCYC                           7  2010  M F39 R59           25
261  6 060         B     HDR66                                 4  2017  B !38               25
262  6 070  HDR06  BCE   HDR55,31&X3,                         8  2021  B !10 0C1           25
263  6 080         MLNS  33&X3,RCYC                            7  2029  D 0C3 R59           26
264  6 090         CHAIN 2                                                                 MACRO
265                MLNS                                        1  2036  D           GEN     26
266                MLNS                                        1  2037  D           GEN     26
267  6 100  HDR66  B     PLACE                                 4  2038  B D64               26
268  6 110         DCW   COMMA                                 3  2044  R56                 26
269  6 120         B     PLACE                                 4  2045  B D64               26
270  6 130         DCW   RCYC                                  3  2051  R59                 26
271  6 140  REST   B     PLACE                                 4  2052  B D64               27
272  6 150         DCW   MACSEP                                3  2058  O54                 27
273  6 160  ALLFLS MLNS  9&X3,RCS3-3                           7  2059  D 0?9 Q37           27
274  6 170         CHAIN 2                                                                 MACRO
275                MLNS                                        1  2066  D           GEN     27
276                MLNS                                        1  2067  D           GEN     27
277  6 180         B     PLACES                                4  2068  B A09               27
278  6 190         DCW   RCSZST                                3  2074  Q23                 27
279  6 200         BCE   ALL01,46&X3,                          8  2075  B !87 0D6           28
280  6 210         B     ALL02                                 4  2083  B J22               28
281  6 220  ALL01  BCE   NOIOA,44&X3,                         8  2087  B J61 0D4           28
282  6 230         MLNS  45&X3,DA1                             7  2095  D 0D5 R77           28
283  6 240         MLNS                                        1  2102  D                   28
284  6 250         MLZS  45&X3,DA1                             7  2103  Y 0D5 R77           28
285  7 010         MLZS                                        1  2110  Y                   28
286  7 020         B     PLACES                                4  2111  B A09               29
287  7 030         DCW   DA1ST                                 3  2117  R60                 29
288  7 040         B     NOIOA                                 4  2118  B J61               29
289  7 050  ALL02  MLNS  45&X3,DA21                           7  2122  D 0D5 R98           29
290  7 060         MLNS                                        1  2129  D                   29
291  7 070         MLZS  45&X3,DA21                            7  2130  Y 0D5 R98           29
292  7 080         MLZS                                        1  2137  Y                   29
293  7 090         MLNS  47&X3,DA22                            7  2138  D 0D7 ?07           30
294  7 100         MLNS                                        1  2145  D                   30
295  7 110         MLZS  47&X3,DA22                            7  2146  Y 0D7 ?07           30
296  7 120         MLZS                                        1  2153  Y                   30
297  7 130         B     PLACES                                4  2154  B A09               30
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  7 140          DCW   DA2ST                                      3  2160  R81                 30
299  7 150  NOIOA   BW    NORN,10&X3                                 8  2161  V J99 0A0 1         30
300  7 160          BW    NORN,3&X3                                  8  2169  V J99 0?3 1         31
301  7 170          BCE   NORN,1&X3,3                                8  2177  B J99 0?1 3         31
302  7 180          MLC   0&X3,RNM                                   7  2185  M 0?0 ?28           31
303  7 190          B     PLACES                                     4  2192  B A09               31
304  7 200          DCW   RNMST                                      3  2198  ?11                 31
305  7 210  NORN    BWZ   NOWKA,2&X3,2                               8  2199  V K49 0?2 2         31
306  7 220          BW    YESWK,10&X3                                8  2207  V K35 0A0 1         32
307  7 230          BW    YESWK,3&X3                                 8  2215  V K35 0?3 1         32
308  7 240          BCE   YESWK,1&X3,3                               8  2223  B K35 0?1 3         32
309  7 250          B     NOWKA                                      4  2231  B K49               32
310  8 010  YESWK   MLC   0&X3,WKNM                                  7  2235  M 0?0 ?49           32
311  8 020          B     PLACES                                     4  2242  B A09               32
312  8 030          DCW   WKARST                                     3  2248  ?32                 33
313  8 040  NOWKA   B     START1                                     4  2249  B T44               33
314  8 050  DIAGNS  MLNS  4&X3,DGTST                                 7  2253  D 0?4 N37           33
315  8 060          BCE   TST03,DGTST,                               8  2260  B K79 N37           33
316  8 070          MLC   @E0B@,DIAG                                 7  2268  M F42 ?64           33
317  8 080          B     PLACDG                                     4  2275  B N38               33
318  8 090  TST03   BWZ   TST04,9&X3,2                              8  2279  V K98 0?9 2         34
319  8 100          MLC   @E0C@,DIAG                                 7  2287  M F45 ?64           34
320  8 110          B     PLACDG                                     4  2294  B N38               34
321  8 120  TST04   BW    DO04,4&X3                                  8  2298  V L10 0?4 1         34
322  8 130          B     TST05                                      4  2306  B L21               34
323  8 140  DO04    MLC   @E04@,DIAG                                7  2310  M F48 ?64           34
324  8 150          B     PLACDG                                     4  2317  B N38               35
325  8 160  TST05   BWZ   TST06,5&X3,2                              8  2321  V L40 0?5 2         35
326  8 170          MLC   @E0E@,DIAG                                 7  2329  M F51 ?64           35
327  8 180          B     PLACDG                                     4  2336  B N38               35
328  8 190  TST06   MLNS  5&X3,DGTST                                 7  2340  D 0?5 N37           35
329  8 200          BCE   TST07,DGTST,                               8  2347  B L66 N37           35
330  8 210          MLC   @E0F@,DIAG                                 7  2355  M F54 ?64           36
331  8 220          B     PLACDG                                     4  2362  B N38               36
332  8 230  TST07   BWZ   TST08,10&X3,2                             8  2366  V L85 0A0 2         36
333  8 240          MLC   @E0G@,DIAG                                 7  2374  M F57 ?64           36
334  8 250          B     PLACDG                                     4  2381  B N38               36
335  9 010  TST08   BWZ   TST09,6&X3,2                              8  2385  V M04 0?6 2         36
336  9 020          MLC   @E0H@,DIAG                                 7  2393  M F60 ?64           37
337  9 030          B     PLACDG                                     4  2400  B N38               37
338  9 040  TST09   BWZ   TST10,11&X3,2                            8  2404  V M23 0A1 2         37
339  9 050          MLC   @E0I@,DIAG                                 7  2412  M F63 ?64           37
340  9 060          B     PLACDG                                     4  2419  B N38               37
341  9 070  TST10   BWZ   TST11,4&X3,2                              8  2423  V M42 0?4 2         37
342  9 080          MLC   @E1?@,DIAG                                 7  2431  M F66 ?64           38
343  9 090          B     PLACDG                                     4  2438  B N38               38
344  9 100  TST11   BW    DO11,6&X3                                  8  2442  V M54 0?6 1         38
345  9 110          B     TST12                                      4  2450  B M65               38
346  9 120  DO11    MLC   @E1A@,DIAG                                7  2454  M F69 ?64           38
347  9 130          B     PLACDG                                     4  2461  B N38               38
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348  9 140  TST12  BWZ   TST13,7&X3,2                                 8  2465  V M84 0?7 2          39
349  9 150         MLC   @E1B@,DIAG                                   7  2473  M F72 ?64            39
350  9 160         B     PLACDG                                      4  2480  B N38                39
351  9 170  TST13  BW    DO13,5&X3                                   8  2484  V M96 0?5 1          39
352  9 180         B     TST14                                       4  2492  B N07                39
353  9 190  DO13   MLC   @E1C@,DIAG                                   7  2496  M F75 ?64            39
354  9 200         B     PLACDG                                      4  2503  B N38                40
355  9 210  TST14  MLNS  6&X3,DGTST                                   7  2507  D 0?6 N37            40
356  9 220         BCE   TST15,DGTST,                                8  2514  B N33 N37            40
357  9 230         MLC   @E1D@,DIAG                                   7  2522  M F78 ?64            40
358  9 240         B     PLACDG                                      4  2529  B N38                40
359  9 250  TST15  B     START2                                      4  2533  B T48                40
360 10 010  DGTST  DCW   #1                                          1  2537                       40
361 10 020  PLACDG SBR   PLCGEX&3                                    4  2538  H N52                41
362 10 030         B     PLACES                                      4  2542  B A09                41
363 10 040         DCW   DGST                                        3  2548  ?59                  41
364 10 050  PLCGEX B     0                                           4  2549  B 000                41
365 10 060  ENDST  EQU   *&1                                           2553
366 10 070         DCW   @.DE.IE.EB@                                 9  2561                       41
367 10 080  DTFST  EQU   *&1                                           2562
368 10 090  FILENM DCW   @.LCDTF.OP  I   @                          15  2576                       41
369 10 100         DC    @.MCFILETYPE .OP@                           15  2591                       42
370 10 110  PRNTST EQU   *&1                                           2592
371 10 120         DCW   @PRINTER  .MC@                             12  2603                       42
372 10 130  READST EQU   *&1                                           2604
373 10 140         DCW   @READER.MCCOBOL .OPYES.MC@                 24  2627                       43
374 10 150  PNCHST EQU   *&1                                           2628
375 10 160         DCW   @PUNCH .MC@                                 9  2636                       43
376 10 170  POCKST EQU   *&1                                           2637
377 10 180  POC    DCW   @CARDPOC  .OP   @                          15  2651                       44
378 10 190  MACSEP DC    @.MC@                                        3  2654                       44
379 10 200  TPINST EQU   *&1                                           2655
380 10 210         DCW   @TAP  E  ,INPUT .MCCOBOL .OPYES.MC@        33  2687                       45
381 10 220  TPOTST EQU   *&1                                           2688
382 10 230         DCW   @TAP  E  ,OUTPUT.MC@                       18  2705                       46
383 10 240  CHNDST EQU   *&1                                           2706
384 10 250  UNIT   DCW   @CHANDRIVE.OP   @                          15  2720                       46
385 11 010         DC    @.MC@                                        3  2723                       46
386 11 020  ALTDST EQU   *&1                                           2724
387 11 030  ALT    DCW   @ALTTAPE  .OP   @                          15  2738                       47
388 11 040         DC    @.MC@                                        3  2741                       47
389 11 050  UNLDST EQU   *&1                                           2742
390 11 060         DCW   @REWIND.OPUNLOAD.MC@                       18  2759                       47
391 11 070  NORWST EQU   *&1                                           2760
392 11 080         DCW   @REWIND.OPNORWD .MC@                       18  2777                       48
393 11 090  RCFBLK EQU   *&1                                           2778
394 11 100         DCW   @RECFORM  .OPBLOCKE  D@                    21  2798                       48
395 11 110  VRBLST EQU   *&1                                           2799
396 11 120         DCW   @,VARIABLE@                                 9  2807                       49
397 11 130  BLKSZS EQU   *&1                                           2808
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 11 140          DCW   @.MCBLOCKSIZE.OP@                             15  2822                    49
399 11 180  RCSZST  EQU   *&1                                            2823
400 11 190  RCS3    DCW   @SIZEREC  .OP   .MC@                          18  2840                    50
401 11 200  TYPLST  EQU   *&1                                            2841
402 11 210          DCW   @TYPELABEL.OPSTANDARD .MCCHECKLABEL  .OP@     39  2879                    51
403 11 220  IDNTST  EQU   *&1                                            2880
404 11 230          DCW   @IDENT .MC@                                    9  2888                    52
405 11 240  ALLST   EQU   *&1                                            2889
406 11 250          DCW   @ALL.MC@                                       6  2894                    52
407 12 010  RLSQST  EQU   *&1                                            2895
408 12 020  RSQ     DCW   @REELSEQ  .OP   @                             15  2909                    52
409 12 030          DC    @.MC@                                          3  2912                    52
410 12 040  SRLNST  EQU   *&1                                            2913
411 12 050          DCW   @SERIALNUM.OP@                                12  2924                    53
412 12 060  LTEMP   DCW   @.MC@                                          3  2927                    53
413 12 070  TEMP    DCW   #10                                           10  2937                    53
414 12 080          DC    @|@                                            1  2938                    53
415 12 081  FIVER   DCW   #5                                             5  2943                    53
416 12 082          DC    @|@                                            1  2944                    53
417 12 090  HDRST   EQU   *&1                                            2945
418 12 100          DCW   @HEADER.OP@                                    9  2953                    54
419 12 110  COMMA   DCW   @  ,@                                          3  2956                    54
420 12 120  RCYC    DCW   #3                                            3  2959                    54
421 12 130  DA1ST   EQU   *&1                                            2960
422 12 140  DA1     DCW   @IOAREAS  .OP  LI  @                          18  2977                    54
423 12 150          DC    @.MC@                                          3  2980                    54
424 12 160  DA2ST   EQU   *&1                                            2981
425 12 170  DA21    DCW   @IOAREAS  .OP  LI  @                          18  2998                    55
426 12 180  DA22    DC    @  ,  LI  @                                    9  3007                    55
427 12 190          DC    @.MC@                                          3  3010                    55
428 12 200  RNMST   EQU   *&1                                            3011
429 12 210  RNM     DCW   @IOAREAS  .OP  LI  @                          18  3028                    56
430 12 220          DC    @.MC@                                          3  3031                    56
431 12 230  WKARST  EQU   *&1                                            3032
432 12 240  WKNM    DCW   @WORKAREA .OP  L   @                          18  3049                    56
433 12 250  LCDAT   DC    @.MC@                                          3  3052                    57
434 13 010  CDATE   DCW   #5                                             5  3057                    57
435 13 020          DC    @|@                                            1  3058                    57
436 13 030  DGST    EQU   *&1                                            3059
437 13 040  DIAG    DCW   @***   @                                       6  3064                    57
438 13 050  GETFIL  SBR   GTFLEX&3                                       4  3065  H A08             57
439 13 060          MLC   3798,250                                       7  3069  M G98 250         57
440 13 070          MLC   @202@,X3                                       7  3076  M F81 099         58
441 13 080  RTALT   MLNS  445,RT&3                                       7  3083  D 445 ?97         58
442 13 090          B     IORW                                           4  3090  B 343             58
443 13 100  RT      RTW   5,200                                          8  3094  L %U5 200 R       58
444 13 110          DCW   EOJ                                            3  3104  T52               58
445 13 120  GTFLEX  B     0                                              4  3105  B 000             58
446 13 130  PLACES  SBR   X2                                             4  3109  H 094             58
447 13 140          SBR   PLCSEX&3,3&X2                                  7  3113  H A44 0!3         59
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 13 150         MLC   2&X2,X2                                     7  3120  M 0!2 094          59
449 13 160  PLCAA  MLC   2&X2,PLCGT                                   7  3127  M 0!2 A62          59
450 13 170         B     PLACE                                       4  3134  B D64              59
451 13 180         DCW   PLCGT                                       3  3140  A62                59
452 13 190  PLCSEX BW    0,3&X2                                      8  3141  V 000 0!3 1        59
453 13 200         SBR   X2,3&X2                                     7  3149  H 094 0!3          60
454 13 210         B     PLCAA                                       4  3156  B A27              60
455 13 220  PLCGT  DCW   #3                                          3  3162                     60
456 13 230         DA    1X300                                          3163   3462             60
457 13 240  PLCA          1                                             3163            SBFLD
458 13 250  PLCB          3                                             3165            SBFLD
459 14 010  PLCMAX EQU    *                                             3462
460 14 020         DC    @}@                                         1  3463                     61
461 14 030  PLACE  SBR    X1              SUBROUTINE                  4  3464  H 089              61
462 14 040         SBR   PLC2&3,3&X1         PLACE ON TAPE 4         7  3468  H E38 0|3          61
463 14 050         MLC   2&X1,PLC1&3                                 7  3475  M 0|2 D85          61
464 14 060  PLC1   MLC   0,PLCSY                                     7  3482  M 000 F18          61
465 14 070  PLC1A  MLC   PLCSY,PLCB          PLACE SYMBOL            7  3489  M F18 A65          62
466 14 080         C     PLCSY,@.EB@         LOOK FOR .EB            7  3496  C F18 F84          62
467 14 090         BE    PLC3                                        5  3503  B E39 S            62
468 14 100         C     PLC1A&6,&PLCMAX     LOOK FOR FULL BUFFER    7  3508  C D95 F87          62
469 14 110         BE    PLC3                                        5  3515  B E39 S            62
470 14 120         MA    @003@,PLC1A&6                                                 MACRO
471                SW    PLC1A&6-2                                   4  3520  , D93       GEN    62
472                A     @003@,PLC1A&6                               7  3524  A F90 D95   GEN    63
473                CW    PLC1A&6-2                                   4  3531  ) D93       GEN    63
474 14 130  PLC2   B     0                                           4  3535  B 000              63
475 14 140  PLC3   SW    PLC5&1                                      4  3539  , F15              63
476 14 150         B     IORW                                        4  3543  B 343              63
477 14 160         RT    4,PLC5              LOOK FOR END OF TAPE    8  3547  M %U4 F14 R        63
478 14 170         DCW   PLC4                                       3  3557  E62                63
479 14 180         B     PLC3                                        4  3558  B E39              64
480 14 190  PLC4   BSP   4                                           5  3562  U %U4 B            64
481 14 200         SW    PLCMAX&1                                    4  3567  , D63              64
482 14 210         B     IORW                                        4  3571  B 343              64
483 14 220         WT    4,PLCA              WRITE BUFFER            8  3575  M %U4 A63 W        64
484 14 230         DCW   *&1                                         3  3585  E86                64
485 14 240         WTM   4                   END TAPE                5  3586  U %U4 M            64
486 14 250         BSP   4                                           5  3591  U %U4 B            65
487 15 010         MLC   &PLCB,PLC1A&6                               7  3596  M F93 D95          65
488 15 020         ZA    @0@,PLCMAX                                  7  3603  ? F94 D62          65
489 15 030         B     PLC2                                        4  3610  B E35              65
490 15 040  PLC5   EQU   *&1                                           3614
491 15 050         DCW   @ }@                                        2  3615                     65
492 15 060  PLCSY  DCW   #3                                          3  3618                     65
493 15 070         LTORG                                                    3619
                   DCW   @.DT@                                       3  3621            LIT    65
                         @1@                                         1  3622            LIT    66
                         @4@                                         1  3623            LIT    66
                         @001@                                       3  3626            LIT    66
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @.@                                       1  3627              LIT     66
       226               &LTEMP                                    3  3630  R27         ADCON   66
       231               &FIVER-5                                  3  3633  R38         ADCON   66
       255               &LCDAT                                    3  3636  ?52         ADCON   66
                         @999@                                     3  3639              LIT     67
                         @E0B@                                     3  3642              LIT     67
                         @E0C@                                     3  3645              LIT     67
                         @E04@                                     3  3648              LIT     67
                         @E0E@                                     3  3651              LIT     67
                         @E0F@                                     3  3654              LIT     67
                         @E0G@                                     3  3657              LIT     67
                         @E0H@                                     3  3660              LIT     68
                         @E0I@                                     3  3663              LIT     68
                         @E1?@                                     3  3666              LIT     68
                         @E1A@                                     3  3669              LIT     68
                         @E1B@                                     3  3672              LIT     68
                         @E1C@                                     3  3675              LIT     68
                         @E1D@                                     3  3678              LIT     68
                         @202@                                     3  3681              LIT     69
                         @.EB@                                     3  3684              LIT     69
       468               &PLCMAX                                   3  3687  D62         ADCON   69
                         @003@                                     3  3690              LIT     69
       487               &PLCB                                     3  3693  A65         ADCON   69
                         @0@                                       1  3694              LIT     69
494 15 071  DIOCS  DCW   #1                                        1  3695                      69
495 15 072         DC    #49                                      49  3744                      71
496 15 073  DIOGM  DC    @}@                                       1  3745                      71
497 15 080         ORG   3798                                                 3798
498 15 090         DCW   @}@                                       1  3798                      72
499 15 100         END   START                                              / T29 080           73
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - F01 PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - F01
 102  1 020         CTL   631 11
 103  1 030         ORG   1300                                                  1300
 104  1 040  SUPER  EQU   351                                          0351
 105  1 050  GETX   EQU   335                                          0335
 106  1 060  PUTX   EQU   363                                          0363
 107  1 070  X1     EQU   89                                           0089
 108  1 080  BEGIN  B     GETSX                                    4  1300  B ?41               4
 109  1 090         C     SX,@*01@                                 7  1304  C R27 C48           4
 110  1 100         BU    BEGIN                                    5  1311  B T00 /             4
 111  1 110         B     PUTSX                                    4  1316  B ?59               4
 112  1 120  START  B     GETSX                                    4  1320  B ?41               4
 113  1 130  STRT0  C     SX,VNOTE                                 7  1324  C R27 R78           4
 114  1 140         BU    START0                                   5  1331  B T51 /             4
 115  1 150         B     PUTSX              NOTE PASS-THROUGH     4  1336  B ?59               5
 116  1 160         B     GTPTIL                                   4  1340  B ?74               5
 117  1 170         DCW   VNOTE                                    3  1346  R78                 5
 118  1 180         B     START2                                   4  1347  B U74               5
 119  1 190  START0 C     SX,VAC                                   7  1351  C R27 R81           5
 120  1 200         BU    START1                                   5  1358  B T78 /             5
 121  1 210         B     PUTSX              AUTOCODER PASS-THROUGH 4  1363  B ?59               5
 122  1 220         B     GTPTIL                                   4  1367  B ?74               6
 123  1 230         DCW   VAC                                      3  1373  R81                 6
 124  1 240         B     START2                                   4  1374  B U74               6
 125  1 250  START1 C     SX,VIF                                   7  1378  C R27 R84           6
 126  2 010         BE    IF                                       5  1385  B V34 S             6
 127  2 020         C     SX,VLPARN                                7  1390  C R27 R63           6
 128  2 030         BE    SBSC                                     5  1397  B O12 S             6
 129  2 040         C     SX,VOPEN                                 7  1402  C R27 R57           7
 130  2 050         BE    OPEN                                     5  1409  B O47 S             7
 131  2 060         C     SX,VCLOSE                                7  1414  C R27 R60           7
 132  2 070         BE    CLOSE                                    5  1421  B P19 S             7
 133  2 080         C     SX,VCOMP                                 7  1426  C R27 R66           7
 134  2 090         BE    COMP                                     5  1433  B N25 S             7
 135  2 100         C     SX,VWRITE                                7  1438  C R27 R75           8
 136  2 110         BE    WRITE                                    5  1445  B P91 S             8
 137  2 120         C     SX,VUNTIL                                7  1450  C R27 R87           8
 138  2 130         BE    UNTIL                                    5  1457  B U89 S             8
 139  2 140         C     SX,VAND            SUPPRESS NOISE-WORD AND 7  1462  C R27 R90           8
 140  2 150         BE    START                                    5  1469  B T20 S             8
 141  2 160  START2 B     PUTSX                                    4  1474  B ?59               9
 142  2 170         MLC   SX,LAST                                  7  1478  M R27 R54           9
 143  2 180         B     START                                    4  1485  B T20               9
 144  2 190  UNTIL  B     GETSX                                    4  1489  B ?41               9
 145  2 200         C     SX,VFIRST                                7  1493  C R27 ?37           9
 146  2 210         BE    UNTIL1                                   5  1500  B V23 S             9
 147  2 220         B     PUTX                                     4  1505  B 363               9
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          DCW   VIFOP                                       3  1511  R93                 10
149  2 240          B     PUTX                                        4  1512  B 363               10
150  2 250          DCW   VUNTIL                                     3  1518  R87                 10
151  3 010          B     IF3                                         4  1519  B V49               10
152  3 020  UNTIL1  B     PUTX                                        4  1523  B 363               10
153  3 030          DCW   VXTL                                      3  1529  ?40                 10
154  3 040          B     START2                                      4  1530  B U74               10
155  3 050  IF      B     PUTX              IF ROUTINE                4  1534  B 363               11
156  3 060          DCW   VIFOP                                       3  1540  R93                 11
157  3 070  IF1     B     PUTSX                                       4  1541  B ?59               11
158  3 080  IF2     B     GETSX                                       4  1545  B ?41               11
159  3 090  IF3     C     SX-2,@?@          NAME TEST                 7  1549  C R25 C49           11
160  3 100          BL    NAME                                        5  1556  B !71 T             11
161  3 110          BCE   RELAT,SX,#        RELATIONAL TESTS          8  1561  B !41 R27 #         11
162  3 120          C     SX-1,@$2@                                   7  1569  C R26 C51           12
163  3 130          BE    RELAT                                       5  1576  B !41 S             12
164  3 140          C     SX,VGE                                      7  1581  C R27 R96           12
165  3 150          BE    RELAT                                       5  1588  B !41 S             12
166  3 160          C     SX,VLE                                      7  1593  C R27 R99           12
167  3 170          BE    RELAT                                       5  1600  B !41 S             12
168  3 180          C     SX,VNOT           NOT TEST                  7  1605  C R27 ?02           13
169  3 190          BE    NOT                                         5  1612  B Y64 S             13
170  3 200          C     SX-1,@$3@         LOGICAL TEST              7  1617  C R26 C53           13
171  3 210          BE    LOGIC                                       5  1624  B X55 S             13
172  3 220          C     SX-1,@$1@                                   7  1629  C R26 C55           13
173  3 230          BE    CLSGN                                       5  1636  B X07 S             13
174  3 240          C     SX,VSW                                      7  1641  C R27 ?05           14
175  3 250          BE    SWITCH                                      5  1648  B Y38 S             14
176  4 010          BCE   LEFTP,SX,%         LEFT-PAREN TEST           8  1653  B Y20 R27 %         14
177  4 020          BCE   RIGHTP,SX,)        RIGHT-PAREN TEST          8  1661  B X70 R27 )         14
178  4 030          BCE   IF4,SX-2,          REFERENCE-SYMBOL TEST     8  1669  B W93 R25           14
179  4 040          C     SX,VSBSC                                    7  1677  C R27 R45           15
180  4 050          BE    IF4                                         5  1684  B W93 S             15
181  4 060          B     EOIF                                        4  1689  B X26               15
182  4 070  IF4     B     ADSL                                        4  1693  B A42               15
183  4 080          DCW   WORKST                                      3  1699  C81                 15
184  4 090                SX                                        3  1702  R27                 15
185  4 100          B     IF2                                         4  1703  B V45               15
186  4 110  CLSGN   B     PUTX                                        4  1707  B 363               16
187  4 120          DCW   VPS                                       3  1713  ?15                 16
188  4 130          B     PUTXST                                      4  1714  B M94               16
189  4 140          B     PUTSX                                       4  1718  B ?59               16
190  4 150          B     IF2                                         4  1722  B V45               16
191  4 160  EOIF    B     PURGE             END OF CONDITIONAL EXPRESSION 4  1726  B J15             16
192  4 170          B     PUTX                                        4  1730  B 363               16
193  4 180          DCW   VEX                                       3  1736  ?18                 17
194  4 190          B     PUTX                                        4  1737  B 363               17
195  4 200          DCW   VKV                                       3  1743  ?08                 17
196  4 210          MLC   @0@,RLTSW                                  7  1744  M C56 ?22           17
197  4 220          B     STRT0                                       4  1751  B T24               17
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  LOGIC  B     PURGE              LOGICAL OPERATOR ROUTINE   4  1755  B J15              17
199  4 240         B     PUTX                                          4  1759  B 363              17
200  4 250         DCW   VEX                                           3  1765  ?18                18
201  5 010         B     IF1                                           4  1766  B V41              18
202  5 020  RIGHTP BCE   IF4,LPARN,0         RIGHT-PAREN ROUTINE       8  1770  B W93 ?09 0        18
203  5 030         S     &1,PRNCNT                                     7  1778  S C57 ?12          18
204  5 040  RGT0   BWZ   RGT2,PRNCNT,K                                8  1785  V Y04 ?12 K        18
205  5 050  RGT1   MLZS  @ @,PRNCNT                                   7  1793  Y C58 ?12          18
206  5 060         B     IF4                                           4  1800  B W93              19
207  5 070  RGT2   C     PRNCNT,@00!@                                  7  1804  C ?12 C61          19
208  5 080         BE    RGT1                                          5  1811  B X93 S            19
209  5 090         B     IF4                                           4  1816  B W93              19
210  5 100  LEFTP  MLC   @1@,LPARN           LEFT-PAREN ROUTINE        7  1820  M C62 ?09          19
211  5 110         A     &1,PRNCNT                                     7  1827  A C57 ?12          19
212  5 120         B     RGT0                                          4  1834  B X85              19
213  5 130  SWITCH B     PUTX               SWITCH ROUTINE             4  1838  B 363              20
214  5 140         DCW   VPS                                           3  1844  ?15                20
215  5 150         B     GETSX                                         4  1845  B ?41              20
216  5 160         B     PUTSX                                         4  1849  B ?59              20
217  5 170         B     PUTX                                          4  1853  B 363              20
218  5 180         DCW   VSW                                           3  1859  ?05                20
219  5 190         B     IF2                                           4  1860  B V45              20
220  5 200  NOT    B     GETSX              NOT ROUTINE                4  1864  B ?41              21
221  5 210         C     WORKST,NULL                                   7  1868  C C81 C84          21
222  5 220         BU    NOT2                                          5  1875  B Z42 /            21
223  5 230         BCE   NOT1,SX,#          RELATIONAL TESTS           8  1880  B Z24 R27 #        21
224  5 240         C     SX-1,@$2@                                     7  1888  C R26 C51          21
225  5 250         BE    NOT1                                          5  1895  B Z24 S            21
226  6 010         C     SX,VGE                                        7  1900  C R27 R96          22
227  6 020         BE    NOT1                                          5  1907  B Z24 S            22
228  6 030         C     SX,VLE                                        7  1912  C R27 R99          22
229  6 040         BU    NOT5                                          5  1919  B !30 /            22
230  6 050  NOT1   B     PUTX                                          4  1924  B 363              22
231  6 060         DCW   VRL                                           3  1930  ?21                22
232  6 070         B     PUTX                                          4  1931  B 363              22
233  6 080         DCW   VNOT                                          3  1937  ?02                23
234  6 090         B     RELAT1                                        4  1938  B !60              23
235  6 100  NOT2   C     SX,VZERO                                      7  1942  C R27 C45          23
236  6 110         BU    NOT3                                          5  1949  B Z78 /            23
237  6 120         B     ADSL               INSERT EQUALS BEFORE ZERO  4  1954  B A42              23
238  6 130         DCW   WORKST                                        3  1960  C81                23
239  6 140               VNOT                                          3  1963  ?02                23
240  6 150         B     ADSL                                          4  1964  B A42              24
241  6 160         DCW   WORKST                                        3  1970  C81                24
242  6 170               VEQU                                          3  1973  R48                24
243  6 180         B     IF4                                           4  1974  B W93              24
244  6 190  NOT3   C     SX-1,@$1@          CLASS/SIGN TEST            7  1978  C R26 C55          24
245  6 200         BU    NOT4                                          5  1985  B !16 /            24
246  6 210         B     PUTX                                          4  1990  B 363              24
247  6 220         DCW   VPS                                           3  1996  ?15                25
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         B     PUTXST                               4  1997  B M94               25
249  6 240         B     PUTX                                 4  2001  B 363               25
250  6 250         DCW   VNOT                                 3  2007  ?02                 25
251  7 010         B     PUTSX                                4  2008  B ?59               25
252  7 020         B     IF2                                  4  2012  B V45               25
253  7 030  NOT4   B     ADSL                                 4  2016  B A42               25
254  7 040         DCW   WORKST                               3  2022  C81                 26
255  7 050               VNOT                                 3  2025  ?02                 26
256  7 060         B     IF3                                  4  2026  B V49               26
257  7 070  NOT5   B     PUTX                                 4  2030  B 363               26
258  7 080         DCW   VNOT                                 3  2036  ?02                 26
259  7 090         B     IF3                                  4  2037  B V49               26
260  7 100  RELAT  C     WORKST,NULL                          7  2041  C C81 C84           26
261  7 110         BU    IF4                                  5  2048  B W93 /            27
262  7 120         B     PUTX                                 4  2053  B 363               27
263  7 130         DCW   VRL                                  3  2059  ?21                 27
264  7 140  RELAT1 MLC   @1@,RLTSW                           7  2060  M C62 ?22           27
265  7 150         B     IF1                                  4  2067  B V41               27
266  7 160  NAME   MLC   SX,SYM                              7  2071  M R27 ?25           27
267  7 170         B     GETSX                                4  2078  B ?41               27
268  7 180         BCE   NAME2,SX,%                          8  2082  B J04 R27 %         28
269  7 190  NAME1  B     ADSL                                 4  2090  B A42               28
270  7 200         DCW   WORKST                               3  2096  C81                 28
271  7 210               SYM                                  3  2099  ?25                 28
272  7 220         B     IF3                                  4  2100  B V49               28
273  7 230  NAME2  MLC   VSB,SX                              7  2104  M ?28 R27           28
274  7 240         B     NAME1                                4  2111  B !90               28
275  7 250  PURGE  SBR   PEXIT&3                             4  2115  H M56               29
276  8 010         C     WORKST,NULL                          7  2119  C C81 C84           29
277  8 020         BE    PURGEA                               5  2126  B M32 S             29
278  8 030         BCE   PRG1A,LPARN,0                        8  2131  B M20 ?09 0         29
279  8 040         C     PRNCNT,NULL                          7  2139  C ?12 C84           29
280  8 050         BE    PURGE1                               5  2146  B J86 S             29
281  8 060  PRG00  BCE   PRG001,FIRST,%                      8  2151  B J71 C90 %         30
282  8 061         C     FIRST,VNOT                           7  2159  C C90 ?02           30
283  8 070         BU    PURGE1                               5  2166  B J86 /             30
284  8 080  PRG001 B     PUTX                                 4  2171  B 363               30
285  8 090         DCW   VLPARN                               3  2177  R63                 30
286  8 100         B     DROP                                 4  2178  B M57               30
287  8 101         B     PRG00                                4  2182  B J51               30
288  8 110  PURGE1 BCE   PURGE3,RLTSW,0                      8  2186  B K16 ?22 0         31
289  8 120         MLC   @0@,RLTSW                           7  2194  M C56 ?22           31
290  8 130         B     PUTX                                 4  2201  B 363               31
291  8 140         DCW   VCO                                  3  2207  ?31                 31
292  8 150         B     PUTXST                               4  2208  B M94               31
293  8 160  PURGE2 B     PURGEA                               4  2212  B M32               31
294  8 170  PURGE3 B     PUTX                                 4  2216  B 363               31
295  8 180         DCW   VCS                                  3  2222  ?34                 32
296  8 190  PURGE4 C     WORKST,NULL                          7  2223  C C81 C84           32
297  8 200         BE    PURGE2                               5  2230  B K12 S             32
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 210  PURGEB NOP   PURGEC                                     4  2235  N K62               32
299  8 220         C     FIRST,VZERO                               7  2239  C C90 C45           32
300  8 230         BE    PURGE8                                    5  2246  B M05 S             32
301  8 240         MLC   @B@,PURGEB                                7  2251  M C63 K35           32
302  8 250         B     PURGED                                    4  2258  B K92               33
303  9 010  PURGEC C     FIRST,VZERO                               7  2262  C C90 C45           33
304  9 020         BU    PURGED                                    5  2269  B K92 /             33
305  9 030         B     PUTX                                      4  2274  B 363               33
306  9 040         DCW   VRL                                       3  2280  ?21                 33
307  9 050         B     PUTX                                      4  2281  B 363               33
308  9 060         DCW   VEQU                                      3  2287  R48                 33
309  9 070         B     PURGEF                                    4  2288  B L98               34
310  9 080  PURGED C     FIRST,VNOT                                7  2292  C C90 ?02           34
311  9 090         BE    PURGE5                                    5  2299  B L48 S             34
312  9 100         BCE   PURGE5,FIRST,#                           8  2304  B L48 C90 #         34
313  9 110         C     FIRST-1,@$2@                              7  2312  C C89 C51           34
314  9 120         BE    PURGE5                                    5  2319  B L48 S             34
315  9 130         C     FIRST,VGE                                 7  2324  C C90 R96           35
316  9 140         BE    PURGE5                                    5  2331  B L48 S             35
317  9 150         C     FIRST,VLE                                 7  2336  C C90 R99           35
318  9 160         BU    PURGE8                                    5  2343  B M05 /             35
319  9 170  PURGE5 B     PUTX                                      4  2348  B 363               35
320  9 180         DCW   VRL                                       3  2354  ?21                 35
321  9 190  PURGE6 B     PUTX                                      4  2355  B 363               35
322  9 200         DCW   FIRST                                     3  2361  C90                 36
323  9 210         C     FIRST,VNOT                                7  2362  C C90 ?02           36
324  9 220         BU    PURGE7                                    5  2369  B L82 /             36
325  9 230         B     DROP                                      4  2374  B M57               36
326  9 240         B     PURGE6                                    4  2378  B L55               36
327  9 250  PURGE7 B     DROP                                      4  2382  B M57               36
328 10 010         C     WORKST,NULL                               7  2386  C C81 C84           36
329 10 020         BE    PURGE2                                    5  2393  B K12 S             37
330 10 030  PURGEF B     PUTX                                      4  2398  B 363               37
331 10 040         DCW   VCO                                       3  2404  ?31                 37
332 10 050  PURGE8 B     PUTX                                      4  2405  B 363               37
333 10 060         DCW   FIRST                                     3  2411  C90                 37
334 10 070         B     DROP                                      4  2412  B M57               37
335 10 080         B     PURGE4                                    4  2416  B K23               37
336 10 090  PRG1A  BCE   PURGE8,FIRST,)                           8  2420  B M05 C90 )         38
337 10 100         B     PURGE1                                    4  2428  B J86               38
338 10 110  PURGEA MLC   @0@,LPARN                                7  2432  M C56 ?09           38
339 10 120         MLC   @N@,PURGEB                               7  2439  M C64 K35           38
340 10 130         MLC   NULL,PRNCNT                              7  2446  M C84 ?12           38
341 10 140  PEXIT  B     *                                         4  2453  B M56               38
342 10 150  DROP   SBR   DEXIT&3                                   4  2457  H M93               39
343 10 160         MRCM  FIRST&1,FIRST-2                           7  2461  P C91 C88           39
344 10 170         MLC   @ @                                       4  2468  M C58               39
345 10 180         SBR   ENDST                                     4  2472  H C78               39
346 10 190         S     &3,WORKST                                 7  2476  S C65 C81           39
347 10 200         MLZS  @ @,WORKST                                7  2483  Y C58 C81           39
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 210  DEXIT  B     *                                             4  2490  B M93               39
349 10 220  PUTXST SBR   PSTEX&3                                       4  2494  H N24               40
350 10 230  PST01  BCE   PSTEX,FIRST-2,|                              8  2498  B N21 C88 |         40
351 10 240         B     PUTX                                          4  2506  B 363               40
352 10 250         DCW   FIRST                                         3  2512  C90                 40
353 11 010         B     DROP                                          4  2513  B M57               40
354 11 020         B     PST01                                         4  2517  B M98               40
355 11 030  PSTEX  B     *                                             4  2521  B N24               40
356 11 040  COMP   B     PUTSX                                         4  2525  B ?59               41
357 11 050         B     GETSX                                         4  2529  B ?41               41
358 11 060         C     SX,VRNDD                                      7  2533  C R27 O11           41
359 11 070         BE    CRNDD                                         5  2540  B N91 S             41
360 11 080         C     SX,VEQU                                       7  2545  C R27 R48           41
361 11 090         BE    COMP1                                         5  2552  B N80 S             41
362 11 100         BCE   CSUB,SX,%                                     8  2557  B N69 R27 %         42
363 11 110         B     COMP                                          4  2565  B N25               42
364 11 120  CSUB   MLC   VSBSC,SX                                      7  2569  M R45 R27           42
365 11 130         B     COMP                                          4  2576  B N25               42
366 11 140  COMP1  MLC   VASGN,SX                                      7  2580  M R51 R27           42
367 11 150         B     START2                                        4  2587  B U74               42
368 11 160  CRNDD  B     GETSX                                         4  2591  B ?41               42
369 11 170         MLC   VAR,SX                                       7  2595  M O08 R27           43
370 11 180         B     START2                                        4  2602  B U74               43
371 11 190  VAR    DCW   @*10@                                         3  2608                      43
372 11 200  VRNDD        @*10@                                         3  2611                      43
373 11 210  SBSC   C     LAST-2,@A@          LEFT-PAREN & SUBSCRIPTING 7  2612  C R52 C66           43
374 11 220         BH    START2                                        5  2619  B U74 U             43
375 11 230         C     LAST-2,@R@                                    7  2624  C R52 C67           43
376 11 240         BL    START2                                        5  2631  B U74 T             44
377 11 250         B     PUTX                                          4  2636  B 363               44
378 12 010         DCW   VSBSC                                         3  2642  R45                 44
379 12 020         B     START                                         4  2643  B T20               44
380 12 030  OPEN   B     PUTSX               OPEN                      4  2647  B ?59               44
381 12 040         B     GETSX                                         4  2651  B ?41               44
382 12 050  OPEN1  B     GETSX                                         4  2655  B ?41               44
383 12 060         C     SX-2,@A@                                      7  2659  C R25 C66           45
384 12 070         BH    OPEN2                                         5  2666  B O91 U             45
385 12 080         C     SX-2,@R@                                      7  2671  C R25 C67           45
386 12 090         BL    OPEN2                                         5  2678  B O91 T             45
387 12 100         B     PUTSX                                         4  2683  B ?59               45
388 12 110         B     OPEN1                                         4  2687  B O55               45
389 12 120  OPEN2  C     SX,VINPUT                                     7  2691  C R27 R30           45
390 12 130         BE    OPEN1                                         5  2698  B O55 S             46
391 12 140         C     SX,VOUTPT                                     7  2703  C R27 R33           46
392 12 150         BE    OPEN1                                         5  2710  B O55 S             46
393 12 160         B     STRT0                                         4  2715  B T24               46
394 12 170  CLOSE  B     PUTSX               CLOSE                     4  2719  B ?59               46
395 12 180  CLOSE1 B     GETSX                                         4  2723  B ?41               46
396 12 190         C     SX-2,@A@                                      7  2727  C R25 C66           46
397 12 200         BH    CLOSE2                                        5  2734  B P51 U             47
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 210          C     SX-2,@S@                                     7  2739  C R25 C68           47
399 12 220          BH    CLOSE                                        5  2746  B P19 U             47
400 12 230  CLOSE2  C     SX,VNO                                       7  2751  C R27 R36           47
401 12 240          BE    CLOSE1                                       5  2758  B P23 S             47
402 12 250          C     SX,VLOCK                                     7  2763  C R27 R39           47
403 13 010          BE    CLOSE1                                       5  2770  B P23 S             48
404 13 020          C     SX,VRWND                                     7  2775  C R27 R42           48
405 13 030          BE    CLOSE1                                       5  2782  B P23 S             48
406 13 040          B     STRT0                                        4  2787  B T24               48
407 13 050  WRITE   B     GETX                                         4  2791  B 335               48
408 13 060          DCW   RCDNM                                        3  2797  R69                 48
409 13 070          EOJ                                                3  2800  R14                 48
410 13 080          B     GETSX                                        4  2801  B ?41               49
411 13 090          C     SX,VFROM                                     7  2805  C R27 R72           49
412 13 100          BU    WRITE2                                       5  2812  B Q66 /             49
413 13 110          B     GETSX                                        4  2817  B ?41               49
414 13 120          B     PUTX                                         4  2821  B 363               49
415 13 130          DCW   VMOVE              MOVE                    3  2827  R10                 49
416 13 140  WRITE0  B     PUTSX              FIRST SYM OF AREA         4  2828  B ?59               49
417 13 150          B     GETSX                                        4  2832  B ?41               50
418 13 160          BCE   WRITE4,SX,%                                 8  2836  B Q48 R27 %         50
419 13 170          B     WRITE1                                       4  2844  B Q59               50
420 13 180  WRITE4  MLC   VSBSC,SX                                     7  2848  M R45 R27           50
421 13 190          B     WRITE3                                       4  2855  B Q84               50
422 13 200  WRITE1  B     PUTX                                         4  2859  B 363               50
423 13 210          DCW   RCDNM              TO RECORD-NAME            3  2865  R69                 50
424 13 220  WRITE2  B     PUTX                                         4  2866  B 363               51
425 13 230          DCW   VWRITE             WRITE                     3  2872  R75                 51
426 13 240          B     PUTX                                         4  2873  B 363               51
427 13 250          DCW   RCDNM              RECORD-NAME               3  2879  R69                 51
428 14 010          B     STRT0                                        4  2880  B T24               51
429 14 020  WRITE3  C     SX,VRP                                       7  2884  C R27 R13           51
430 14 030          BE    WRITE0                                       5  2891  B Q28 S             51
431 14 040          B     PUTSX                                        4  2896  B ?59               52
432 14 050          B     GETSX                                        4  2900  B ?41               52
433 14 060          B     WRITE3                                       4  2904  B Q84               52
434 14 070  VMOVE   DCW   @)15@                                       3  2910                      52
435 14 080  VRP     DCW   @  )@                                        3  2913                      52
436 14 090  EOJ     B     PUTSX                                        4  2914  B ?59               52
437 14 100          B     SUPER                                        4  2918  B 351               52
438 14 110          DCW   @F02@                                       3  2924                      53
439 14 120  SX      DCW   #3                                          3  2927                      53
440 14 130  VINPUT        @*20@                                      3  2930                      53
441 14 140  VOUTPT        @*15@                                      3  2933                      53
442 14 150  VNO           @*33@                                      3  2936                      53
443 14 160  VLOCK   DCW   @*26@                                       3  2939                      53
444 14 170  VRWND        @*13@                                      3  2942                      53
445 14 180  VSBSC        @.SB@                                      3  2945                      54
446 14 190  VEQU         @  #@                                      3  2948                      54
447 14 200  VASGN   DCW   @*16@                                       3  2951                      54
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 210  LAST          #3                                    3  2954                      54
449 14 220  VOPEN         @)14@                                 3  2957                      54
450 14 230  VCLOSE       @)09@                                 3  2960                      54
451 14 240  VLPARN       @  %@                                 3  2963                      54
452 14 250  VCOMP         @)05@                                 3  2966                      55
453 15 010  RCDNM         #3                                    3  2969                      55
454 15 020  VFROM        @*28@                                 3  2972                      55
455 15 030  VWRITE       @)08@                                 3  2975                      55
456 15 040  VNOTE        @*24@                                 3  2978                      55
457 15 050  VAC     DCW   @#DC@                                 3  2981                      55
458 15 060  VIF           @)19@                                 3  2984                      55
459 15 070  VUNTIL       @*18@                                 3  2987                      56
460 15 080  VAND          @$32@                                 3  2990                      56
461 15 090  VIFOP         @)IF@                                 3  2993                      56
462 15 100  VGE           @.GE@                                 3  2996                      56
463 15 110  VLE           @.LE@                                 3  2999                      56
464 15 120  VNOT          @$30@                                 3  3002                      56
465 15 130  VSW           @.SW@                                 3  3005                      56
466 15 140  VKV           @.KV@                                 3  3008                      57
467 15 150  LPARN         @0@                                   1  3009                      57
468 15 160  PRNCNT       @000@                                 3  3012                      57
469 15 170  VPS           @.PS@                                 3  3015                      57
470 15 180  VEX           @.EX@                                 3  3018                      57
471 15 190  VRL           @.RL@                                 3  3021                      57
472 15 200  RLTSW         @0@                                   1  3022                      57
473 15 210  SYM           #3                                    3  3025                      58
474 15 220  VSB           @.SB@                                 3  3028                      58
475 15 230  VCO           @.CO@                                 3  3031                      58
476 15 240  VCS           @.CS@                                 3  3034                      58
477 15 250  VFIRST        @*38@                                 3  3037                      58
478 16 010  VXTL          @/XT@                                 3  3040                      58
479 16 020  GETSX   SBR   GTSEX&3             GETSX             4  3041  H ?58               58
480 16 030          B     GETX                                  4  3045  B 335               59
481 16 040          DCW   &SX                                   3  3051  R27                 59
482 16 050                &EOJ                                  3  3054  R14                 59
483 16 060  GTSEX   B     *                                     4  3055  B ?58               59
484 16 070  PUTSX   SBR   PTSEX&3             PUTSX             4  3059  H ?73               59
485 16 080          B     PUTX                                  4  3063  B 363               59
486 16 090          DCW   &SX                                   3  3069  R27                 59
487 16 100  PTSEX   B     *                                     4  3070  B ?73               60
488 16 110  GTPTIL  SBR   X1                GTPTIL            4  3074  H 089               60
489 16 120          MLC   @P@,GTPSW                           7  3078  M C69 A41           60
490 16 130          MLC   X1,GTLSV                            7  3085  M 089 A40           60
491 16 140          MLC   2&X1,GTL03&3                        7  3092  M 0|2 A06           60
492 16 150  GTL02   B     GETSX                               4  3099  B ?41               60
493 16 160  GTL03   C     *,SX                                7  3103  C A09 R27           61
494 16 170          BE    GTL04                               5  3110  B A27 S             61
495 16 180          BCE   PUTSX,GTPSW,P                       8  3115  B ?59 A41 P         61
496 16 190          B     GTL02                               4  3123  B ?99               61
497 16 200  GTL04   MLC   GTLSV,X1                            7  3127  M A40 089           61
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 210         B     3&X1                                      4  3134  B 0|3              61
499 16 220  GTLSV  DCW   #3                                       3  3140                     61
500 16 230  GTPSW        #1                                       1  3141                     62
501 16 240  ADSL   SBR   X1                                       4  3142  H 089              62
502 16 250         SBR   ADSL5&3,6&X1        FIX EXIT            7  3146  H B65 0|6          62
503 17 010         MLC   2&X1,ADSL1          STRING 1            7  3153  M 0|2 A87          62
504 17 020         MLC   ADSL1,ADSL4&6       STRING1             7  3160  M A87 B47          62
505 17 030         MLC   5&X1,ADSL3&3        SYMBOL              7  3167  M 0|5 B33          62
506 17 040         A     @003@,ADSL1                             7  3174  A C72 A87          63
507 17 050         B     LCST                LOCATE FIRST OF NEXT STRING  4  3181  B B66    63
508 17 060  ADSL1  DCW   #3                                       3  3187                     63
509 17 070         LOCTN                                         3  3190  C42                63
510 17 080         MLC   ENDST,X1            SET OPENER          7  3191  M C78 089          63
511 17 090         SBR   ADSL2&3,0&X1                            7  3198  H B26 0|0          63
512 17 100         SBR   ADSL2&6,3&X1                            7  3205  H B29 0|3          63
513 17 110         MLC   LOCTN,X1                               7  3212  M C42 089          64
514 17 120         SW    0&X1                                    4  3219  , 0|0              64
515 17 130  ADSL2  MLC   0,0                 OPEN STRING AREA    7  3223  M 000 000          64
516 17 140  ADSL3  MLC   0,2&X1                                  7  3230  M 000 0|2          64
517 17 150         CW    0&X1                                    4  3237  ) 0|0              64
518 17 160  ADSL4  A     @003@,0             INCREMENT NORM      7  3241  A C72 000          64
519 17 170         MLC   ENDST,X1                                7  3248  M C78 089          65
520 17 180         SBR   ENDST,3&X1                              7  3255  H C78 0|3          65
521 17 190  ADSL5  B     0                   EXIT                4  3262  B 000              65
522 17 200  *         LOCATION GIVEN IS LEFT END CHARACTER
523 17 210  LCST   SBR   X1                                       4  3266  H 089              65
524 17 220         MLC   2&X1,*&4            SET ADDER           7  3270  M 0|2 B80          65
525 17 230         MLC   0,LOCTN                                 7  3277  M 000 C42          65
526 17 240         SAR   LCST2&3                                 4  3284  Q C28              66
527 17 250         MLC   BGNST,LOCTN         INITIALIZE COUNTER  7  3288  M C87 C42          66
528 18 010  LCST1  C     LCST2&3,&BGNLC      TEST FOR END        7  3295  C C28 C75          66
529 18 020         BU    LCST2                                   5  3302  B C25 /            66
530 18 030         MLC   5&X1,*&7                                7  3307  M 0|5 C20          66
531 18 040         MLC   LOCTN,*                                 7  3314  M C42 C20          66
532 18 050         B     6&X1                                    4  3321  B 0|6              67
533 18 060  LCST2  A     0,LOCTN             ADDER               7  3325  A 000 C42          67
534 18 070         SAR   LCST2&3             DECREMENT ADDER     4  3332  Q C28              67
535 18 080         B     LCST1                                   4  3336  B B95              67
536 18 090  LOCTN  DCW   #3                  LOCATION OF STRING  3  3342                     67
537 18 100  VZERO  DCW   @A0Q@                                   3  3345                     67
538 18 110         LTORG                                                 3346
                   DCW   @*01@                                   3  3348            LIT     67
                         @?@                                     1  3349            LIT     68
                         @$2@                                    2  3351            LIT     68
                         @$3@                                    2  3353            LIT     68
                         @$1@                                    2  3355            LIT     68
                         @0@                                     1  3356            LIT     68
                         &1                                      1  3357            LIT     68
                         @ @                                     1  3358            LIT     68
                         @00!@                                   3  3361            LIT     69
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @1@                                       1  3362              LIT     69
                         @B@                                       1  3363              LIT     69
                         @N@                                       1  3364              LIT     69
                         &3                                        1  3365              LIT     69
                         @A@                                       1  3366              LIT     69
                         @R@                                       1  3367              LIT     69
                         @S@                                       1  3368              LIT     70
                         @P@                                       1  3369              LIT     70
                         @003@                                     3  3372              LIT     70
      528                &BGNLC                                    3  3375  C78         ADCON   70
539 18 120  ENDST  DCW   RM                                        3  3378  C88                 70
540 18 130  BGNLC  EQU   *                                           3378
541 18 140  WORKST DCW   @000@                                     3  3381                      70
542 18 150  NULL       @000@                                     3  3384                      70
543 18 160  BGNST  DCW   RM                                        3  3387  C88                 71
544 18 170  RM     DC    @|@                                       1  3388                      71
545 18 180  FIRST  DC    #2                                        2  3390                      71
546 18 190         ORG   3798                                                 3798
547 18 200         DCW   @}@                                       1  3798                      72
548 18 210         END   START                                              / T20 080           73
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - F02 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - F02							
102	1	020		CTL	631 11							
103	1	030		ORG	1300					1300		
104	1	040	SUPER	EQU	351				0351			
105	1	050	GETX	EQU	335				0335			
106	1	060	PUTX	EQU	363				0363			
107	1	070	X1	EQU	89				0089			
108	1	080	X2	EQU	94				0094			
109	1	090	START	B	GTPTIL			4	1300	B L87		4
110	1	100		DCW	VPROC			3	1306	X70		4
111	1	110	START1	B	PUTSX	GENERAL CONTROL		4	1307	B L72		4
112	1	120	START2	B	GETSX			4	1311	B L54		4
113	1	130	START3	C	SX,VIFOP			7	1315	C X73 X76		4
114	1	140		BE	IF			5	1322	B T89 S		4
115	1	150		C	SX,VCOMP			7	1327	C X73 Z07		4
116	1	160		BE	COMP			5	1334	B Y08 S		5
117	1	170		C	SX,VNOTE			7	1339	C X73 X98		5
118	1	180		BU	START6			5	1346	B T73 /		5
119	1	190	START5	MLC	SX,TEST			7	1351	M X73 Y04		5
120	1	200		B	PUTSX			4	1358	B L72		5
121	1	210		B	GTPTIL			4	1362	B L87		5
122	1	220		DCW	TEST			3	1368	Y04		5
123	1	230		B	START1			4	1369	B T07		6
124	1	240	START6	C	SX,VAC			7	1373	C X73 Y01		6
125	1	250		BE	START5			5	1380	B T51 S		6
126	2	010		B	START1			4	1385	B T07		6
127	2	020	IF	B	GETSX			4	1389	B L54		6
128	2	030	IF0	B	PUTSX			4	1393	B L72		6
129	2	040	IF1	B	GETSX			4	1397	B L54		6
130	2	050		C	SX,VPS			7	1401	C X73 X79		7
131	2	060		BU	IF4			5	1408	B U24 /		7
132	2	070	IF3	B	GTPTIL			4	1413	B L87		7
133	2	080		DCW	VEX			3	1419	X82		7
134	2	090		B	IF1			4	1420	B T97		7
135	2	100	IF4	C	SX,VRL			7	1424	C X73 X85		7
136	2	110		BU	IF5			5	1431	B U90 /		7
137	2	120		B	PUTXST			4	1436	B Z11		8
138	2	130		DCW	SBJST			3	1442	M81		8
139	2	140	IF4A	B	GETSX			4	1443	B L54		8
140	2	150		C	SX,VCO			7	1447	C X73 X88		8
141	2	160		BE	IF3			5	1454	B U13 S		8
142	2	170		C	SX,VEX			7	1459	C X73 X82		8
143	2	180		BU	IF4B			5	1466	B U82 /		8
144	2	190		B	PUTXST			4	1471	B Z11		9
145	2	200		DCW	OBJST			3	1477	M75		9
146	2	210		B	IF1			4	1478	B T97		9
147	2	220	IF4B	B	PUTSX			4	1482	B L72		9

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		B	IF4A		4	1486	B U43	9
149	2	240	IF5	C	SX,VCS		7	1490	C X73 X91	9
150	2	250		BU	IF13		5	1497	B X41 /	9
151	3	010	IF6	B	GETSX		4	1502	B L54	10
152	3	020		C	SX,VEX		7	1506	C X73 X82	10
153	3	030		BU	IF7		5	1513	B V50 /	10
154	3	040		B	PUTXST		4	1518	B Z11	10
155	3	050		DCW	SBJST		3	1524	M81	10
156	3	060		B	PUTXST		4	1525	B Z11	10
157	3	070		DCW	RLTST		3	1531	M78	10
158	3	080		B	PUTXST		4	1532	B Z11	11
159	3	090		DCW	WORKST		3	1538	M84	11
160	3	100		B	FREE		4	1539	B !55	11
161	3	110		DCW	WORKST		3	1545	M84	11
162	3	120		B	IF1		4	1546	B T97	11
163	3	130	IF7	C	SX,VRL		7	1550	C X73 X85	11
164	3	140		BU	IF12		5	1557	B X27 /	11
165	3	150		B	FREE		4	1562	B !55	12
166	3	160		DCW	SBJST		3	1568	M81	12
167	3	170		MLC	WORKST,SBJST		7	1569	M M84 M81	12
168	3	180		MLC	NULL,WORKST		7	1576	M M87 M84	12
169	3	190		B	FREE		4	1583	B !55	12
170	3	200		DCW	RLTST		3	1589	M78	12
171	3	210	IF8	B	GETSX		4	1590	B L54	12
172	3	220		C	SX,VCO		7	1594	C X73 X88	13
173	3	230		BU	IF10		5	1601	B W90 /	13
174	3	240		B	FREE		4	1606	B !55	13
175	3	250		DCW	OBJST		3	1612	M75	13
176	4	010	IF9	B	GETSX		4	1613	B L54	13
177	4	020		C	SX,VEX		7	1617	C X73 X82	13
178	4	030		BU	IF9B		5	1624	B W76 /	13
179	4	040		B	PUTXST		4	1629	B Z11	14
180	4	050		DCW	SBJST		3	1635	M81	14
181	4	060		B	PUTXST		4	1636	B Z11	14
182	4	070		DCW	RLTST		3	1642	M78	14
183	4	080		BCE	IF9A,LDLPO,0		8	1643	B W65 X92 0	14
184	4	090		MLC	@0@,LDLPO		7	1651	M M61 X92	14
185	4	100		B	PUTX		4	1658	B 363	14
186	4	110		DCW	VLPARN		3	1664	Y07	15
187	4	120	IF9A	B	PUTXST		4	1665	B Z11	15
188	4	130		DCW	OBJST		3	1671	M75	15
189	4	140		B	IF1		4	1672	B T97	15
190	4	150	IF9B	B	ADSL		4	1676	B J60	15
191	4	160		DCW	OBJST		3	1682	M75	15
192	4	170			SX		3	1685	X73	15
193	4	180		B	IF9		4	1686	B W13	16
194	4	190	IF10	C	SX,VLPARN		7	1690	C X73 Y07	16
195	4	200		BU	IF11		5	1697	B X13 /	16
196	4	210		MLC	@1@,LDLPO		7	1702	M M62 X92	16
197	4	220		B	IF8		4	1709	B V90	16

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  IF11    B     ADSL                                      4  1713  B J60               16
199  4 240          DCW   RLTST                                     3  1719  M78                 16
200  4 250                SX                                        3  1722  X73                 17
201  5 010          B     IF8                                       4  1723  B V90               17
202  5 020  IF12    B     ADSL                                      4  1727  B J60               17
203  5 030          DCW   WORKST                                    3  1733  M84                 17
204  5 040                SX                                        3  1736  X73                 17
205  5 050          B     IF6                                       4  1737  B V02               17
206  5 060  IF13    C     SX,VKV                                    7  1741  C X73 X95           17
207  5 070          BE    START2                                    5  1748  B T11 S             18
208  5 080          B     IF0                                       4  1753  B T93               18
209  5 090  EOJ     B     PUTSX                                     4  1757  B L72               18
210  5 100          B     SUPER                                     4  1761  B 351               18
211  5 110          DCW   @F03@                                     3  1767                      18
212  5 120  VPROC   DCW   @*01@                                     3  1770                      18
213  5 130  SX            #3                                        3  1773                      18
214  5 140  VIFOP         @)IF@                                     3  1776                      19
215  5 150  VPS           @.PS@                                     3  1779                      19
216  5 160  VEX           @.EX@                                     3  1782                      19
217  5 170  VRL           @.RL@                                     3  1785                      19
218  5 180  VCO           @.CO@                                     3  1788                      19
219  5 190  VCS           @.CS@                                     3  1791                      19
220  5 200  LDLPO         @0@                                       1  1792                      19
221  5 210  VKV           @.KV@                                     3  1795                      20
222  5 220  VNOTE   DCW   @*24@                                     3  1798                      20
223  5 230  VAC     DCW   @#DC@                                     3  1801                      20
224  5 240  TEST          #3                                        3  1804                      20
225  5 250  VLPARN        @  %@                                     3  1807                      20
226  6 010  COMP    B     PUTSX                                     4  1808  B L72               20
227  6 020          MLC   SX,LAST                                   7  1812  M X73 Z10           20
228  6 030  COMP1   B     GETSX                                     4  1819  B L54               21
229  6 040          BCE   START3,SX-2,)                            8  1823  B T15 X71 )         21
230  6 050          BCE   COMP2,SX,&                               8  1831  B Y51 X73 &         21
231  6 060          BCE   COMP2,SX,-                               8  1839  B Y51 X73 -         21
232  6 070          B     COMP                                      4  1847  B Y08               21
233  6 080  COMP2   BCE   COMP,LAST,)                             8  1851  B Y08 Z10 )         22
234  6 090          BWZ   COMP3,LAST-1,2                          8  1859  V Y71 Z09 2         22
235  6 100          B     COMP4                                     4  1867  B Y83               22
236  6 110  COMP3   C     LAST-2,@?@                                7  1871  C Z08 M63           22
237  6 120          BL    COMP                                      5  1878  B Y08 T             22
238  6 130  COMP4   BCE   COMP1,SX,&                               8  1883  B Y19 X73 &         23
239  6 140          MLC   VUM,SX                                   7  1891  M Z04 X73           23
240  6 150          B     COMP                                      4  1898  B Y08               23
241  6 160  VUM     DCW   @.UM@                                     3  1904                      23
242  6 170  VCOMP         @)05@                                     3  1907                      23
243  6 180  LAST          #3                                        3  1910                      23
244  6 190  PUTXST  SBR   X1                                        4  1911  H 089               23
245  6 200          SBR   PTXSX&3,3&X1                             7  1915  H !51 0|3           24
246  6 210          MLC   2&X1,PTXS01&6                           7  1922  M 0|2 Z35           24
247  6 220  PTXS01  C     NULL,*                                    7  1929  C M87 Z35           24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         BE    PTXSX                                        5  1936  B !48 S             24
249  6 240         MLC   2&X1,PTXST                                   7  1941  M 0|2 Z61           24
250  6 250         MLC   2&X1,PTXS03&3                               7  1948  M 0|2 !28           25
251  7 010         B     LCST                                       4  1955  B K77               25
252  7 020  PTXST  DCW   *                                          3  1961  Z61                 25
253  7 030         LOCTN                                            3  1964  L53                 25
254  7 040         MLC   LOCTN,*&14                                 7  1965  M L53 Z85           25
255  7 050         MLC   LOCTN,*&4                                  7  1972  M L53 Z82           25
256  7 060         MLNS  *,*                                        7  1979  D Z85 Z85           25
257  7 070         SBR   LOCTN                                      4  1986  H L53               26
258  7 080         MLC   @003@,X2                                   7  1990  M M66 094           26
259  7 090         MLC   LOCTN,PTXS02&3                             7  1997  M L53 !14           26
260  7 100         MLZS  @!@,PTXS02&2                               7  2004  Y M67 !13           26
261  7 110  PTXS02 MLC   *,PTXSGT                                   7  2011  M !17 !54           26
262  7 120         B     PUTX                                       4  2018  B 363               26
263  7 130         DCW   PTXSGT                                     3  2024  !54                 26
264  7 140  PTXS03 C     *,X2                                       7  2025  C !31 094           27
265  7 150         BE    PTXSX                                      5  2032  B !48 S             27
266  7 160         A     &3,X2                                      7  2037  A M68 094           27
267  7 170         B     PTXS02                                     4  2044  B !11               27
268  7 180  PTXSX  B     *                                          4  2048  B !51               27
269  7 190  PTXSGT DCW   #3                                         3  2054                      27
270  7 200  FREE   SBR   X1                                       4  2055  H 089               27
271  7 210         SBR   FREEX&3,3&X1                              7  2059  H J59 0|3           28
272  7 220         MLC   2&X1,FREEST                               7  2066  M 0|2 !98           28
273  7 230         MLC   2&X1,X2                                   7  2073  M 0|2 094           28
274  7 240         C     0&X2,NULL                                  7  2080  C 0!0 M87           28
275  7 250         BE    FREEX                                      5  2087  B J56 S             28
276  8 010         B     LCST                                       4  2092  B K77               28
277  8 020  FREEST DCW   *                                          3  2098  !98                 29
278  8 030         LOCTN                                            3  2101  L53                 29
279  8 040         MLC   LOCTN,FRE03&6                              7  2102  M L53 J29           29
280  8 050         A     0&X2,LOCTN                                 7  2109  A 0!0 L53           29
281  8 060         MLC   LOCTN,FRE03&3                              7  2116  M L53 J26           29
282  8 070  FRE03  MRCM  *,*                                        7  2123  P J29 J29           29
283  8 080         SBR   FRE04&3                                    4  2130  H J41               29
284  8 090         SBR   FRE04&6                                    4  2134  H J44               30
285  8 100  FRE04  MLNS  *,*                                        7  2138  D J44 J44           30
286  8 110         SBR   ENDST                                      4  2145  H M57               30
287  8 120         MLC   NULL,0&X2                                  7  2149  M M87 0!0           30
288  8 130  FREEX  B     *                                          4  2156  B J59               30
289  8 140  ADSL   SBR   X1                                       4  2160  H 089               30
290  8 150         SBR   ADSL5&3,6&X1       FIX EXIT               7  2164  H K76 0|6           30
291  8 160         MLC   2&X1,ADSL1         STRING 1               7  2171  M 0|2 K05           31
292  8 170         MLC   ADSL1,ADSL4&6      STRING1                7  2178  M K05 K65           31
293  8 180         MLC   5&X1,ADSL3&3       SYMBOL                 7  2185  M 0|5 K51           31
294  8 190         A     @003@,ADSL1                                7  2192  A M66 K05           31
295  8 200         B     LCST              LOCATE FIRST OF NEXT STRING  4  2199  B K77           31
296  8 210  ADSL1  DCW   #3                                         3  2205                      31
297  8 220         LOCTN                                            3  2208  L53                 31
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          MLC   ENDST,X1            SET OPENER            7  2209  M M57 089           32
299  8 240          SBR   ADSL2&3,0&X1                            7  2216  H K44 0|0           32
300  8 250          SBR   ADSL2&6,3&X1                            7  2223  H K47 0|3           32
301  9 010          MLC   LOCTN,X1                                7  2230  M L53 089           32
302  9 020          SW    0&X1                                    4  2237  , 0|0               32
303  9 030  ADSL2   MLC   0,0                 OPEN STRING AREA      7  2241  M 000 000           32
304  9 040  ADSL3   MLC   0,2&X1                                  7  2248  M 000 0|2           33
305  9 050          CW    0&X1                                    4  2255  ) 0|0               33
306  9 060  ADSL4   A     @003@,0             INCREMENT NORM        7  2259  A M66 000           33
307  9 070          A     @003@,ENDST                             7  2266  A M66 M57           33
308  9 080  ADSL5   B     0                   EXIT                  4  2273  B 000               33
309  9 090  *          LOCATION GIVEN IS LEFT END CHARACTER
310  9 100  LCST    SBR   X1                                      4  2277  H 089               33
311  9 110          MLC   2&X1,*&4            SET ADDER             7  2281  M 0|2 K91           34
312  9 120          MLC   0,LOCTN                                 7  2288  M 000 L53           34
313  9 130          SAR   LCST2&3                                 4  2295  Q L39               34
314  9 140          MLC   BGNST,LOCTN         INITIALIZE COUNTER    7  2299  M M60 L53           34
315  9 150  LCST1   C     LCST2&3,&BGNLC      TEST FOR END          7  2306  C L39 M71           34
316  9 160          BU    LCST2                                   5  2313  B L36 /             34
317  9 170          MLC   5&X1,*&7                                7  2318  M 0|5 L31           35
318  9 180          MLC   LOCTN,*                                 7  2325  M L53 L31           35
319  9 190          B     6&X1                                    4  2332  B 0|6               35
320  9 200  LCST2   A     0,LOCTN             ADDER                 7  2336  A 000 L53           35
321  9 210          SAR   LCST2&3             DECREMENT ADDER       4  2343  Q L39               35
322  9 220          B     LCST1                                   4  2347  B L06               35
323  9 230  LOCTN   DCW   #3                  LOCATION OF STRING    3  2353                      35
324  9 240  GETSX   SBR   GTSEX&3            GETSX                 4  2354  H L71               36
325  9 250          B     GETX                                    4  2358  B 335               36
326 10 010          DCW   &SX                                     3  2364  X73                 36
327 10 020                &EOJ                                    3  2367  X57                 36
328 10 030  GTSEX   B     *                                       4  2368  B L71               36
329 10 040  PUTSX   SBR   PTSEX&3            PUTSX                 4  2372  H L86               36
330 10 050          B     PUTX                                    4  2376  B 363               36
331 10 060          DCW   &SX                                     3  2382  X73                 37
332 10 070  PTSEX   B     *                                       4  2383  B L86               37
333 10 080  GTPTIL  SBR   X1                  GTPTIL                4  2387  H 089               37
334 10 090          MLC   @P@,GTPSW                               7  2391  M M72 M54           37
335 10 100          MLC   X1,GTLSV                               7  2398  M 089 M53           37
336 10 110          MLC   2&X1,GTL03&3                          7  2405  M 0|2 M19           37
337 10 120  GTL02   B     GETSX                                   4  2412  B L54               37
338 10 130  GTL03   C     *,SX                                    7  2416  C M22 X73           38
339 10 140          BE    GTL04                                   5  2423  B M40 S             38
340 10 150          BCE   PUTSX,GTPSW,P                          8  2428  B L72 M54 P         38
341 10 160          B     GTL02                                   4  2436  B M12               38
342 10 170  GTL04   MLC   GTLSV,X1                               7  2440  M M53 089           38
343 10 180          B     3&X1                                    4  2447  B 0|3               38
344 10 190  GTLSV   DCW   #3                                      3  2453                      38
345 10 200  GTPSW         #1                                      1  2454                      39
346 10 210  ENDST   DCW   RM                                      3  2457  M88                 39
347 10 220  BGNST   DCW   RM                                      3  2460  M88                 39
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          LTORG                                                    2461
                    DCW   @0@                                          1  2461              LIT     39
                          @1@                                          1  2462              LIT     39
                          @?@                                          1  2463              LIT     39
                          @0003@                                       3  2466              LIT     39
                          @!@                                          1  2467              LIT     40
                          &3                                           1  2468              LIT     40
       315                &BGNLC                                       3  2471  M72         ADCON   40
                          @P@                                          1  2472              LIT     40
349 10 240  BGNLC  EQU   *                                               2472
350 10 250  OBJST  DCW   @000@                                        3  2475                      40
351 11 010  RLTST        @000@                                        3  2478                      40
352 11 020  SBJST        @000@                                        3  2481                      40
353 11 030  WORKST      @000@                                        3  2484                      41
354 11 040  NULL         @000@                                        3  2487                      41
355 11 050  RM     DC    @|@                                          1  2488                      41
356 11 060          ORG   3798                                                 3798
357 11 070          DCW   @}@                                          1  3798                      42
358 11 080          END   START                                                / T00 080           43
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - F03 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - F03						
102	1	020		CTL	631 11						
103	1	030		ORG	1300				1300		
104	1	040	SUPER	EQU	351			0351			
105	1	050	GETX	EQU	335			0335			
106	1	060	PUTX	EQU	363			0363			
107	1	070	X1	EQU	89			0089			
108	1	080	X2	EQU	94			0094			
109	1	090	X3	EQU	99			0099			
110	1	100	RDRFIL	EQU	195			0195			
111	1	110	START	B	GTPTIL		4	1300	B ?59		4
112	1	120		DCW	VPROC		3	1306	K15		4
113	1	130	START1	B	PUTSX		4	1307	B ?44		4
114	1	140	START2	B	GETSX		4	1311	B ?26		4
115	1	150	START3	C	SX,VIF		7	1315	C K18 Z75		4
116	1	160		BE	IF		5	1322	B Y81 S		4
117	1	170		C	SX,VUNTIL		7	1327	C K18 Z78		4
118	1	180		BE	IF		5	1334	B Y81 S		5
119	1	190		C	SX,VNOTE		7	1339	C K18 K21		5
120	1	200		BU	START6		5	1346	B T73 /		5
121	1	210	START5	MLC	SX,TEST		7	1351	M K18 K27		5
122	1	220		B	PUTSX		4	1358	B ?44		5
123	1	230		B	GTPTIL		4	1362	B ?59		5
124	1	240		DCW	TEST		3	1368	K27		5
125	1	250		B	START1		4	1369	B T07		6
126	2	010	START6	C	SX,VAC		7	1373	C K18 K24		6
127	2	020		BE	START5		5	1380	B T51 S		6
128	2	030		C	SX,VREAD		7	1385	C K18 J64		6
129	2	040		BE	READ		5	1392	B U20 S		6
130	2	050		C	SX,VPRFM		7	1397	C K18 J67		6
131	2	060		BU	START1		5	1404	B T07 /		7
132	2	070		MLC	@1@,PRFMSW		7	1409	M A33 J61		7
133	2	080		B	START1		4	1416	B T07		7
134	2	090	READ	B	PUTSX READ		4	1420	B ?44		7
135	2	100		B	GETX		4	1424	B 335		7
136	2	110		DCW	FILNM		3	1430	J70		7
137	2	120			EOJ		3	1433	Z79		7
138	2	130		B	GNLBL		4	1434	B K34		8
139	2	140		DCW	GL1		3	1440	J73		8
140	2	150		B	FOS		4	1441	B O76		8
141	2	160		DCW	RDFNST		3	1447	A61		8
142	2	170			FILNM		3	1450	J70		8
143	2	180			FNPOS		3	1453	J82		8
144	2	190		C	FNPOS,NULL		7	1454	C J82 A64		8
145	2	200		BU	READ2		5	1461	B V44 /		9
146	2	210		B	GNLBL		4	1466	B K34		9
147	2	220		DCW	GL2		3	1472	J76		9

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		B	GNLBL		4	1473	B K34	9
149	2	240		DCW	GL3		3	1479	J79	9
150	2	250		MLC	NULL,ENDYET		7	1480	M A64 J85	9
151	3	010		B	ADSL		4	1487	B Q32	9
152	3	020		DCW	RDFNST		3	1493	A61	10
153	3	030			FILNM		3	1496	J70	10
154	3	040		B	ADSL		4	1497	B Q32	10
155	3	050		DCW	RDFNST		3	1503	A61	10
156	3	060			GL2		3	1506	J76	10
157	3	070		B	ADSL		4	1507	B Q32	10
158	3	080		DCW	RDFNST		3	1513	A61	10
159	3	090		DCW	GL3		3	1516	J79	11
160	3	100		B	ADSL		4	1517	B Q32	11
161	3	110		DCW	RDFNST		3	1523	A61	11
162	3	120			ENDYET		3	1526	J85	11
163	3	130		B	FOS		4	1527	B O76	11
164	3	140		DCW	RDFNST		3	1533	A61	11
165	3	150		DCW	FILNM		3	1536	J70	11
166	3	160			FNPOS		3	1539	J82	12
167	3	170		B	READ3		4	1540	B W11	12
168	3	180	READ2	MLC	FNPOS,GT1		7	1544	M J82 J88	12
169	3	190		A	&1,GT1		7	1551	A A34 J88	12
170	3	200		B	GTNS		4	1558	B N07	12
171	3	210		DCW	RDFNST		3	1564	A61	12
172	3	220			GT1		3	1567	J88	12
173	3	230			GL2		3	1570	J76	13
174	3	240		A	&1,GT1		7	1571	A A34 J88	13
175	3	250		B	GTNS		4	1578	B N07	13
176	4	010		DCW	RDFNST		3	1584	A61	13
177	4	020			GT1		3	1587	J88	13
178	4	030			GL3		3	1590	J79	13
179	4	040		A	&1,GT1		7	1591	A A34 J88	13
180	4	050		B	GTNS		4	1598	B N07	14
181	4	060		DCW	RDFNST		3	1604	A61	14
182	4	070			GT1		3	1607	J88	14
183	4	080			ENDYET		3	1610	J85	14
184	4	090	READ3	B	PUTX		4	1611	B 363	14
185	4	100		DCW	FILNM		3	1617	J70	14
186	4	110		B	PUTX		4	1618	B 363	14
187	4	120		DCW	GL1		3	1624	J73	15
188	4	130	READ4	B	GETSX		4	1625	B ?26	15
189	4	140	READ4A	C	SX,VRECD		7	1629	C K18 J91	15
190	4	150		BE	READ4		5	1636	B W25 S	15
191	4	160		C	RDRFIL,FILNM		7	1641	C 195 J70	15
192	4	170		BU	READ5		5	1648	B W67 /	15
193	4	180		B	PUTX		4	1653	B 363	15
194	4	190		DCW	VGMMV		3	1659	J94	16
195	4	200		B	PUTX		4	1660	B 363	16
196	4	210		DCW	FILNM		3	1666	J70	16
197	4	220	READ5	C	SX,VINTO		7	1667	C K18 J97	16

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          BU    READ6                                      5  1674  B X54 /             16
199  4 240          B     GETX                                       4  1679  B 335               16
200  4 250          DCW   AREA                                       3  1685  K12                 16
201  5 010                EOJ                                      3  1688  Z79                 17
202  5 020          B     PUTX                                       4  1689  B 363               17
203  5 030          DCW   VMOVE                                     3  1695  K00                 17
204  5 040          B     PUTX                                       4  1696  B 363               17
205  5 050          DCW   FILNM                                     3  1702  J70                 17
206  5 060          B     PUTX                                       4  1703  B 363               17
207  5 070          DCW   AREA                                       3  1709  K12                 17
208  5 080  READ5B  B     GETSX                                      4  1710  B ?26               18
209  5 090          C     SX,VSBSC                                   7  1714  C K18 K30           18
210  5 100          BU    READ6                                      5  1721  B X54 /             18
211  5 110  READ5A  B     PUTSX                                      4  1726  B ?44               18
212  5 120          C     SX,VRP                                     7  1730  C K18 K33           18
213  5 130          BE    READ5B                                     5  1737  B X10 S             18
214  5 140          B     GETSX                                      4  1742  B ?26               18
215  5 150          B     READ5A                                     4  1746  B X26               19
216  5 160          B     READ4                                      4  1750  B W25               19
217  5 170  READ6   C     SX,VEND                                    7  1754  C K18 K09           19
218  5 180          BU    READ8                                      5  1761  B Y23 /             19
219  5 190          C     ENDYET,NULL                                7  1766  C J85 A64           19
220  5 200          BU    READ7                                      5  1773  B Y09 /             19
221  5 210          MLC   FNPOS,GT1                                  7  1778  M J82 J88           19
222  5 220          A     &3,GT1                                     7  1785  A A35 J88           20
223  5 230          B     RPNSP                                      4  1792  B L97               20
224  5 240          DCW   RDFNST                                     3  1798  A61                 20
225  5 250                GT1                                      3  1801  J88                 20
226  6 010                V1                                       3  1804  K06                 20
227  6 020          B     READ8                                      4  1805  B Y23               20
228  6 030  READ7   B     GNLBL                                      4  1809  B K34               20
229  6 040          DCW   GL2                                        3  1815  J76                 21
230  6 050          B     GNLBL                                      4  1816  B K34               21
231  6 060          DCW   GL3                                        3  1822  J79                 21
232  6 070  READ8   B     PUTX                                       4  1823  B 363               21
233  6 080          DCW   VRLINK                                     3  1829  K03                 21
234  6 090          B     PUTX                                       4  1830  B 363               21
235  6 100          DCW   GL1                                        3  1836  J73                 21
236  6 110          B     PUTX                                       4  1837  B 363               22
237  6 120          DCW   GL2                                        3  1843  J76                 22
238  6 130          B     PUTX                                       4  1844  B 363               22
239  6 140          DCW   GL3                                        3  1850  J79                 22
240  6 150          C     SX,VEND                                    7  1851  C K18 K09           22
241  6 160          BU    START1                                     5  1858  B T07 /             22
242  6 170          B     PUTX                                       4  1863  B 363               22
243  6 180          DCW   GL2                                        3  1869  J76                 23
244  6 190          B     PUTX                                       4  1870  B 363               23
245  6 200          DCW   GL3                                        3  1876  J79                 23
246  6 210          B     START1                                     4  1877  B T07               23
247  6 220  IF      B     PUTSX                                      4  1881  B ?44               23
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230          MLC   SX,LAST                                    7  1885  M K18 Z72           23
249  6 240          B     GETSX                                      4  1892  B ?26               23
250  6 250          BCE   START3,SX-2,)                            8  1896  B T15 K16 )         24
251  7 010          BCE   IF1,SX,&                                  8  1904  B Z24 K18 &         24
252  7 020          BCE   IF1,SX,-                                  8  1912  B Z24 K18 -         24
253  7 030          B     IF                                         4  1920  B Y81               24
254  7 040  IF1     BCE   IF,LAST,)                                  8  1924  B Y81 Z72 )         24
255  7 050          BWZ   IF2,LAST-1,2                             8  1932  V Z44 Z71 2         25
256  7 060          B     IF                                         4  1940  B Y81               25
257  7 070  IF2     C     LAST-2,@?@                                 7  1944  C Z70 A36           25
258  7 080          BL    IF                                         5  1951  B Y81 T             25
259  7 090          MLC   VUM,SX                                     7  1956  M Z69 K18           25
260  7 100          B     IF                                         4  1963  B Y81               25
261  7 110  VUM     DCW   @.UM@                                      3  1969                      25
262  7 120  LAST          #3                                         3  1972                      26
263  7 130  VIF           @)19@                                      3  1975                      26
264  7 140  VUNTIL       @*18@                                      3  1978                      26
265  7 150  EOJ     C     RDFNST,NULL                                7  1979  C A61 A64           26
266  7 160          BE    EOJ5                                       5  1986  B !54 S             26
267  7 170          B     LCST                                       4  1991  B R49               26
268  7 180          DCW   RDFNST                                     3  1997  A61                 26
269  7 190                X2                                         3  2000  094                 27
270  7 200          MLC   NULL,GT1                                  7  2001  M A64 J88           27
271  7 210  EOJ1    A     &12,GT1                                    7  2008  A A38 J88           27
272  7 220          C     11&X2,NULL                                 7  2015  C 0J1 A64           27
273  7 230  EOJ2    BE    RDDG                                       5  2022  B !80 S             27
274  7 240  EOJ3    C     RDFNST,GT1                                 7  2027  C A61 J88           27
275  7 250          BE    EOJ4                                       5  2034  B !50 S             28
276  8 010          A     &12,X2                                     7  2039  A A38 094           28
277  8 020          B     EOJ1                                       4  2046  B !08               28
278  8 030  EOJ4    NOP   DG3                                        4  2050  N J35               28
279  8 040  EOJ5    B     PUTSX                                      4  2054  B ?44               28
280  8 050          BCE   EOJ6,PRFMSW,0                            8  2058  B !73 J61 0         28
281  8 060          B     SUPER                                      4  2066  B 351               28
282  8 070          DCW   @F04@                                     3  2072                      29
283  8 080  EOJ6    B     SUPER                                      4  2073  B 351               29
284  8 090          DCW   @G01@                                     3  2079                      29
285  8 100  RDDG    B     PUTX                                       4  2080  B 363               29
286  8 110  RDDGSY  DCW   FST                                      3  2086  J48                 29
287  8 120          C     RDDGSY,&ENDED                              7  2087  C !86 A41           29
288  8 130          BE    RDDG01                                     5  2094  B J10 S             29
289  8 140          A     &3,RDDGSY                                  7  2099  A A35 !86           30
290  8 150          B     RDDG                                       4  2106  B !80               30
291  8 160  RDDG01  MLC   &DG2,EOJ2&3                              7  2110  M A44 !25           30
292  8 170          MLC   @B@,EOJ4                                 7  2117  M A45 !50           30
293  8 180  DG2     B     PUTX                                       4  2124  B 363               30
294  8 190          DCW   @0!2@                                     3  2130                      30
295  8 200          B     EOJ3                                       4  2131  B !27               30
296  8 210  DG3     B     PUTX                                       4  2135  B 363               31
297  8 220          DCW   VNOTE                                     3  2141  K21                 31
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          B     EOJ5                                         4  2142  B !54               31
299  8 240  FST     DCW   @#DC@                                        3  2148                      31
300  8 250  ENDED   DC    @***F0A#DC*24@                              12  2160                      31
301  9 010  PRFMSW  DCW   @0@                                          1  2161                      31
302  9 020  VREAD         @)13@                                        3  2164                      31
303  9 030  VPRFM         @)03@                                        3  2167                      31
304  9 040  FILNM         #3                                           3  2170                      32
305  9 050  GL1           #3                                           3  2173                      32
306  9 060  GL2           #3                                           3  2176                      32
307  9 070  GL3           #3                                           3  2179                      32
308  9 080  FNPOS         #3                                           3  2182                      32
309  9 090  ENDYET        #3                                           3  2185                      32
310  9 100  GT1           #3                                           3  2188                      32
311  9 110  VRECD         @/11@                                        3  2191                      33
312  9 120  VGMMV         @*36@                                        3  2194                      33
313  9 130  VINTO         @*27@                                        3  2197                      33
314  9 140  VMOVE         @)15@                                        3  2200                      33
315  9 150  VRLINK  DCW   @.RK@                                       3  2203                      33
316  9 160  V1      DCW   @001@                                        3  2206                      33
317  9 170  VEND    DCW   @)17@                                        3  2209                      33
318  9 180  AREA    DCW   #3                                           3  2212                      34
319  9 190  VPROC   DCW   @*01@                                        3  2215                      34
320  9 200  SX            #3                                           3  2218                      34
321  9 210  VNOTE         @*24@                                        3  2221                      34
322  9 220  VAC           @#DC@                                        3  2224                      34
323  9 230  TEST          #3                                           3  2227                      34
324  9 240  VSBSC   DCW   @.SB@                                       3  2230                      34
325  9 250  VRP     DCW   @  )@                                        3  2233                      35
326 10 010  GNLBL   SBR   X1                                           4  2234  H 089               35
327 10 020          MLC   2&X1,GNLBMV&6       MOVE-IN ADDR. OF ANSWER  7  2238  M 0|2 K84           35
328 10 030          MLC   X3,GNLBSV           SAVE REGISTERS           7  2245  M 099 L90           35
329 10 040          MLC                                                1  2252  M                   35
330 10 050          MLC                                                1  2253  M                   35
331 10 060          MLC   GNLPTR,X3           MOVE-IN POINTERS         7  2254  M S36 099           35
332 10 070          MLC                                                1  2261  M                   36
333 10 080          MLC                                                1  2262  M                   36
334 10 090          A     &1,X3               BUMP UNITS POINTER       7  2263  A A34 099           36
335 10 100          BCE   GNL01,0&X3,|        UNITS OVERFLOW           8  2270  B L15 0?0 |         36
336 10 110  GNLBMV MLC   0&X3,*               MOVE-OUT ANSWER          7  2278  M 0?0 K84           36
337 10 120          MLC   0&X2                                         4  2285  M 0!0               36
338 10 130          MLC   0&X1                                         4  2289  M 0|0               36
339 10 140          MLC   X3,GNLPTR                                    7  2293  M 099 S36           37
340 10 150          MLC                                                1  2300  M                   37
341 10 160          MLC                                                1  2301  M                   37
342 10 170          MLC   GNLBSV,X3           RESTORE REGISTERS        7  2302  M L90 099           37
343 10 180          MLC                                                1  2309  M                   37
344 10 190          MLC                                                1  2310  M                   37
345 10 200          B     3&X1                EXIT                     4  2311  B 0|3               37
346 10 210  GNL01   MLC   GNLZE,X3            REINIT. UNITS POINTER    7  2315  M L96 099           38
347 10 220          A     &1,X2               BUMP TENS POINTER        7  2322  A A34 094           38
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          BCE   GNL02,0&X2,          TENS OVERFLOW          8  2329  B L41 0!0           38
349 10 240          B     GNLBMV                                      4  2337  B K78               38
350 10 250  GNL02   MLC   GNLA,X2              REINIT. TENS POINTER   7  2341  M L93 094           38
351 11 010          A     &1,X1                BUMP HUNDREDS POINTER  7  2348  A A34 089           39
352 11 020          BCE   GNL03,0&X1,          HUNDREDS OVERFLOW      8  2355  B L67 0|0           39
353 11 030          B     GNLBMV                                      4  2363  B K78               39
354 11 040  GNL03   MLC   GNLA,X1              REINIT. HUNDREDS POINTER 7  2367  M L93 089           39
355 11 050          B     GNLBMV                                      4  2374  B K78               39
356 11 060  GNLBSV DCW   #13                                        13  2390                      40
357 11 070  GNLA        @/60@                                       3  2393                      40
358 11 080  GNLZE       @S00@                                       3  2396                      40
359 11 090  GNLPTR EQU   1236                                          1236                      40
360 11 100  RPNSP   SBR   X1                                        4  2397  H 089               40
361 11 110          SBR   RPNEX&3,9&X1                             7  2401  H N03 0|9           40
362 11 120          MLC   8&X1,RPNSYM&3                            7  2408  M 0|8 M96           40
363 11 130          MLC   5&X1,RPNPTR                              7  2415  M 0|5 M57           41
364 11 140          MLC   2&X1,X1                                  7  2422  M 0|2 089           41
365 11 150          C     0&X1,NULL                                7  2429  C 0|0 A64           41
366 11 160          BE    RPNEX              NO STRING             5  2436  B N00 S             41
367 11 170          MLC   X1,RPNST                                 7  2441  M 089 M54           41
368 11 180          B     GTNS               USE GTNS TO SET UP ADDRESS 4  2448  B N07           41
369 11 190  RPNST   DCW   *                                        3  2454  M54                 42
370 11 200  RPNPTR DCW   *                                        3  2457  M57                 42
371 11 210          DCW   RPNGT                                    3  2460  N06                 42
372 11 220          MLC   LOCTN,X1                                7  2461  M ?25 089           42
373 11 230          MLZS  0&X1,0&X1                               7  2468  Y 0|0 0|0           42
374 11 240          SBR   X1                                      4  2475  H 089               42
375 11 250          MLC   GTNNTH,RPNSYM&6                         7  2479  M O75 M99           42
376 12 010          MLZS  RPNSP&9,RPNSYM&5                        7  2486  Y M06 M98           43
377 12 020  RPNSYM MLC   *,*                                      7  2493  M M99 M99           43
378 12 030  RPNEX   B     *                                        4  2500  B N03               43
379 12 040  RPNGT   DCW   #3                                       3  2506                      43
380 12 050  *               THE ABOVE ROUTINE REQUIRES GTNS AND LCST.
381 12 060  GTNS    SBR   X1                                       4  2507  H 089               43
382 12 070          SBR   GTNEX&3,9&X1                            7  2511  H O54 0|9           43
383 12 080          MLC   8&X1,GTNANS&6                           7  2518  M 0|8 O50           43
384 12 090          MLC   5&X1,GTNNTH                              7  2525  M 0|5 O75           44
385 12 100          MLC   2&X1,X1                                  7  2532  M 0|2 089           44
386 12 110          C     0&X1,NULL                                7  2539  C 0|0 A64           44
387 12 120          BE    GTNNFD             NO STRING             5  2546  B O55 S             44
388 12 130          MLC   GTNNTH,*&4                              7  2551  M O75 N61           44
389 12 140          MLC   *,GTNST            POINTER               7  2558  M N64 O08           45
390 12 150          MLC   GTNST,GTNNTH                           7  2565  M O08 O75           45
391 12 160          A     GTNNTH                                   4  2572  A O75               45
392 12 170          A     GTNST,GTNNTH       CHARACTER-COUNT POINTER 7  2576  A O08 O75           45
393 12 180          C     GTNNTH,0&X1                              7  2583  C O75 0|0           45
394 12 190          BL    GTNNFD             SYMBOL BEYOND STRING  5  2590  B O55 T             45
395 12 200          MLC   X1,GTNST                                 7  2595  M 089 O08           46
396 12 210          B     LCST                                     4  2602  B R49               46
397 12 220  GTNST   DCW   *                                        3  2608  O08                 46
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          DCW   LOCTN                                       3  2611  ?25                46
399 12 240          MLC   LOCTN,X1                                    7  2612  M ?25 089          46
400 12 250          MLZS  0&X1,0&X1                                   7  2619  Y 0|0 0|0          46
401 13 010          SBR   X1                                          4  2626  H 089              46
402 13 020          MLC   GTNNTH,GTNANS&3                            7  2630  M O75 O47          47
403 13 030          MLZS  GTNS&9,GTNANS&2                            7  2637  Y N16 O46          47
404 13 040  GTNANS  MLC   *,*                                        7  2644  M O50 O50          47
405 13 050  GTNEX   B     *                                          4  2651  B O54              47
406 13 060  GTNNFD  MLC   NULL,X1                                    7  2655  M A64 089          47
407 13 070          MLC   NULL,GTNNTH                               7  2662  M A64 O75          47
408 13 080          B     GTNANS                                     4  2669  B O44              48
409 13 090  GTNNTH  DCW   #3                                         3  2675                     48
410 13 100  FOS     SBR   X1                                         4  2676  H 089              48
411 13 110          SBR   FOSEX&3,9&X1                               7  2680  H Q17 0|9          48
412 13 120          MLC   8&X1,FOSFND&6                              7  2687  M 0|8 Q13          48
413 13 130          MLC   5&X1,FOSTES&6                              7  2694  M 0|5 P83          48
414 13 140          MLC   2&X1,X1                                    7  2701  M 0|2 089          48
415 13 150          C     0&X1,NULL                                  7  2708  C 0|0 A64          49
416 13 160          BE    FOSNFD              NO STRING              5  2715  B Q18 S            49
417 13 170          MLC   X1,FOSST                                   7  2720  M 089 P33          49
418 13 180          B     LCST                                       4  2727  B R49              49
419 13 190  FOSST   DCW   *                                          3  2733  P33                49
420 13 200          DCW   FOSTES&3                                   3  2736  P80                49
421 13 210          MLZS  FOS&9,FOSTES&2                             7  2737  Y O85 P79          49
422 13 220          MLC   @001@,FOSCNT                               7  2744  M A48 Q31          50
423 13 230          MLC   @002@,X1                                   7  2751  M A51 089          50
424 13 240          MLC   FOSST,*&7                                  7  2758  M P33 P71          50
425 13 250  FOSTST  C     X1,*                                       7  2765  C 089 P71          50
426 14 010          BL    FOSNFD              STRING HAS BEEN SEARCHED  5  2772  B Q18 T            50
427 14 020  FOSTES  C     *,*                                        7  2777  C P83 P83          51
428 14 030          BE    FOSFND                                     5  2784  B Q07 S            51
429 14 040          A     &1,FOSCNT                                  7  2789  A A34 Q31          51
430 14 050          A     &3,X1                                      7  2796  A A35 089          51
431 14 060          B     FOSTST                                     4  2803  B P65              51
432 14 070  FOSFND  MLC   FOSCNT,*                                   7  2807  M Q31 Q13          51
433 14 080  FOSEX   B     *                   EXIT                   4  2814  B Q17              52
434 14 090  FOSNFD  MLC   NULL,FOSCNT                                7  2818  M A64 Q31          52
435 14 100          B     FOSFND                                     4  2825  B Q07              52
436 14 110  FOSCNT  DCW   #3                                         3  2831                     52
437 14 120  ADSL    SBR   X1                                         4  2832  H 089              52
438 14 130          SBR   ADSL5&3,6&X1         FIX EXIT             7  2836  H R48 0|6          52
439 14 140          MLC   2&X1,ADSL1           STRING 1             7  2843  M 0|2 Q77          52
440 14 150          MLC   ADSL1,ADSL4&6        STRING1              7  2850  M Q77 R37          53
441 14 160          MLC   5&X1,ADSL3&3         SYMBOL               7  2857  M 0|5 R23          53
442 14 170          A     @003@,ADSL1                                7  2864  A A54 Q77          53
443 14 180          B     LCST                 LOCATE FIRST OF NEXT STRING  4  2871  B R49          53
444 14 190  ADSL1   DCW   #3                                         3  2877                     53
445 14 200          LOCTN                                            3  2880  ?25                53
446 14 210          MLC   ENDST,X1             SET OPENER           7  2881  M A29 089          53
447 14 220          SBR   ADSL2&3,0&X1                             7  2888  H R16 0|0          54
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230          SBR   ADSL2&6,3&X1                              7  2895  H R19 0|3           54
449 14 240          MLC   LOCTN,X1                                  7  2902  M ?25 089           54
450 14 250          SW    0&X1                                      4  2909  , 0|0               54
451 15 010  ADSL2   MLC   0,0                 OPEN STRING AREA      7  2913  M 000 000           54
452 15 020  ADSL3   MLC   0,2&X1                                    7  2920  M 000 0|2           54
453 15 030          CW    0&X1                                      4  2927  ) 0|0               55
454 15 040  ADSL4   A     @003@,0             INCREMENT NORM        7  2931  A A54 000           55
455 15 050          A     @003@,ENDST                               7  2938  A A54 A29           55
456 15 060  ADSL5   B     0                   EXIT                  4  2945  B 000               55
457 15 070  *         LOCATION GIVEN IS LEFT END CHARACTER
458 15 080  LCST    SBR   X1                                        4  2949  H 089               55
459 15 090          MLC   2&X1,*&4            SET ADDER             7  2953  M 0|2 R63           55
460 15 100          MLC   0,LOCTN                                   7  2960  M 000 ?25           56
461 15 110          SAR   LCST2&3                                   4  2967  Q ?11               56
462 15 120          MLC   BGNST,LOCTN         INITIALIZE COUNTER    7  2971  M A32 ?25           56
463 15 130  LCST1   C     LCST2&3,&BGNLC      TEST FOR END          7  2978  C ?11 A57           56
464 15 140          BU    LCST2                                     5  2985  B ?08 /             56
465 15 150          MLC   5&X1,*&7                                  7  2990  M 0|5 ?03           56
466 15 160          MLC   LOCTN,*                                   7  2997  M ?25 ?03           57
467 15 170          B     6&X1                                      4  3004  B 0|6               57
468 15 180  LCST2   A     0,LOCTN             ADDER                 7  3008  A 000 ?25           57
469 15 190          SAR   LCST2&3             DECREMENT ADDER       4  3015  Q ?11               57
470 15 200          B     LCST1                                     4  3019  B R78               57
471 15 210  LOCTN   DCW   #3                  LOCATION OF STRING    3  3025                      57
472 15 220  GETSX   SBR   GTSEX&3            GETSX                 4  3026  H ?43               57
473 15 230          B     GETX                                      4  3030  B 335               58
474 15 240          DCW   &SX                                       3  3036  K18                 58
475 15 250                &EOJ                                      3  3039  Z79                 58
476 16 010  GTSEX   B     *                                         4  3040  B ?43               58
477 16 020  PUTSX   SBR   PTSEX&3            PUTSX                 4  3044  H ?58               58
478 16 030          B     PUTX                                      4  3048  B 363               58
479 16 040          DCW   &SX                                       3  3054  K18                 58
480 16 050  PTSEX   B     *                                         4  3055  B ?58               59
481 16 060  GTPTIL  SBR   X1                  GTPTIL                4  3059  H 089               59
482 16 070          MLC   @P@,GTPSW                                 7  3063  M A58 A26           59
483 16 080          MLC   X1,GTLSV                                  7  3070  M 089 A25           59
484 16 090          MLC   2&X1,GTL03&3                            7  3077  M 0|2 ?91           59
485 16 100  GTL02   B     GETSX                                     4  3084  B ?26               59
486 16 110  GTL03   C     *,SX                                      7  3088  C ?94 K18           60
487 16 120          BE    GTL04                                     5  3095  B A12 S             60
488 16 130          BCE   PUTSX,GTPSW,P                            8  3100  B ?44 A26 P         60
489 16 140          B     GTL02                                     4  3108  B ?84               60
490 16 150  GTL04   MLC   GTLSV,X1                                  7  3112  M A25 089           60
491 16 160          B     3&X1                                      4  3119  B 0|3               60
492 16 170  GTLSV   DCW   #3                                       3  3125                      60
493 16 180  GTPSW         #1                                       1  3126                      61
494 16 190  ENDST   DCW   RM                                       3  3129  A65                 61
495 16 200  BGNST   DCW   RM                                       3  3132  A65                 61
496 16 210          LTORG                                                  3133
                    DCW   @1@                                      1  3133            LIT     61
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          &1                                        1  3134              LIT     61
                          &3                                        1  3135              LIT     61
                          @?@                                       1  3136              LIT     61
                          &12                                       2  3138              LIT     62
       287                &ENDED                                    3  3141  J60         ADCON   62
       291                &DG2                                      3  3144  J24         ADCON   62
                          @B@                                       1  3145              LIT     62
                          @001@                                     3  3148              LIT     62
                          @002@                                     3  3151              LIT     62
                          @003@                                     3  3154              LIT     62
       463                &BGNLC                                    3  3157  A58         ADCON   63
                          @P@                                       1  3158              LIT     63
497 16 220  BGNLC  EQU   *                                            3158
498 16 230  RDFNST DCW   @000@                                      3  3161                      63
499 16 240  NULL         @000@                                     3  3164                      63
500 16 250  RM     DC    @|@                                       1  3165                      63
501 17 010         ORG   3798                                             3798
502 17 020         DCW   @}@                                       1  3798                      64
503 17 030         END   START                                           / T00 080             65
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - F04 PAGE 1

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - F04
 102  1 020         CTL   631 11
 103  1 030         ORG   1300                                                 1300
 104  1 040  GETX   EQU   335                                             0335
 105  1 050  PUTX   EQU   363                                             0363
 106  1 060  SUPER  EQU   351                                             0351
 107  1 070  X1     EQU   89                                              0089
 108  1 080  X2     EQU   94                                              0094
 109  1 090  X3     EQU   99                                              0099
 110  1 100  START  CS    0                                          4   1300  / 000               4
 111  1 110         SBR   X3                                         4   1304  H 099               4
 112  1 120         BCE   ST16,X3,I                                  8   1308  B T43 099 I         4
 113  1 130         BCE   ST12,X3,R                                  8   1316  B T54 099 R         4
 114  1 140         BCE   ST8,X3,Z                                   8   1324  B T65 099 Z         4
 115  1 150         MLC   &GM,X3                                     7   1332  M Z07 099           4
 116  1 160         B     STARTA                                     4   1339  B T72               5
 117  1 170  ST16   SBR   X3,15396                                   7   1343  H 099 C9F           5
 118  1 180         B     STARTA                                     4   1350  B T72               5
 119  1 190  ST12   SBR   X3,11396                                   7   1354  H 099 C9O           5
 120  1 200         B     STARTA                                     4   1361  B T72               5
 121  1 210  ST8    SBR   X3,7636                                    7   1365  H 099 F3W           5
 122  1 220  STARTA MLC   X3,1289                                    7   1372  M 099 S89           6
 123  1 230  START1 B     GETSX                                      4   1379  B Y04               6
 124  1 240  START2 C     SX,VLBL                                    7   1383  C W22 W40           6
 125  1 250         BE    LABEL                                      5   1390  B U15 S             6
 126  2 010         C     SX,VPFRM                                   7   1395  C W22 W19           6
 127  2 020         BE    PRFRM                                      5   1402  B U26 S             6
 128  2 030  START3 B     PUTSX                                      4   1407  B Y22               6
 129  2 040         B     START1                                     4   1411  B T79               7
 130  2 050  LABEL  A     &1,LBLCNT                                  7   1415  A Z08 W16           7
 131  2 060         B     START3                                     4   1422  B U07               7
 132  2 070  PRFRM  B     PUTSX                                      4   1426  B Y22               7
 133  2 080         B     GETX                                       4   1430  B 335               7
 134  2 090         DCW   FIRST                                      3   1436  W25                 7
 135  2 100               EOJ                                      3   1439  V69                 7
 136  2 110         B     PUTX                                       4   1440  B 363               8
 137  2 120         DCW   FIRST                                      3   1446  W25                 8
 138  2 130         MLC   NULL,LASTN                                 7   1447  M W31 W28           8
 139  2 140         B     GETSX                                      4   1454  B Y04               8
 140  2 150         C     SX,VTHRU                                   7   1458  C W22 W34           8
 141  2 160         BU    PERF1                                      5   1465  B U88 /             8
 142  2 170         B     PUTSX                                      4   1470  B Y22               8
 143  2 180         B     GETX                                       4   1474  B 335               9
 144  2 190         DCW   LASTN                                     3   1480  W28                 9
 145  2 200               EOJ                                      3   1483  V69                 9
 146  2 210         B     GETSX                                      4   1484  B Y04               9
 147  2 220  PERF1  C     LASTN,NULL                                 7   1488  C W28 W31           9
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          BU    PERF2                                        5  1495  B V14 /             9
149  2 240          MLC   FIRST,LASTN                                  7  1500  M W25 W28           9
150  2 250          B     PUTX                                         4  1507  B 363              10
151  3 010          DCW   VTHRU                                       3  1513  W34                10
152  3 020  PERF2    B     GNLBL                                        4  1514  B W41              10
153  3 030          DCW   PFLBL                                        3  1520  W37                10
154  3 040          B     PUTX                                         4  1521  B 363              10
155  3 050          DCW   PFLBL                                        3  1527  W37                10
156  3 060          B     GNLBL                                        4  1528  B W41              10
157  3 070          DCW   PFLBL2                                       3  1534  V48                11
158  3 080          B     PUTX                                         4  1535  B 363              11
159  3 090          DCW   PFLBL2                                       3  1541  V48                11
160  3 100          B     BUILD              PFLBL & LASTN             4  1542  B V80              11
161  3 110  PFLBL2  DCW   #3                                           3  1548                     11
162  3 120  PERF3   C     SX,VPFRM                                     7  1549  C W22 W19          11
163  3 130          BE    PRFRM                                        5  1556  B U26 S            11
164  3 140          B     PUTSX                                        4  1561  B Y22              12
165  3 150          B     START1                                       4  1565  B T79              12
166  3 160  EOJ     B     PUTSX                                        4  1569  B Y22              12
167  3 170          B     SUPER                                        4  1573  B 351              12
168  3 180          DCW   @F05@                                        3  1579                     12
169  3 190  BUILD   MLCWA LASTN,0&X3                                  7  1580  L W28 0?0          12
170  3 200          MLCWA LBLCNT                                       4  1587  L W16              12
171  3 210          MLCWA PFLBL                                        4  1591  L W37              13
172  3 220          MLCWA PFLBL2                                       4  1595  L V48              13
173  3 230          SBR   X3                                           4  1599  H 099              13
174  3 240          MLC   @|@,0&X3                                     7  1603  M Z09 0?0          13
175  3 250          B     PERF3                                        4  1610  B V49              13
176  4 010  LBLCNT  DCW   @001@                                       3  1616                     13
177  4 020  VPFRM   DCW   @)03@                                       3  1619                     13
178  4 030  SX             #3                                         3  1622                     14
179  4 040  FIRST          #3                                         3  1625                     14
180  4 050  LASTN          #3                                         3  1628                     14
181  4 060  NULL           @000@                                      3  1631                     14
182  4 070  VTHRU          @*08@                                      3  1634                     14
183  4 080  PFLBL          #3                                         3  1637                     14
184  4 090  VLBL    DCW   @.LB@                                       3  1640                     14
185  4 100  GNLBL   SBR   X1                                         4  1641  H 089              15
186  4 110          MLC   2&X1,GNLBMV&6      MOVE-IN ADDR. OF ANSWER   7  1645  M 0|2 W91          15
187  4 120          MLC   X3,GNLBSV          SAVE REGISTERS            7  1652  M 099 X97          15
188  4 130          MLC                                              1  1659  M                  15
189  4 140          MLC                                              1  1660  M                  15
190  4 150          MLC   GNLPTR,X3          MOVE-IN POINTERS          7  1661  M S36 099          15
191  4 160          MLC                                              1  1668  M                  15
192  4 170          MLC                                              1  1669  M                  16
193  4 180          A     &1,X3              BUMP UNITS POINTER        7  1670  A Z08 099          16
194  4 190          BCE   GNL01,0&X3,|       UNITS OVERFLOW           8  1677  B X22 0?0 |        16
195  4 200  GNLBMV  MLC   0&X3,*             MOVE-OUT ANSWER           7  1685  M 0?0 W91          16
196  4 210          MLC   0&X2                                         4  1692  M 0!0              16
197  4 220          MLC   0&X1                                         4  1696  M 0|0              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         MLC   X3,GNLPTR                                 7  1700  M 099 S36          16
199  4 240         MLC                                             1  1707  M                  17
200  4 250         MLC                                             1  1708  M                  17
201  5 010         MLC   GNLBSV,X3          RESTORE REGISTERS      7  1709  M X97 099          17
202  5 020         MLC                                             1  1716  M                  17
203  5 030         MLC                                             1  1717  M                  17
204  5 040         B     3&X1               EXIT                   4  1718  B 0|3              17
205  5 050  GNL01  MLC   GNLZE,X3           REINIT. UNITS POINTER  7  1722  M Y03 099          17
206  5 060         A     &1,X2              BUMP TENS POINTER      7  1729  A Z08 094          18
207  5 070         BCE   GNL02,0&X2,        TENS OVERFLOW          8  1736  B X48 0!0          18
208  5 080         B     GNLBMV                                    4  1744  B W85              18
209  5 090  GNL02  MLC   GNLA,X2            REINIT. TENS POINTER   7  1748  M Y00 094          18
210  5 100         A     &1,X1              BUMP HUNDREDS POINTER  7  1755  A Z08 089          18
211  5 110         BCE   GNL03,0&X1,        HUNDREDS OVERFLOW      8  1762  B X74 0|0          19
212  5 120         B     GNLBMV                                    4  1770  B W85              19
213  5 130  GNL03  MLC   GNLA,X1            REINIT. HUNDREDS POINTER 7  1774  M Y00 089          19
214  5 140         B     GNLBMV                                    4  1781  B W85              19
215  5 150  GNLBSV DCW   #13                                      13  1797                     19
216  5 160  GNLA   DCW   @/60@                                    3  1800                     19
217  5 170  GNLZE  DCW   @S00@                                    3  1803                     20
218  5 180  GNLPTR EQU   1236                                        1236
219  5 190  GETSX  SBR   GTSEX&3            GETSX                  4  1804  H Y21              20
220  5 200         B     GETX                                      4  1808  B 335              20
221  5 210         DCW   &SX                                       3  1814  W22                20
222  5 220         DCW   &EOJ                                      3  1817  V69                20
223  5 230  GTSEX  B     *                                         4  1818  B Y21              20
224  5 240  PUTSX  SBR   PTSEX&3            PUTSX                  4  1822  H Y36              20
225  5 250         B     PUTX                                      4  1826  B 363              21
226  6 010         DCW   &SX                                       3  1832  W22                21
227  6 020  PTSEX  B     *                                         4  1833  B Y36              21
228  6 030  GTPTIL SBR   X1                 GTPTIL                 4  1837  H 089              21
229  6 040         MLC   @P@,GTPSW                                 7  1841  M Z10 Z04          21
230  6 050         MLC   X1,GTLSV                                  7  1848  M 089 Z03          21
231  6 060         MLC   2&X1,GTL03&3                             7  1855  M 0|2 Y69          21
232  6 070  GTL02  B     GETSX                                     4  1862  B Y04              22
233  6 080  GTL03  C     *,SX                                      7  1866  C Y72 W22          22
234  6 090         BE    GTL04                                     5  1873  B Y90 S            22
235  6 100         BCE   PUTSX,GTPSW,P                            8  1878  B Y22 Z04 P        22
236  6 110         B     GTL02                                     4  1886  B Y62              22
237  6 120  GTL04  MLC   GTLSV,X1                                 7  1890  M Z03 089          22
238  6 130         B     3&X1                                      4  1897  B 0|3              22
239  6 140  GTLSV  DCW   #3                                       3  1903                     23
240  6 150  GTPSW  DCW   #1                                       1  1904                     23
241  6 160         LTORG                                                 1905
       115         DCW   &GM                                      3  1907  G98          ADCON 23
                         &1                                      1  1908               LIT   23
                         @|@                                     1  1909               LIT   23
                         @P@                                     1  1910               LIT   23
242  6 170         ORG   3798                                              3798
243  6 180  GM     DCW   @}@                                     1  3798                     24
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
244	6	190		END	START				/ T00 080	25

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
```

1401 COBOL - F05 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - F05						
102	1	020		CTL	631 11						
103	1	030		ORG	1300		5		1300		
104	1	040	GETX	EQU	335		5		0335		
105	1	050	PUTX	EQU	363				0363		
106	1	060	SUPER	EQU	351		5		0351		
107	1	070	X1	EQU	89		5		0089		
108	1	080	X2	EQU	94		5		0094		
109	1	090	X3	EQU	99		5		0099		
110	1	100	START	B	GTPTIL		5	4	1300	B O10	4
111	1	110		DCW	VLABEL		5	3	1306	L59	4
112	1	120	LABEL	B	GETX		5	4	1307	B 335	4
113	1	130		DCW	NAME		5	3	1313	Z09	4
114	1	140			EOJ		5	3	1316	X35	4
115	1	150		A	&1,LBLCNT		5	7	1317	A O96 K17	4
116	1	160		B	GETSX		5	4	1324	B N77	4
117	1	170		C	SX,VSECT		5	7	1328	C L62 L68	5
118	1	180		BU	LBL1		5	5	1335	B T51 /	5
119	1	190		MLC	@1@,SECT		5	7	1340	M O97 L69	5
120	1	200		B	GETSX		5	4	1347	B N77	5
121	1	210	LBL1	B	GETSX		5	4	1351	B N77	5
122	1	220		C	SX,VEXIT		5	7	1355	C L62 Z05	5
123	1	230		BU	LBL1D		5	5	1362	B U23 /	5
124	1	240		MLC	@1@,EXITSW		5	7	1367	M O97 Z06	6
125	1	250		B	PUTX		5	4	1374	B 363	6
126	2	010		DCW	VLABEL		5	3	1380	L59	6
127	2	020		B	PUTX		5	4	1381	B 363	6
128	2	030		DCW	NAME		5	3	1387	Z09	6
129	2	040		B	PUTX		5	4	1388	B 363	6
130	2	050		DCW	VPRD		5	3	1394	Z12	6
131	2	060		B	PUTSX		5	4	1395	B N95	7
132	2	070		B	GETSX		5	4	1399	B N77	7
133	2	080		B	PUTSX		5	4	1403	B N95	7
134	2	090		B	GETSX		5	4	1407	B N77	7
135	2	100		BCE	LBL3,SECT,1		5	8	1411	B U74 L69 1	7
136	2	110		B	LBL1B		5	4	1419	B U38	7
137	2	120	LBL1D	MLC	NAME,PNM		5	7	1423	M Z09 L65	7
138	2	130		BCE	LBL3,SECT,1		5	8	1430	B U74 L69 1	8
139	2	140	LBL1B	C	PRLBL,NULL		5	7	1438	C O80 O89	8
140	2	150		BU	LBL2		5	5	1445	B U66 /	8
141	2	160	LBL1A	B	LBLC	NO PARAGRAPH PENDING	5	4	1450	B V92	8
142	2	170		B	LBLD	LABEL-PN-BUILD STRING	5	4	1454	B W37	8
143	2	180		B	LBLE	ASSIGN STRING,IF PRESENT	5	4	1458	B W49	8
144	2	190		B	PROC1		5	4	1462	B Y46	8
145	2	200	LBL2	B	LBLA	YES PARAGRAPH PENDING	5	4	1466	B V54	9
146	2	210		B	LBL1A	LOOP PUTX RTRN & LABEL	5	4	1470	B U50	9
147	2	220	*			THEN LBL1A WORK	5				

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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230  LBL3   C     SRLBL,NULL          SECTION CASE             5    7  1474  C O86 O89          9
149  2 240         BU    LBL5                                         5    5  1481  B V22 /            9
150  2 250         C     PRLBL,NULL                                   5    7  1486  C O80 O89          9
151  3 010         BU    LBL4                                         5    5  1493  B V14 /            9
152  3 020  LBL3A  B     LBLC                NOTHING PENDING          5    4  1498  B V92              9
153  3 030         B     LBLD                LABEL-PN-BUILD & ASSIGN  5    4  1502  B W37             10
154  3 040         B     LBLF                SECTION STRING IF APROPOS.5   4  1506  B W64             10
155  3 050         B     PROC1                                        5    4  1510  B Y46             10
156  3 060  LBL4   B     LBLA                NO SECTION,BUT YES PARAGRAPH 5    4  1514  B V54             10
157  3 070         B     LBL3A                                        5    4  1518  B U98             10
158  3 080  LBL5   C     PRLBL,NULL                                   5    7  1522  C O80 O89         10
159  3 090         BU    LBL6                                         5    5  1529  B V42 /           10
160  3 100         B     LBLB                YES SECTION BUT NO PARAGRAPH 5    4  1534  B V73             11
161  3 110         B     LBL3A                                        5    4  1538  B U98             11
162  3 120  LBL6   B     LBLA                YES SECTION AND YES PARAGRAPH5    4  1542  B V54             11
163  3 130         B     LBLB                                         5    4  1546  B V73             11
164  3 140         B     LBL3A                                        5    4  1550  B U98             11
165  3 150  LBLA   SBR   X3                  LOOP THROUGH PARAGRAPH STRING5    4  1554  H 099             11
166  3 160  LBLA1  B     RMPR                PUTTING RETURN OPERATORS 5    4  1558  B K41             11
167  3 170         MLC   @1@,RETURN          AND LABELS               5    7  1562  M O97 L70         12
168  3 180         B     LBLH1                                        5    4  1569  B W86             12
169  3 190  LBLB   SBR   X3                                           5    4  1573  H 099             12
170  3 200  LBLB1  B     RMSR                SAME AS ABOVE,BUT ON THE SECT5ON  4  1577  B K26             12
171  3 210         MLC   @0@,RETURN          STRING                   5    7  1581  M O98 L70         12
172  3 220         B     LBLH1                                        5    4  1588  B W86             12
173  3 230  LBLC   SBR   X3                                           5    4  1592  H 099             12
174  3 240         BCE   PROC1,EXITSW,1                              5    8  1596  B Y46 Z06 1       13
175  3 250         B     LBLC2                                        5    4  1604  B W12             13
176  4 010  LBLC1  SBR   X3                  PUT THE LABEL OPERATOR AND TH5    4  1608  H 099             13
177  4 020  LBLC2  B     PUTX                PROCEDURE NAME           5    4  1612  B 363             13
178  4 030         DCW   VLBL                                         5    3  1618  L59               13
179  4 040         B     PUTX                                         5    4  1619  B 363             13
180  4 050         DCW   PNM                                          5    3  1625  L65               13
181  4 060         B     PUTX                                         5    4  1626  B 363             14
182  4 070         DCW   VPRD                                         5    3  1632  Z12               14
183  4 080         B     0&X3                                         5    4  1633  B 0?0             14
184  4 090  LBLD   SBR   X3                  CONVERT TABLE TO STRING  5    4  1637  H 099             14
185  4 100         B     TBTOST                                       5    4  1641  B Z13             14
186  4 110  LBLD1A B     0&X3                                         5    4  1645  B 0?0             14
187  4 120  LBLE   SBR   X3                  ASSIGN STRING AS PARAGRAPH-  5    4  1649  H 099             14
188  4 130         MLC   ST,PRLBL            STRING                   5    7  1653  M O83 O80         15
189  4 140         B     LBLG                                         5    4  1660  B W75             15
190  4 150  LBLF   SBR   X3                  ASSIGN STRING AS SECTION-STRI5G   4  1664  H 099             15
191  4 160         MLC   ST,SRLBL                                     5    7  1668  M O83 O86         15
192  4 170  LBLG   MLC   NULL,ST                                      5    7  1675  M O89 O83         15
193  4 180         B     0&X3                                         5    4  1682  B 0?0             15
194  4 190  LBLH1  C     ZZ,NULL                                      5    7  1686  C L73 O89         16
195  4 200         BE    0&X3                                         5    5  1693  B 0?0 S           16
196  4 210         B     PUTX                                         5    4  1698  B 363             16
197  4 220         DCW   VRTRN                                        5    3  1704  L76               16
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         B     PUTX                                      5    4  1705  B 363             16
199  4 240         DCW   ZZ                                        5    3  1711  L73               16
200  4 250         B     RMSP                                      5    4  1712  B K18             16
201  5 010         B     PUTX                                      5    4  1716  B 363             17
202  5 020         DCW   ZZ                                        5    3  1722  L73               17
203  5 030         BCE   LBLA1,RETURN,1                            5    8  1723  B V58 L70 1       17
204  5 040         B     LBLB1                                     5    4  1731  B V77             17
205  5 050  EOJ    C     SRLBL,NULL          END-OF-PROGRAM ROUTE  5    7  1735  C O86 O89         17
206  5 060         BE    EOJ1                CHECK FOR RETURNS PE  5    5  1742  B X63 S           17
207  5 070         C     PRLBL,NULL                                5    7  1747  C O80 O89         17
208  5 080         BU    LBLA                                      5    5  1754  B V54 /           18
209  5 090         B     EOJA                                      5    4  1759  B X83             18
210  5 100  EOJ1   C     PRLBL,NULL                                5    7  1763  C O80 O89         18
211  5 110         BE    EOJC                                      5    5  1770  B Y35 S           18
212  5 120         B     LBLA                                      5    4  1775  B V54             18
213  5 130         B     EOJB                                      5    4  1779  B Y24             18
214  5 140  EOJA   B     RMSR                                      5    4  1783  B K26             18
215  5 150         C     ZZ,NULL                                   5    7  1787  C L73 O89         19
216  5 160         BE    EOJC                                      5    5  1794  B Y35 S           19
217  5 170         B     PUTX                                      5    4  1799  B 363             19
218  5 180         DCW   VRTRN                                     5    3  1805  L76               19
219  5 190         B     PUTX                                      5    4  1806  B 363             19
220  5 200         DCW   ZZ                                        5    3  1812  L73               19
221  5 210         B     RMSP                                      5    4  1813  B K18             19
222  5 220         B     PUTX                                      5    4  1817  B 363             20
223  5 230         DCW   ZZ                                        5    3  1823  L73               20
224  5 240  EOJB   B     PUTX                                      5    4  1824  B 363             20
225  5 250         DCW   VPRD                                      5    3  1830  Z12               20
226  6 010         B     EOJA                                      5    4  1831  B X83             20
227  6 020  EOJC   B     PUTSX                                     5    4  1835  B N95             20
228  6 030         B     SUPER                                     5    4  1839  B 351             20
229  6 040         DCW   @G01@                                    5    3  1845                    21
230  6 050  PROC1  MLC   @0@,SECT                                 5    7  1846  M O98 L69         21
231  6 060         BCE   PROC2,EXITSW,0                           5    8  1853  B Y83 Z06 0       21
232  6 070         MLC   @0@,EXITSW                               5    7  1861  M O98 Z06         21
233  6 080         MLC   NAME,PNM                                 5    7  1868  M Z09 L65         21
234  6 090         B     LBLD                                      5    4  1875  B W37             21
235  6 100         B     LBLE                                      5    4  1879  B W49             22
236  6 110  PROC2  C     SX,VLABEL                                 5    7  1883  C L62 L59         22
237  6 120         BE    LABEL                                     5    5  1890  B T07 S           22
238  6 130         B     PUTSX                                     5    4  1895  B N95             22
239  6 140         B     START                                     5    4  1899  B T00             22
240  6 150  VEXIT  DCW   @)16@                                    5    3  1905                    22
241  6 160  EXITSW       @0@                                       5    1  1906                    22
242  6 170  NAME         #3                                        5    3  1909                    23
243  6 180  VPRD         @.PD@                                     5    3  1912                    23
244  6 190  TBTOST MLC   NULL,TEST                                 5    7  1913  M O89 K08         23
245  6 200         MLC   NULL,SAVE                                5    7  1920  M O89 K11         23
246  6 210         MLC   LBLCNT,TBGT                              5    7  1927  M K17 K14         23
247  6 220  TBT01  MLC   1289,X2                                   5    7  1934  M S89 094         23
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         SBR   TEST,12&X2                                   7  1941  H K08 0J2           24
249  6 240  TBT02  BCE   TBT11,0&X2,|                                 8  1948  B J92 0!0 |         24
250  6 250         C     0&X2                                         4  1956  C 0!0               24
251  7 010         SAR   X2                                          4  1960  Q 094               24
252  7 020         C     TBGT,0&X2                                    7  1964  C K14 0!0           24
253  7 030         SBR   X2                                          4  1971  H 094               24
254  7 040         BH    TBT03                                        5  1975  B Z93 U             24
255  7 050         C     0&X2                                         4  1980  C 0!0               25
256  7 060         C                                                  1  1984  C                   25
257  7 070         SAR   X2                                          4  1985  Q 094               25
258  7 080         B     TBT02                                        4  1989  B Z48               25
259  7 090  TBT03  SBR   X2,6&X2                                      7  1993  H 094 0!6           25
260  7 100         SBR   NEWRH,12&X2                                 7  2000  H K05 0J2           25
261  7 110         C     X2,TEST                                      7  2007  C 094 K08           25
262  7 120         BE    TBT08                                        5  2014  B J13 S             26
263  7 130  TBT04  SBR   X2,12&X2                                     7  2019  H 094 0J2           26
264  7 140         C     X2,TEST                                      7  2026  C 094 K08           26
265  7 150         BE    TBT08                                        5  2033  B J13 S             26
266  7 160         C     0&X2,PNM                                     7  2038  C 0!0 L65           26
267  7 170         BU    TBT04                                        5  2045  B !19 /             26
268  7 180         C     0&X2                                         4  2050  C 0!0               27
269  7 190         C                                                  1  2054  C                   27
270  7 200         SAR   X2                                          4  2055  Q 094               27
271  7 210  TBT05  MLC   0&X2,SYM                                     7  2059  M 0!0 L79           27
272  7 220         SAR   X2                                          4  2066  Q 094               27
273  7 230         B     ADSL                                         4  2070  B L83               27
274  7 240         DCW   ST                                           3  2076  O83                 27
275  7 250         DCW   SYM                                          3  2079  L79                 28
276  8 010  TBT06  NOP   TBT07                                       4  2080  N !95               28
277  8 020         MLC   @B@,TBT06                                    7  2084  M O99 !80           28
278  8 030         B     TBT05                                        4  2091  B !59               28
279  8 040  TBT07  MLC   @N@,TBT06                                    7  2095  M P00 !80           28
280  8 050         SBR   X2,12&X2                                     7  2102  H 094 0J2           28
281  8 060         B     TBT04                                        4  2109  B !19               28
282  8 070  TBT08  NOP   TBT10                                       4  2113  N J81               29
283  8 080         MLC   @B@,TBT08                                    7  2117  M O99 J13           29
284  8 090         MLC   NEWRH,TEST                                   7  2124  M K05 K08           29
285  8 100         MLC   NEWRH,X2                                     7  2131  M K05 094           29
286  8 110         BW    TBT09,4&X2                                   8  2138  V J58 0!4 1         29
287  8 120         C     4&X2                                         4  2146  C 0!4               29
288  8 130         SAR   X2                                          4  2150  Q 094               30
289  8 140         B     TBT09A                                       4  2154  B J69               30
290  8 150  TBT09  C     0&X2                                         4  2158  C 0!0               30
291  8 160         C                                                  1  2162  C                   30
292  8 170         C                                                  1  2163  C                   30
293  8 180         C                                                  1  2164  C                   30
294  8 190         SAR   X2                                          4  2165  Q 094               30
295  8 200  TBT09A BCE   TBT04,0&X2,|                                 8  2169  B !19 0!0 |         31
296  8 210         B     TBT09                                        4  2177  B J58               31
297  8 220  TBT10  MLC   @N@,TBT08                                   7  2181  M P00 J13           31
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          B     LBLD1A                               4  2188  B W45               31
299  8 240  TBT11   MLC   @B@,TBT08                           7  2192  M O99 J13           31
300  8 250          B     TBT04                                4  2199  B !19               31
301  9 010  NEWRH   DCW   #3                                   3  2205                      31
302  9 020  TEST    DCW   #3                                5  3  2208                      32
303  9 030  SAVE    DCW   #3                                5  3  2211                      32
304  9 040  TBGT    DCW   #3                                5  3  2214                      32
305  9 050  LBLCNT  DCW   @001@                             5  3  2217                      32
306  9 060  RMSP    SBR   EXIT&3                           5  4  2218  H L45               32
307  9 070          B     RM01                             5  4  2222  B K52               32
308  9 080  RMSR    SBR   EXIT&3                           5  4  2226  H L45               32
309  9 090          MLC   &SRLBL,RMST                      5  7  2230  M P03 K77           33
310  9 100          B     RM01                             5  4  2237  B K52               33
311  9 110  RMPR    SBR   EXIT&3                           5  4  2241  H L45               33
312  9 120          MLC   &PRLBL,RMST                      5  7  2245  M P06 K77           33
313  9 130  RM01    MLC   RMST,*&4                         5  7  2252  M K77 K62           33
314  9 140          C     *,NULL                           5  7  2259  C K65 O89           33
315  9 150          BE    RMNTFD             NO STRING     5  5  2266  B L46 S             34
316  9 160          B     LCST                             5  4  2271  B N00               34
317  9 170  RMST    DCW   *                                5  3  2277  K77                 34
318  9 180                LOCTN                            5  3  2280  N76                 34
319  9 190          MLC   LOCTN,X1                         5  7  2281  M N76 089           34
320  9 200          MLC   2&X1,ZZ                         5  7  2288  M 0|2 L73           34
321  9 210          MRCM  3&X1,0&X1                        5  7  2295  P 0|3 0|0           34
322  9 220          SBR   RM02&3                          5  4  2302  H L13               35
323  9 230          SBR   RM02&6                          5  4  2306  H L16               35
324  9 240  RM02    MLNS  *,*                             5  7  2310  D L16 L16           35
325  9 250          SBR   ENDST                            5  4  2317  H O92               35
326 10 010          MLC   RMST,X1                         5  7  2321  M K77 089           35
327 10 020          S     &3,0&X1                          5  7  2328  S P07 0|0           35
328 10 030          MLZS  @ @,0&X1                         5  7  2335  Y P08 0|0           36
329 10 040  EXIT    B     *                                5  4  2342  B L45               36
330 10 050  RMNTFD  MLC   NULL,ZZ                          5  7  2346  M O89 L73           36
331 10 060          B     EXIT                             5  4  2353  B L42               36
332 10 070  VLABEL  DCW   @.LB@                           5  3  2359                      36
333 10 080  SX             #3                             5  3  2362                      36
334 10 090  PNM            #3                             5  3  2365                      36
335 10 100  VSECT          @*09@                          5  3  2368                      37
336 10 110  SECT           @0@                            5  1  2369                      37
337 10 120  RETURN         @0@                            5  1  2370                      37
338 10 130  VLBL    EQU   VLABEL                          5     2359
339 10 140  ZZ      DCW   @000@                           5  3  2373                      37
340 10 150  VRTRN          @.RT@                          5  3  2376                      37
341 10 160  SYM            #3                             5  3  2379                      37
342 10 170  TBARG   DCW   @G98@                           5  3  2382                      37
343 10 180  ADSL    SBR   X1                             5  4  2383  H 089               38
344 10 190          SBR   ADSL5&3,6&X1       FIX EXIT    5  7  2387  H M99 0|6           38
345 10 200          MLC   2&X1,ADSL1         STRING 1    5  7  2394  M 0|2 M28           38
346 10 210          MLC   ADSL1,ADSL4&6      STRING1     5  7  2401  M M28 M88           38
347 10 220          MLC   5&X1,ADSL3&3       SYMBOL      5  7  2408  M 0|5 M74           38
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          A     @003@,ADSL1                               5    7  2415  A P11 M28          38
349 10 240          B     LCST                LOCATE FIRST OF NEXT STRING 5    4  2422  B N00              39
350 10 250  ADSL1   DCW   #3                                        5    3  2428                     39
351 11 010          LOCTN                                           5    3  2431  N76                39
352 11 020          MLC   ENDST,X1            SET OPENER            5    7  2432  M O92 089          39
353 11 030          SBR   ADSL2&3,0&X1                             5    7  2439  H M67 0|0          39
354 11 040          SBR   ADSL2&6,3&X1                            5    7  2446  H M70 0|3          39
355 11 050          MLC   LOCTN,X1                                5    7  2453  M N76 089          39
356 11 060          SW    0&X1                                    5    4  2460  , 0|0              40
357 11 070  ADSL2   MLC   0,0                 OPEN STRING AREA      5    7  2464  M 000 000          40
358 11 080  ADSL3   MLC   0,2&X1                                   5    7  2471  M 000 0|2          40
359 11 090          CW    0&X1                                    5    4  2478  ) 0|0              40
360 11 100  ADSL4   A     @003@,0             INCREMENT NORM        5    7  2482  A P11 000          40
361 11 110          A     @003@,ENDST                             5    7  2489  A P11 O92          40
362 11 120  ADSL5   B     0                   EXIT                  5    4  2496  B 000              41
363 11 130  *         LOCATION GIVEN IS LEFT END CHARACTER                 5
364 11 140  LCST    SBR   X1                                       5    4  2500  H 089              41
365 11 150          MLC   2&X1,*&4            SET ADDER             5    7  2504  M 0|2 N14          41
366 11 160          MLC   0,LOCTN                                   5    7  2511  M 000 N76          41
367 11 170          SAR   LCST2&3                                 5    4  2518  Q N62              41
368 11 180          MLC   BGNST,LOCTN         INITIALIZE COUNTER    5    7  2522  M O95 N76          41
369 11 190  LCST1   C     LCST2&3,&BGNLC      TEST FOR END          5    7  2529  C N62 P14          42
370 11 200          BU    LCST2                                   5    5  2536  B N59 /            42
371 11 210          MLC   5&X1,*&7                                5    7  2541  M 0|5 N54          42
372 11 220          MLC   LOCTN,*                                 5    7  2548  M N76 N54          42
373 11 230          B     6&X1                                    5    4  2555  B 0|6              42
374 11 240  LCST2   A     0,LOCTN             ADDER                 5    7  2559  A 000 N76          42
375 11 250          SAR   LCST2&3             DECREMENT ADDER       5    4  2566  Q N62              43
376 12 010          B     LCST1                                   5    4  2570  B N29              43
377 12 020  LOCTN   DCW   #3                  LOCATION OF STRING    5    3  2576                     43
378 12 030  GETSX   SBR   GTSEX&3             GETSX                 5    4  2577  H N94              43
379 12 040          B     GETX                                    5    4  2581  B 335              43
380 12 050          DCW   &SX                                     5    3  2587  L62                43
381 12 060          &EOJ                                          5    3  2590  X35                43
382 12 070  GTSEX   B     *                                       5    4  2591  B N94              44
383 12 080  PUTSX   SBR   PTSEX&3             PUTSX                 5    4  2595  H O09              44
384 12 090          B     PUTX                                    5    4  2599  B 363              44
385 12 100          DCW   &SX                                     5    3  2605  L62                44
386 12 110  PTSEX   B     *                                       5    4  2606  B O09              44
387 12 120  GTPTIL  SBR   X1                  GTPTIL                5    4  2610  H 089              44
388 12 130          MLC   @P@,GTPSW                               5    7  2614  M P15 O77          44
389 12 140          MLC   X1,GTLSV                                5    7  2621  M 089 O76          45
390 12 150          MLC   2&X1,GTL03&3                           5    7  2628  M 0|2 O42          45
391 12 160  GTL02   B     GETSX                                   5    4  2635  B N77              45
392 12 170  GTL03   C     *,SX                                    5    7  2639  C O45 L62          45
393 12 180          BE    GTL04                                   5    5  2646  B O63 S            45
394 12 190          BCE   PUTSX,GTPSW,P                          5    8  2651  B N95 O77 P        45
395 12 200          B     GTL02                                   5    4  2659  B O35              46
396 12 210  GTL04   MLC   GTLSV,X1                                5    7  2663  M O76 089          46
397 12 220          B     3&X1                                    5    4  2670  B 0|3              46
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230  GTLSV  DCW   #3                                     5       3  2676                      46
399 12 240  GTPSW        #1                                     5       1  2677                      46
400 12 250  BGNLC  EQU   *                                      5          2677
401 13 010  PRLBL  DCW   @000@                                  5       3  2680                      46
402 13 020  ST     DCW   @000@                                  5       3  2683                      46
403 13 030  SRLBL  DCW   @000@                                  5       3  2686                      47
404 13 040  NULL   DCW   @000@                                  5       3  2689                      47
405 13 050  ENDST  DCW   RM                                     5       3  2692  P16                 47
406 13 060  BGNST  DCW   RM                                     5       3  2695  P16                 47
407 13 070         LTORG                                        5                 2696
                   DCW   &1                                             1  2696             LIT     47
                         @1@                                            1  2697             LIT     47
                         @0@                                            1  2698             LIT     47
                         @B@                                            1  2699             LIT     48
                         @N@                                            1  2700             LIT     48
       309               &SRLBL                                         3  2703  O86         ADCON   48
       312               &PRLBL                                         3  2706  O80         ADCON   48
                         &3                                             1  2707             LIT     48
                         @ @                                            1  2708             LIT     48
                         @003@                                          3  2711             LIT     48
       369               &BGNLC                                         3  2714  O77         ADCON   49
                         @P@                                            1  2715             LIT     49
408 13 080  RM     DC    @|@                                    5       1  2716                      49
409 13 090         DCW   @}@                                    5       1  2717                      49
410 13 100         END   START                                  5                / T00 080           50
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - G01 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - G01					
102	1	020		CTL	631 11					
103	1	030	X1	EQU	89			0089		
104	1	040	X2	EQU	94			0094		
105	1	050	X3	EQU	99			0099		
106	1	060	SUPER	EQU	351			0351		
107	1	070	PUTX	EQU	363			0363		
108	1	080	GETX	EQU	335			0335		
109	1	090	DUMP	EQU	359			0359		
110	1	100	SZSW	EQU	1126			1126		
111	1	110		ORG	1300				1300	
112	1	120	CURNT	DCW	#3		3	1302		4
113	1	130	SBNM	DCW	@A0?@		3	1305		4
114	1	140	GTSAVE	DCW	@A0@		2	1307		4
115	1	150	HICORE	DCW	@G92@		3	1310		4
116	1	160		BCE	INIT,SZSW,4		8	1311	B T57 /26 4	4
117	1	170		MLC	@F3S@,HICORE		7	1319	M F58 T10	4
118	1	180		SW	3801		4	1326	, H01	4
119	1	190		MLC	@F3S@,X1		7	1330	M F58 089	5
120	1	200	CLEAR	CS	0&X1		4	1337	/ 0|0	5
121	1	210		SBR	X1		4	1341	H 089	5
122	1	220		BWZ	CLEAR,3801,1		8	1345	V T37 H01 1	5
123	1	230		CW	3799		4	1353	) G99	5
124	1	240	INIT	B	GTSYM		4	1357	B J20	5
125	1	250		C	CURNT,SPROC		7	1361	C T02 E56	5
126	2	010		BU	INIT		5	1368	B T57 /	6
127	2	020		B	PASS		4	1373	B U56	6
128	2	030	TEST1	MLC	@0@,SWRT		7	1377	M F59 E09	6
129	2	040		C	CURNT,SADD		7	1384	C T02 F10	6
130	2	050		BE	ADDRTN		5	1391	B W52 S	6
131	2	060		C	CURNT,SSUB		7	1396	C T02 E92	6
132	2	070		BE	ADDRTN		5	1403	B W52 S	7
133	2	080		C	CURNT,SDIV		7	1408	C T02 F04	7
134	2	090		BE	DVDRTN		5	1415	B Z60 S	7
135	2	100		C	CURNT,SMLT		7	1420	C T02 E95	7
136	2	110		BE	MLTRTN		5	1427	B Z71 S	7
137	2	120		C	CURNT,SMOV		7	1432	C T02 F07	7
138	2	130		BE	MOVRTN		5	1439	B V75 S	8
139	2	140		C	CURNT,SPRF		7	1444	C T02 E98	8
140	2	150		BE	PRFRTN		5	1451	B P70 S	8
141	2	160	PASS	B	PUTX		4	1456	B 363	8
142	2	170		DCW	CURNT		3	1462	T02	8
143	2	180	GTEST	B	GTSYM		4	1463	B J20	8
144	2	190	TEST2	BCE	TEST1,CURNT-2,)		8	1467	B T77 T00)	8
145	2	200		C	CURNT,RLNK		7	1475	C T02 E05	9
146	2	210		BE	RLKRTN		5	1482	B M91 S	9
147	2	220		BCE	PASS,SWRT,0		8	1487	B U56 E09 0	9

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		C	CURNT,SAFT		7	1495	C T02 E49	9
149	2	240		BU	PASS		5	1502	B U56 /	9
150	2	250		BCE	AFTER,SWRT,1		8	1507	B ?63 E09 1	10
151	3	010		B	AFTERX		4	1515	B B07	10
152	3	020	TEST	C	GTSAVE,GT		7	1519	C T07 E52	10
153	3	030		BH	TEST3		5	1526	B V64 U	10
154	3	040	TEST4	MLC	@A0@,GT		7	1531	M F61 E52	10
155	3	050	TEST5	BCE	TEST2,SUBSW,0		8	1538	B U67 F45 0	10
156	3	060		B	PUTX		4	1546	B 363	11
157	3	070		DCW	SE		3	1552	F48	11
158	3	080		MLC	@0@,SUBSW		7	1553	M F59 F45	11
159	3	090		B	TEST2		4	1560	B U67	11
160	3	100	TEST3	MLC	GT,GTSAVE		7	1564	M E52 T07	11
161	3	110		B	TEST4		4	1571	B V31	11
162	3	120	MOVRTN	MLC	SMOV,OUTOP		7	1575	M F07 E80	11
163	3	130		B	GTSYM		4	1582	B J20	12
164	3	140		B	NMTST		4	1586	B J38	12
165	3	150		DCW	TEST2		3	1592	U67	12
166	3	160		MLC	NAME,PAR2		7	1593	M E59 E86	12
167	3	170		MLC	NAME		4	1600	M E59	12
168	3	180		B	NMTST		4	1604	B J38	12
169	3	190		DCW	MOV02		3	1610	W44	12
170	3	200		MLC	NAME,PAR1		7	1611	M E59 E83	13
171	3	210		B	OUTMC2		4	1618	B M32	13
172	3	220	MOV01	B	NMTST		4	1622	B J38	13
173	3	230		DCW	TEST5		3	1628	V38	13
174	3	240		MLC	NAME,PAR1		7	1629	M E59 E83	13
175	3	250		B	OUTMC2		4	1636	B M32	13
176	4	010		B	MOV01		4	1640	B W22	13
177	4	020	MOV02	B	OUTMC2		4	1644	B M32	14
178	4	030		B	TEST5		4	1648	B V38	14
179	4	040	ADDRTN	MLC	@ &@,OUTOP		7	1652	M F64 E80	14
180	4	050	ADDRT1	B	GTSYM		4	1659	B J20	14
181	4	060		B	NMTST		4	1663	B J38	14
182	4	070		DCW	TEST		3	1669	V19	14
183	4	080	ADDRT2	MLC	NAME,PAR1		7	1670	M E59 E83	14
184	4	090	ADD01	B	NMTST		4	1677	B J38	15
185	4	100		DCW	ENDCHK		3	1683	X29	15
186	4	110		MLC	NAME,PAR2		7	1684	M E59 E86	15
187	4	120		MLC	NAME,SAVE		7	1691	M E59 F34	15
188	4	130		A	&1,GT		7	1698	A F65 E52	15
189	4	140		MLC	GT,PAR3		7	1705	M E52 E89	15
190	4	150		MLC			1	1712	M	15
191	4	160		B	OUTMC3		4	1713	B M47	16
192	4	170		MLC	GT,PAR1		7	1717	M E52 E83	16
193	4	180		MLC			1	1724	M	16
194	4	190		B	ADD01		4	1725	B W77	16
195	4	200	ENDCHK	C	CURNT,SFRM		7	1729	C T02 F13	16
196	4	210		BE	ENDCH1		5	1736	B Y98 S	16
197	4	220	GIVCHK	MLC	SGIV,OUTOP		7	1741	M F25 E80	16

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         C     CURNT,SRND                                7  1748  C T02 F22           17
199  4 240         BU    GIVCH1                                    5  1755  B X75 /             17
200  4 250  GIVCH5 MLC   SRND,OUTOP                                7  1760  M F22 E80           17
201  5 010         B     GTSYM                                     4  1767  B J20               17
202  5 020         B     GIVCH2                                    4  1771  B X87               17
203  5 030  GIVCH1 C     CURNT,SGIV                                7  1775  C T02 F25           17
204  5 040         BE    GIVCH4                                    5  1782  B Y64 S             17
205  5 050  GIVCH2 MLC   SAVE,PAR1                                 7  1787  M F34 E83           18
206  5 060         MLC   PAR3,PAR2                                 7  1794  M E89 E86           18
207  5 070         C     CURNT,SSZE                                7  1801  C T02 F37           18
208  5 080         BU    GIVCH3                                    5  1808  B Y56 /             18
209  5 090         B     PUTX                                      4  1813  B 363               18
210  5 100         DCW   SCOMP                                    3  1819  F01                 18
211  5 110         B     PUTX                                      4  1820  B 363               18
212  5 120         DCW   PAR1                                     3  1826  E83                 19
213  5 130         B     PUTX                                      4  1827  B 363               19
214  5 140         DCW   OUTOP                                    3  1833  E80                 19
215  5 150         B     PUTX                                      4  1834  B 363               19
216  5 160         DCW   PAR2                                     3  1840  E86                 19
217  5 170         B     PUTX                                      4  1841  B 363               19
218  5 180         DCW   SSZE                                     3  1847  F37                 19
219  5 190         B     GTSYM                                     4  1848  B J20               20
220  5 200         B     TEST                                      4  1852  B V19               20
221  5 210  GIVCH3 B     OUTMC2                                    4  1856  B M32               20
222  5 220         B     TEST                                      4  1860  B V19               20
223  5 230  GIVCH4 B     GTSYM                                     4  1864  B J20               20
224  5 240         B     NMTST                                     4  1868  B J38               20
225  5 250         DCW   *&1                                      3  1874  Y75                 20
226  6 010         MLC   NAME,SAVE                                7  1875  M E59 F34           21
227  6 020         C     CURNT,SRND                                7  1882  C T02 F22           21
228  6 030         BE    GIVCH5                                    5  1889  B X60 S             21
229  6 040         B     GIVCH2                                    4  1894  B X87               21
230  6 050  ENDCH1 B     GTSYM                                     4  1898  B J20               21
231  6 060         MLC   PAR1,PAR2                                 7  1902  M E83 E86           21
232  6 070         MLC   @  -@,OUTOP                              7  1909  M F68 E80           22
233  6 080         B     NMTST                                     4  1916  B J38               22
234  6 090         DCW   ENDCH2                                   3  1922  Z37                 22
235  6 100         MLC   NAME,PAR1                                 7  1923  M E59 E83           22
236  6 110         MLC   NAME,SAVE                                 7  1930  M E59 F34           22
237  6 120  ENDCH2 A     &1,GT                                     7  1937  A F65 E52           22
238  6 130         MLC   GT,PAR3                                   7  1944  M E52 E89           23
239  6 140         MLC                                             1  1951  M                   23
240  6 150         B     OUTMC3                                    4  1952  B M47               23
241  6 160         B     GIVCHK                                    4  1956  B X41               23
242  6 170  DVDRTN MLC   @  /@,OUTOP                              7  1960  M F71 E80           23
243  6 180         B     MLTRT1                                    4  1967  B Z78               23
244  6 190  MLTRTN MLC   @  *@,OUTOP                             7  1971  M F74 E80           23
245  6 200  MLTRT1 B     GTSYM                                     4  1978  B J20               24
246  6 210         B     NMTST                                     4  1982  B J38               24
247  6 220         DCW   MLTRT5                                    3  1988  !98                 24
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
248	6	230		MLC	NAME,PAR2		7	1989	M E59 E86	24
249	6	240	MLTRT4	C	CURNT,SBY		7	1996	C T02 F19	24
250	6	250		BE	MLTRT2		5	2003	B !20 S	24
251	7	010		C	CURNT,SINTO		7	2008	C T02 F16	24
252	7	020		BU	MLTRT3		5	2015	B !24 /	25
253	7	030	MLTRT2	B	GTSYM		4	2020	B J20	25
254	7	040	MLTRT3	B	NMTST		4	2024	B J38	25
255	7	050		DCW	MLTRT6		3	2030	J09	25
256	7	060		MLC	NAME,PAR1		7	2031	M E59 E83	25
257	7	070	MLTRT7	MLC	PAR1,SAVE		7	2038	M E83 F34	25
258	7	080		A	&1,GT		7	2045	A F65 E52	25
259	7	090		MLC	GT,PAR3		7	2052	M E52 E89	26
260	7	100		MLC			1	2059	M	26
261	7	110		C	CURNT,SGIV		7	2060	C T02 F25	26
262	7	120		BU	MLTRT8		5	2067	B !90 /	26
263	7	130		B	GTSYM		4	2072	B J20	26
264	7	140		B	NMTST		4	2076	B J38	26
265	7	150		DCW	*&1		3	2082	!83	26
266	7	160		MLC	NAME,SAVE		7	2083	M E59 F34	27
267	7	170	MLTRT8	B	OUTMC3		4	2090	B M47	27
268	7	180		B	GIVCHK		4	2094	B X41	27
269	7	190	MLTRT5	MLC	@XXX@,PAR2		7	2098	M F77 E86	27
270	7	200		B	MLTRT4		4	2105	B Z96	27
271	7	210	MLTRT6	MLC	@XXX@,PAR1		7	2109	M F77 E83	27
272	7	220		B	MLTRT7		4	2116	B !38	27
273	7	230	GTSYM	SBR	GT01&3		4	2120	H J37	28
274	7	240		B	GETX		4	2124	B 335	28
275	7	250		DCW	CURNT		3	2130	T02	28
276	8	010		DCW	EOJ		3	2133	L20	28
277	8	020	GT01	B	*		4	2134	B J37	28
278	8	030	NMTST	SBR	X3		4	2138	H 099	28
279	8	040		MLC	2&X3,NMFEXT&3		7	2142	M 0?2 J72	28
280	8	050		C	CURNT-2,@A@		7	2149	C T00 F78	29
281	8	060		BH	NMFEXT		5	2156	B J69 U	29
282	8	070		B	NAMRTN		4	2161	B J73	29
283	8	080		B	3&X3		4	2165	B 0?3	29
284	8	090	NMFEXT	B	*		4	2169	B J72	29
285	8	100	NAMRTN	SBR	NAMR01&3		4	2173	H L19	29
286	8	110		MLC	CURNT,NAME		7	2177	M T02 E59	29
287	8	120		B	GTSYM		4	2184	B J20	30
288	8	130		C	CURNT,SBOP		7	2188	C T02 E62	30
289	8	140		BU	NAMR01		5	2195	B L16 /	30
290	8	150		MLC	@1@,SUBSW		7	2200	M F79 F45	30
291	8	160		A	&1,SBNM		7	2207	A F65 T05	30
292	8	170		C	SBNM,@?@		7	2214	C T05 F80	30
293	8	180		BU	NAMR02		5	2221	B K33 /	31
294	8	190		MLC	@A@,SBNM		7	2226	M F78 T05	31
295	8	200	NAMR02	MLC	NAME,CURNT		7	2233	M E59 T02	31
296	8	210		B	PUTX		4	2240	B 363	31
297	8	220		DCW	LOC		3	2246	E65	31

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          B     PUTX                                       4  2247  B 363               31
299  8 240          DCW   SBOP                                       3  2253  E62                 31
300  8 250          B     PUTX                                       4  2254  B 363               32
301  9 010          DCW   OP                                         3  2260  E68                 32
302  9 020  NAMR03  B     PUTX                                       4  2261  B 363               32
303  9 030          DCW   CURNT                                      3  2267  T02                 32
304  9 040          B     GTSYM                                      4  2268  B J20               32
305  9 050          C     CURNT,RPRN                                 7  2272  C T02 E74           32
306  9 060          BU    NAMR03                                     5  2279  B K61 /             32
307  9 070          B     PUTX                                       4  2284  B 363               33
308  9 080          DCW   SBNM                                       3  2290  T05                 33
309  9 090          B     PUTX                                       4  2291  B 363               33
310  9 100          DCW   NAME                                       3  2297  E59                 33
311  9 110          MLC   SBNM,NAME                                  7  2298  M T05 E59           33
312  9 120          B     PUTX                                       4  2305  B 363               33
313  9 130          DCW   MACSEP                                     3  2311  E71                 33
314  9 140          B     GTSYM                                      4  2312  B J20               34
315  9 150  NAMR01  B     *                                          4  2316  B L19               34
316  9 160  EOJ     B     PUTX                                       4  2320  B 363               34
317  9 170          DCW   EOP                                        3  2326  F43                 34
318  9 180          B     SUPER                                      4  2327  B 351               34
319  9 190          DCW   @G02@                                      3  2333                      34
320  9 200  OUTMAC  SBR   OUTM01&3                                   4  2334  H L97               34
321  9 210          B     OUTLOC                                     4  2338  B M62               35
322  9 220          BCE   OUTSEP,PRSW,0                              8  2342  B L87 F44 0         35
323  9 230          B     PUTX                                       4  2350  B 363               35
324  9 240          DCW   PAR1                                       3  2356  E83                 35
325  9 250          BCE   OUTSEP,PRSW,1                              8  2357  B L87 F44 1         35
326 10 010          B     PUTX                                       4  2365  B 363               35
327 10 020          DCW   PAR2                                       3  2371  E86                 35
328 10 030          BCE   OUTSEP,PRSW,2                              8  2372  B L87 F44 2         36
329 10 040          B     PUTX                                       4  2380  B 363               36
330 10 050          DCW   PAR3                                       3  2386  E89                 36
331 10 060  OUTSEP  B     PUTX                                       4  2387  B 363               36
332 10 070          DCW   MACSEP                                     3  2393  E71                 36
333 10 080  OUTM01  B     *                                          4  2394  B L97               36
334 10 090  OUTMC0  SBR   OUTMXX&3                                   4  2398  H M16               36
335 10 100          MLC   @0@,PRSW                                   7  2402  M F59 F44           37
336 10 110  OUTM11  B     OUTMAC                                     4  2409  B L34               37
337 10 120  OUTMXX  B     *                                          4  2413  B M16               37
338 10 130  OUTMC1  SBR   OUTMXX&3                                   4  2417  H M16               37
339 10 140          MLC   @1@,PRSW                                   7  2421  M F79 F44           37
340 10 150          B     OUTM11                                     4  2428  B M09               37
341 10 160  OUTMC2  SBR   OUTMXX&3                                   4  2432  H M16               37
342 10 170          MLC   @2@,PRSW                                   7  2436  M F81 F44           38
343 10 180          B     OUTM11                                     4  2443  B M09               38
344 10 190  OUTMC3  SBR   OUTMXX&3                                   4  2447  H M16               38
345 10 200          MLC   @3@,PRSW                                   7  2451  M F82 F44           38
346 10 210          B     OUTM11                                     4  2458  B M09               38
347 10 220  OUTLOC  SBR   OUTL01&3                                   4  2462  H M90               38
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
348	10	230		B	PUTX	4	2466	B 363	38
349	10	240		DCW	LOC	3	2472	E65	39
350	10	250		B	PUTX	4	2473	B 363	39
351	11	010		DCW	OUTOP	3	2479	E80	39
352	11	020		B	PUTX	4	2480	B 363	39
353	11	030		DCW	OP	3	2486	E68	39
354	11	040	OUTL01	B	*	4	2487	B M90	39
355	11	050	RLKRTN	MLC	CURNT,OUTOP	7	2491	M T02 E80	39
356	11	060		B	OUTLOC	4	2498	B M62	40
357	11	070		B	GTSYM	4	2502	B J20	40
358	11	080		MLC	CURNT,LST1	7	2506	M T02 E40	40
359	11	090		B	PUTX	4	2513	B 363	40
360	11	100		DCW	CURNT	3	2519	T02	40
361	11	110		B	GTSYM	4	2520	B J20	40
362	11	120		MLC	CURNT,LST2	7	2524	M T02 E37	40
363	11	130		B	GNLAB	4	2531	B D24	41
364	11	140		DCW	LST4	3	2537	E31	41
365	11	150		B	GNLAB	4	2538	B D24	41
366	11	160		DCW	LST5	3	2544	E28	41
367	11	170		B	GTSYM	4	2545	B J20	41
368	11	180		B	PUTX	4	2549	B 363	41
369	11	190		DCW	CURNT	3	2555	T02	41
370	11	200		MLC	CURNT,LST3	7	2556	M T02 E34	42
371	11	210		B	PUTX	4	2563	B 363	42
372	11	220		DCW	LST4	3	2569	E31	42
373	11	230		B	PUTX	4	2570	B 363	42
374	11	240		DCW	LST5	3	2576	E28	42
375	11	250		B	PUTX	4	2577	B 363	42
376	12	010		DCW	MACSEP	3	2583	E71	42
377	12	020		B	GTSYM	4	2584	B J20	43
378	12	030		C	CURNT-2,@A@	7	2588	C T00 F78	43
379	12	040		BH	RLKRT1	5	2595	B O81 U	43
380	12	050		C	CURNT,LST2	7	2600	C T02 E37	43
381	12	060		BU	RLKRT1	5	2607	B O81 /	43
382	12	070		MLC	@.LB@,OUTOP	7	2612	M F85 E80	43
383	12	080		MLC	LST2,PAR1	7	2619	M E37 E83	44
384	12	090		B	OUTMC1	4	2626	B M17	44
385	12	100		B	PUTX	4	2630	B 363	44
386	12	110		DCW	RLNK	3	2636	E05	44
387	12	120		B	PUTX	4	2637	B 363	44
388	12	130		DCW	LST4	3	2643	E31	44
389	12	140	RLKRT4	B	PUTX	4	2644	B 363	44
390	12	150		DCW	LST5	3	2650	E28	45
391	12	160		BCE	RLKRT3,ELSW,1	8	2651	B O63 F52 1	45
392	12	170		B	GTEST	4	2659	B U63	45
393	12	180	RLKRT3	MLC	@0@,ELSW	7	2663	M F59 F52	45
394	12	190		B	PUTX	4	2670	B 363	45
395	12	200		DCW	SEND	3	2676	F51	45
396	12	210		B	GTEST	4	2677	B U63	45
397	12	220	RLKRT1	C	CURNT,SELSE	7	2681	C T02 F55	46

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          BU    RLKRT2                                     5  2688  B P00 /             46
399 12 240          MLC   @1@,ELSW                                   7  2693  M F79 F52           46
400 12 250  RLKRT2  MLC   @)20@,OUTOP                                7  2700  M F88 E80           46
401 13 010          MLC   LST2,PAR1                                  7  2707  M E37 E83           46
402 13 020          B     OUTMC1                                     4  2714  B M17               46
403 13 030          MLC   @.LB@,OUTOP                                7  2718  M F85 E80           47
404 13 040          MLC   LST4,PAR1                                  7  2725  M E31 E83           47
405 13 050          B     OUTMC1                                     4  2732  B M17               47
406 13 060          BCE   RLKRT5,ELSW,0                              8  2736  B P55 F52 0         47
407 13 070          B     PUTX                                       4  2744  B 363               47
408 13 080          DCW   RLNK                                       3  2750  E05                 47
409 13 090          B     RLKRT4                                     4  2751  B O44               47
410 13 100  RLKRT5  MLC   LST5,PAR1                                  7  2755  M E28 E83           48
411 13 110          B     OUTMC1                                     4  2762  B M17               48
412 13 120          B     TEST2                                      4  2766  B U67               48
413 13 130  PRFRTN MLC   CURNT,OUTOP                                7  2770  M T02 E80           48
414 13 140          B     GTSYM                                      4  2777  B J20               48
415 13 150          MLC   CURNT,LST1                                 7  2781  M T02 E40           48
416 13 160          B     GTSYM                                      4  2788  B J20               48
417 13 170          B     GTSYM                                      4  2792  B J20               49
418 13 180          MLC   CURNT,LST2                                 7  2796  M T02 E37           49
419 13 190          B     OUTLOC                                     4  2803  B M62               49
420 13 200          B     PUTX                                       4  2807  B 363               49
421 13 210          DCW   LST2                                       3  2813  E37                 49
422 13 220          B     PUTX                                       4  2814  B 363               49
423 13 230          DCW   MACSEP                                     3  2820  E71                 49
424 13 240          B     GTSYM                                      4  2821  B J20               50
425 13 250          MLC   CURNT,LST3                                 7  2825  M T02 E34           50
426 14 010          B     GTSYM                                      4  2832  B J20               50
427 14 020          B     NMTST                                      4  2836  B J38               50
428 14 030          DCW   PRFCHK                                     3  2842  Q99                 50
429 14 040          C     CURNT,@  *@                                7  2843  C T02 F74           50
430 14 050          BU    PRFCK1                                     5  2850  B R23 /             50
431 14 060          MLC   @.PB@,OUTOP                                7  2855  M F91 E80           51
432 14 070          B     OUTLOC                                     4  2862  B M62               51
433 14 080          B     GTSYM                                      4  2866  B J20               51
434 14 090          B     PUTX                                       4  2870  B 363               51
435 14 100          DCW   NAME                                       3  2876  E59                 51
436 14 110  PRFCK2 MLC   @|@,LST3-3                                 7  2877  M F92 E31           51
437 14 120          B     OTPRLT                                     4  2884  B C72               51
438 14 130          MLC   @ @,LST3-3                                7  2888  M F93 E31           52
439 14 140          B     TEST5                                      4  2895  B V38               52
440 14 150  PRFCHK C     CURNT,SUNTL                                7  2899  C T02 E43           52
441 14 160          BE    PRFUNT                                     5  2906  B R38 S             52
442 14 170          C     CURNT,SVARY                                7  2911  C T02 E46           52
443 14 180          BE    PRFVAR                                     5  2918  B R71 S             52
444 14 190  PRFCK1 MLC   @.PA@,OUTOP                                7  2923  M F96 E80           53
445 14 200          B     OUTLOC                                     4  2930  B M62               53
446 14 210          B     PRFCK2                                     4  2934  B Q77               53
447 14 220  PRFUNT MLC   @.LB@,OUTOP                                7  2938  M F85 E80           53
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230          MLC   LST3,PAR1                                7  2945  M E34 E83           53
449 14 240          B     OUTMC1                                   4  2952  B M17               53
450 14 250          MLC   @.PC@,LST10                              7  2956  M F99 E13           54
451 15 010          B     OUTLST                                   4  2963  B C53               54
452 15 020          B     PASS                                     4  2967  B U56               54
453 15 030  PRFVAR  B     GTSYM                                    4  2971  B J20               54
454 15 040          B     OUTMOV                                   4  2975  B B33               54
455 15 050          MLC   @.IM@,OUTOP                              7  2979  M G02 E80           54
456 15 060          B     GNLAB                                    4  2986  B D24               54
457 15 070          DCW   LST6                                     3  2992  E25                 55
458 15 080          B     GNLAB                                    4  2993  B D24               55
459 15 090          DCW   LST5                                     3  2999  E28                 55
460 15 100          MLC   LST5,PAR2                               7  3000  M E28 E86           55
461 15 110          MLC                                            1  3007  M                   55
462 15 120          B     OUTMC2                                   4  3008  B M32               55
463 15 130          B     OUTAUG                                   4  3012  B B95               55
464 15 140          MLC   @.LB@,OUTOP                              7  3016  M F85 E80           56
465 15 150          B     GNLAB                                    4  3023  B D24               56
466 15 160          DCW   LST4                                     3  3029  E31                 56
467 15 170          MLC   LST4,PAR1                               7  3030  M E31 E83           56
468 15 180          B     OUTMC1                                   4  3037  B M17               56
469 15 190          MLC   @1@,SWRT                                7  3041  M F79 E09           56
470 15 200          MLC   @.PE@,LST10                             7  3048  M G05 E13           56
471 15 210          B     OUTLST                                   4  3055  B C53               57
472 15 220          B     PASS                                     4  3059  B U56               57
473 15 230  AFTER   B     PUTX                                     4  3063  B 363               57
474 15 240          DCW   P1OP                                     3  3069  F28                 57
475 15 250          B     GNLAB                                    4  3070  B D24               57
476 16 010          DCW   LST8                                     3  3076  E19                 57
477 16 020  AFT1    B     GNLAB                                    4  3077  B D24               57
478 16 030          DCW   LST9                                     3  3083  E16                 58
479 16 040          B     GNLAB                                    4  3084  B D24               58
480 16 050          DCW   LST7                                     3  3090  E22                 58
481 16 060          B     OTPRLT                                   4  3091  B C72               58
482 16 070          B     GTSYM                                    4  3095  B J20               58
483 16 080          B     OUTMOV                                   4  3099  B B33               58
484 16 090          MLC   @.P3@,OUTOP                              7  3103  M G08 E80           58
485 16 100          B     OUTLOC                                   4  3110  B M62               59
486 16 110          B     PUTX                                     4  3114  B 363               59
487 16 120          DCW   LST6                                     3  3120  E25                 59
488 16 130          B     GNLAB                                    4  3121  B D24               59
489 16 140          DCW   LST6                                     3  3127  E25                 59
490 16 150          B     PUTX                                     4  3128  B 363               59
491 16 160          DCW   LST6                                     3  3134  E25                 59
492 16 170          B     PUTX                                     4  3135  B 363               60
493 16 180          DCW   LST7                                     3  3141  E22                 60
494 16 190          B     GNLAB                                    4  3142  B D24               60
495 16 200          DCW   LST7                                     3  3148  E22                 60
496 16 210          B     PUTX                                     4  3149  B 363               60
497 16 220          DCW   LST7                                     3  3155  E22                 60
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230          B     PUTX                                       4  3156  B 363              60
499 16 240          DCW   MACSEP                                     3  3162  E71                61
500 16 250          B     OUTAUG                                     4  3163  B B95              61
501 17 010          MLC   @.LB@,OUTOP                                7  3167  M F85 E80          61
502 17 020          MLC   LST9,PAR1                                  7  3174  M E16 E83          61
503 17 030          B     OUTMC1                                     4  3181  B M17              61
504 17 040          MLC   @2@,SWRT                                  7  3185  M F81 E09          61
505 17 050          MLC   @.PF@,LST10                                7  3192  M G11 E13          61
506 17 060          B     OUTLST                                     4  3199  B C53              62
507 17 070          B     PASS                                       4  3203  B U56              62
508 17 080  AFTERX  B     PUTX                                       4  3207  B 363              62
509 17 090          DCW   P2OP                                       3  3213  F31                62
510 17 100          B     PUTX                                       4  3214  B 363              62
511 17 110          DCW   LST5                                       3  3220  E28                62
512 17 120          MLC   LST6,LST5                                  7  3221  M E25 E28          62
513 17 130          MLC                                              1  3228  M                  63
514 17 140          B     AFT1                                       4  3229  B ?77              63
515 17 150  OUTMOV  SBR   OUTMV1&3                                   4  3233  H B94              63
516 17 160          B     NMTST                                      4  3237  B J38              63
517 17 170          DCW   OUTMV2                                     3  3243  B58                63
518 17 180          MLC   NAME,SAVE                                  7  3244  M E59 F34          63
519 17 190          MLC   NAME,PAR1                                  7  3251  M E59 E83          63
520 17 200  OUTMV2  B     GTSYM                                      4  3258  B J20              64
521 17 210          B     NMTST                                      4  3262  B J38              64
522 17 220          DCW   OUTMV1                                     3  3268  B91                64
523 17 230          MLC   NAME,PAR2                                  7  3269  M E59 E86          64
524 17 240          MLC   @)15@,OUTOP                                7  3276  M G14 E80          64
525 17 250          B     OUTMC2                                     4  3283  B M32              64
526 18 010          B     GTSYM                                      4  3287  B J20              64
527 18 020  OUTMV1  B     *                                          4  3291  B B94              65
528 18 030  OUTAUG  SBR   OUTAG1&3                                   4  3295  H C52              65
529 18 040          B     NMTST                                      4  3299  B J38              65
530 18 050          DCW   *&1                                       3  3305  C06                65
531 18 060          MLC   NAME,PAR1                                  7  3306  M E59 E83          65
532 18 070          MLC   SAVE,PAR2                                  7  3313  M F34 E86          65
533 18 080          MLC   @)98@,OUTOP                                7  3320  M G17 E80          65
534 18 090          B     OUTMC2                                     4  3327  B M32              66
535 18 100          MLC   SAVE,PAR1                                  7  3331  M F34 E83          66
536 18 110          MLC   @.ME@,OUTOP                                7  3338  M G20 E80          66
537 18 120          B     OUTMC1                                     4  3345  B M17              66
538 18 130  OUTAG1  B     *                                          4  3349  B C52              66
539 18 140  OUTLST  SBR   OUTLT1&3                                   4  3353  H C71              66
540 18 150          B     PUTX                                       4  3357  B 363              66
541 18 160          DCW   LTOP                                       3  3363  E08                67
542 18 170          B     OTPRLT                                     4  3364  B C72              67
543 18 180  OUTLT1  B     *                                          4  3368  B C71              67
544 18 190  OTPRLT  SBR   OTPR01&3                                   4  3372  H D23              67
545 18 200          MLC   &LST1,X3                                   7  3376  M G23 099          67
546 18 210  OTPR02  MLC   0&X3,OUTSYM                                7  3383  M 0?0 E77          67
547 18 220          SAR   X3                                         4  3390  Q 099              67
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
548 18 230          B     PUTX                                     4  3394  B 363               68
549 18 240          DCW   OUTSYM                                   3  3400  E77                 68
550 18 250          BCE   OTPR03,0&X3,|                            8  3401  B D13 0?0 |         68
551 19 010          B     OTPR02                                   4  3409  B C83               68
552 19 020  OTPR03  B     PUTX                                     4  3413  B 363               68
553 19 030          DCW   MACSEP                                   3  3419  E71                 68
554 19 040  OTPR01  B     *                                        4  3420  B D23               68
555 19 050  GNLAB   SBR   X1                                       4  3424  H 089               69
556 19 060          MLC   2&X1,GNLAB1&6                            7  3428  M 0|2 D84           69
557 19 070          BAV   *&1                                      5  3435  B D40 Z             69
558 19 080          A     &1,GNNM                                  7  3440  A F65 E02           69
559 19 090          BAV   GNLAB2                                   5  3447  B D89 Z             69
560 19 100          C     GNNM-1,@0@                               7  3452  C E01 F59           69
561 19 110          BU    GNLAB3                                   5  3459  B D71 /             70
562 19 120          MLC   @J@,GNNM-1                              7  3464  M G24 E01           70
563 19 130  GNLAB3 MZ    @!@,GNNM-1                               7  3471  Y G25 E01           70
564 19 140  GNLAB1 MLC   GNNM,*                                   7  3478  M E02 D84           70
565 19 150          B     3&X1                                     4  3485  B 0|3               70
566 19 160  GNLAB2 MLC   @SJ0@,GNNM                              7  3489  M G28 E02           70
567 19 170          B     GNLAB1                                   4  3496  B D78               71
568 19 180  GNNM    DCW   @JJ0@                                   3  3502                      71
569 19 190  RLNK    DCW   @.RK@                                   3  3505                      71
570 19 200  LTOP    DCW   @.LT@                                   3  3508                      71
571 19 210  SWRT    DCW   @0@                                     1  3509                      71
572 19 220          DC    @|@                                      1  3510                      71
573 19 230  LST10   DCW   #3                                       3  3513                      71
574 19 240  LST9    DCW   #3                                       3  3516                      71
575 19 250  LST8    DCW   #3                                       3  3519                      72
576 20 010  LST7    DCW   #3                                       3  3522                      72
577 20 020  LST6    DCW   #3                                       3  3525                      72
578 20 030  LST5    DCW   #3                                       3  3528                      72
579 20 040  LST4    DCW   #3                                       3  3531                      72
580 20 050  LST3    DCW   #3                                       3  3534                      72
581 20 060  LST2    DCW   #3                                       3  3537                      72
582 20 070  LST1    DCW   #3                                       3  3540                      73
583 20 080  SUNTL   DCW   @*18@                                    3  3543                      73
584 20 090  SVARY   DCW   @*07@                                    3  3546                      73
585 20 100  SAFT    DCW   @*22@                                    3  3549                      73
586 20 110          DCW   @Z@                                      1  3550                      73
587 20 120  GT      DCW   @A0@                                     2  3552                      73
588 20 130  GTSW    DCW   @0@                                      1  3553                      73
589 20 140  SPROC   DCW   @*01@                                    3  3556                      74
590 20 150  NAME    DCW   #3                                       3  3559                      74
591 20 160  SBOP    DCW   @.SB@                                    3  3562                      74
592 20 170  LOC     DCW   @.LC@                                    3  3565                      74
593 20 180  OP      DCW   @.OP@                                    3  3568                      74
594 20 190  MACSEP  DCW   @.MC@                                    3  3571                      74
595 20 200  RPRN    DCW   @  )@                                    3  3574                      74
596 20 210  OUTSYM  DCW   #3                                       3  3577                      75
597 20 220  OUTOP   DCW   #3                                       3  3580                      75
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

598 20 230  PAR1   DCW   #3                                        3  3583                      75
599 20 240  PAR2   DCW   #3                                        3  3586                      75
600 20 250  PAR3   DCW   #3                                        3  3589                      75
601 21 010  SSUB   DCW   @)01@                                     3  3592                      75
602 21 020  SMLT   DCW   @)02@                                     3  3595                      75
603 21 030  SPRF   DCW   @)03@                                     3  3598                      76
604 21 040  SCOMP  DCW   @)05@                                     3  3601                      76
605 21 050  SDIV   DCW   @)06@                                     3  3604                      76
606 21 060  SMOV   DCW   @)15@                                     3  3607                      76
607 21 070  SADD   DCW   @)18@                                     3  3610                      76
608 21 080  SFRM   DCW   @*28@                                     3  3613                      76
609 21 090  SINTO  DCW   @*27@                                     3  3616                      76
610 21 100  SBY    DCW   @*35@                                     3  3619                      77
611 21 110  SRND   DCW   @*10@                                     3  3622                      77
612 21 120  SGIV   DCW   @*16@                                     3  3625                      77
613 21 130  P1OP   DCW   @.P1@                                     3  3628                      77
614 21 140  P2OP   DCW   @.P2@                                     3  3631                      77
615 21 150  SAVE   DCW   #3                                        3  3634                      77
616 21 160  SSZE   DCW   @/10@                                     3  3637                      77
617 21 170  GTADR  DCW   #3                                        3  3640                      78
618 21 180  EOP    DCW   @.EP@                                     3  3643                      78
619 21 190  PRSW   DCW   @0@                                       1  3644                      78
620 21 200  SUBSW  DCW   @0@                                       1  3645                      78
621 21 210  SE     DCW   @.SE@                                     3  3648                      78
622 21 220  SEND   DCW   @.EN@                                     3  3651                      78
623 21 230  ELSW   DCW   @0@                                       1  3652                      78
624 21 240  SELSE  DCW   @*02@                                     3  3655                      79
625 21 250         LTORG                                                    3656
                   DCW   @F3S@                                     3  3658            LIT       79
                         @0@                                       1  3659            LIT       79
                         @A0@                                      2  3661            LIT       79
                         @  &@                                     3  3664            LIT       79
                         &1                                        1  3665            LIT       79
                         @  -@                                     3  3668            LIT       79
                         @  /@                                     3  3671            LIT       80
                         @  *@                                     3  3674            LIT       80
                         @XXX@                                     3  3677            LIT       80
                         @A@                                       1  3678            LIT       80
                         @1@                                       1  3679            LIT       80
                         @?@                                       1  3680            LIT       80
                         @2@                                       1  3681            LIT       80
                         @3@                                       1  3682            LIT       81
                         @.LB@                                     3  3685            LIT       81
                         @)20@                                     3  3688            LIT       81
                         @.PB@                                     3  3691            LIT       81
                         @|@                                       1  3692            LIT       81
                         @ @                                       1  3693            LIT       81
                         @.PA@                                     3  3696            LIT       81
                         @.PC@                                     3  3699            LIT       82
                         @.IM@                                     3  3702            LIT       82
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @.PE@                                       3  3705              LIT     82
                         @.P3@                                       3  3708              LIT     82
                         @.PF@                                       3  3711              LIT     82
                         @)15@                                       3  3714              LIT     82
                         @)98@                                       3  3717              LIT     82
                         @.ME@                                       3  3720              LIT     83
       545               &LST1                                       3  3723  E40         ADCON   83
                         @J@                                         1  3724              LIT     83
                         @!@                                         1  3725              LIT     83
                         @SJ0@                                       3  3728              LIT     83
626 22 010         DCW   @}@                                         1  3729                      83
627 22 020         END   INIT                                             / T57 080           84
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - G02 PAGE 1

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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - G02
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                          0089
 104  1 040  X2      EQU   94                                          0094
 105  1 050  X3      EQU   99                                          0099
 106  1 060  GETX    EQU   335                                         0335
 107  1 070  PUTX    EQU   363                                         0363
 108  1 080  SUPER   EQU   351                                         0351
 109  1 090  CURNT   EQU   1302                                        1302
 110  1 100  SBNM    EQU   1305                                        1305
 111  1 110  GTSAVE  EQU   1307                                        1307
 112  1 120  HIADR   EQU   1310                                        1310
 113  1 130          ORG   1311                                              1311
 114  1 140          MLC   HIADR,SBSVAD                             7  1311  M T10 J83           4
 115  1 150  INIT    B     GTSYM                                    4  1318  B !79               4
 116  1 160          BCE   SCANXT,SCSW,0                           8  1322  B W50 K51 0         4
 117  1 170  NMTST   C     CURNT-2,@A@                              7  1330  C T00 E72           4
 118  1 180          BH    ENTER                                    5  1337  B T86 U             4
 119  1 190          MLC   CURNT,NAME                              7  1342  M T02 J16           4
 120  1 200          B     GTSYM                                    4  1349  B !79               5
 121  1 210          C     CURNT,SBOP                               7  1353  C T02 J77           5
 122  1 220          BE    ENSBSV                                   5  1360  B Y20 S             5
 123  1 230          MLC   ENDADR,X3                              7  1365  M J80 099           5
 124  1 240          MCM   NAME-2,F&X3                            7  1372  P J14 FC4           5
 125  1 250          A     &3,ENDADR                                7  1379  A E73 J80           5
 126  2 010  ENTER   MLC   ENDADR,X3                              7  1386  M J80 099           6
 127  2 020          MLC   CURNT,F&2&X3                           7  1393  M T02 FC6           6
 128  2 030          A     &3,ENDADR                                7  1400  A E73 J80           6
 129  2 040          MLC   @|@,F&3&X3                            7  1407  M E74 FC7           6
 130  2 050  SCAN    BCE   LFPLCK,LFTSW,1                         8  1414  B V53 K53 1         6
 131  2 060  RTCHK   MLC   PR,X3                                  7  1422  M K09 099           7
 132  2 070          BCE   INIT,F-2&X3,|                          8  1429  B T18 FC2 |         7
 133  2 080          C     F-2&X3,@A@                               7  1437  C FC2 E72           7
 134  2 090          BH    RTLKP                                    5  1444  B U60 U             7
 135  2 100  RTENT   A     &3,PR                                    7  1449  A E73 K09           7
 136  2 110          B     RTCHK                                    4  1456  B U22               7
 137  2 120  RTLKP   B     LKNAME                                   4  1460  B M07               8
 138  2 130          DCW   RTNTFD                                   3  1466  V35                 8
 139  2 140          MLC   0&X1,CDR                               7  1467  M 0|0 K06           8
 140  2 150          MLC                                            1  1474  M                   8
 141  2 160          MLC   RRV,DIFF                               7  1475  M K03 K55           8
 142  2 170          S     LLV,DIFF                                 7  1482  S J88 K55           8
 143  2 180          BWZ   SWCODE,DIFF,K                          8  1489  V V08 K55 K         8
 144  2 190  FORCE   MLC   CDL,X2                                 7  1497  M J93 094           9
 145  2 200          B     0&X2                                     4  1504  B 0!0               9
 146  2 210  SWCODE  MLC   PR,PL                                  7  1508  M K09 J96           9
 147  2 220          MLC                                            1  1515  M                   9
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          MLC                                             1  1516  M                    9
149  2 240          MLC   @1@,LFTSW                                 7  1517  M E75 K53            9
150  2 250          A     &3,PR                                     7  1524  A E73 K09            9
151  3 010          B     FORCHK                                    4  1531  B W34               10
152  3 020  RTNTFD  MLC   @.KV@,F&X3                               7  1535  M E78 FC4           10
153  3 030          B     RTLKP                                     4  1542  B U60               10
154  3 040  OTKVOP  B     PUTX                                      4  1546  B 363               10
155  3 050          DCW   KVOP                                      3  1552  K84                 10
156  3 060  LFPLCK  MLC   @1@,LFTSW                                7  1553  M E75 K53           10
157  3 070          MLC   PL,X3                                     7  1560  M J96 099           10
158  3 080          BCE   INIT,F-2&X3,|                           8  1567  B T18 FC2 |         11
159  3 090          C     F-2&X3,@A@                                7  1575  C FC2 E72           11
160  3 100          BH    LFLKP                                     5  1582  B V98 U             11
161  3 110          A     &3,PL                                     7  1587  A E73 J96           11
162  3 120          B     LFPLCK                                    4  1594  B V53               11
163  3 130  LFLKP   B     LKNAME                                    4  1598  B M07               11
164  3 140          DCW   LFNTFD                                    3  1604  W05                 11
165  3 150  LFNTFD  MLC   PL,PR                                     7  1605  M J96 K09           12
166  3 160          A     &3,PR                                     7  1612  A E73 K09           12
167  3 170          MLC   0&X1,CDL                                  7  1619  M 0|0 J93           12
168  3 180          MLC                                             1  1626  M                   12
169  3 190          MLC   @0@,LFTSW                                 7  1627  M E79 K53           12
170  3 200  FORCHK  C     F&X3,@.KV@                                7  1634  C FC4 E78           12
171  3 210          BE    FORCE                                     5  1641  B U97 S             13
172  3 220          B     RTCHK                                     4  1646  B U22               13
173  3 230  SCANXT  C     CURNT-2,@A@                               7  1650  C T00 E72           13
174  3 240          BH    SCXT1                                     5  1657  B W73 U             13
175  3 250  SCXT7   B     PUTX                                      4  1662  B 363               13
176  4 010          DCW   CURNT                                     3  1668  T02                 13
177  4 020          B     INIT                                      4  1669  B T18               13
178  4 030  SCXT1   C     CURNT,SCMP                                7  1673  C T02 K37           14
179  4 040          BE    SCXT3                                     5  1680  B X16 S             14
180  4 050          C     CURNT,SUNTL                               7  1685  C T02 K40           14
181  4 060          BE    SCXT3                                     5  1692  B X16 S             14
182  4 070  SCXT4   C     CURNT,SIF                                 7  1697  C T02 K43           14
183  4 080          BU    SCXT5                                     5  1704  B X27 /             14
184  4 090          MLC   @1@,SCSW1                                 7  1709  M E75 K52           15
185  4 100  SCXT3   MLC   @1@,SCSW                                 7  1716  M E75 K51           15
186  4 110          B     ENTER                                     4  1723  B T86               15
187  4 120  SCXT5   BCE   SCXT6,SCSW1,0                            8  1727  B X39 K52 0         15
188  4 130          B     SCXT7                                     4  1735  B W62               15
189  4 140  SCXT6   C     CURNT,NOTE                                7  1739  C T02 J26           15
190  4 150          BE    SCXT8                                     5  1746  B X63 S             16
191  4 160          C     CURNT,DCOP                                7  1751  C T02 J29           16
192  4 170          BU    SCXT9                                     5  1758  B X97 /             16
193  4 180  SCXT8   MLC   CURNT,SYM                                 7  1763  M T02 J20           16
194  4 190  SCXT10  B     PUTX                                      4  1770  B 363               16
195  4 200          DCW   CURNT                                     3  1776  T02                 16
196  4 210          B     GTSYM                                     4  1777  B !79               16
197  4 220          C     CURNT,SYM                                 7  1781  C T02 J20           17
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         BU    SCXT10                                         5  1788  B X70 /             17
199  4 240         B     SCXT7                                          4  1793  B W62               17
200  4 250  SCXT9  C     CURNT,LOC                                      7  1797  C T02 J74           17
201  5 010         BU    SCXT7                                          5  1804  B W62 /             17
202  5 020         MLC   MACSEP,SYM                                     7  1809  M K58 J20           17
203  5 030         B     SCXT10                                         4  1816  B X70               17
204  5 040  ENSBSV A     &1,SBNM                                        7  1820  A E80 T05           18
205  5 050         C     SBNM,@?@                                       7  1827  C T05 E81           18
206  5 060         BU    ENTSB2                                         5  1834  B Y46 /             18
207  5 070         MLC   @A@,SBNM                                       7  1839  M E72 T05           18
208  5 080  ENTSB2 MLC   SBNM,FSUB                                      7  1846  M T05 K76           18
209  5 090         MLC   NAME                                           4  1853  M J16               18
210  5 100         SBR   MVFSUB&6                                       4  1857  H Y71               19
211  5 110  ENTSB1 B     GTSYM                                          4  1861  B !79               19
212  5 120  MVFSUB MLC   CURNT,*                                        7  1865  M T02 Y71           19
213  5 130         SBR   MVFSUB&6                                       4  1872  H Y71               19
214  5 140         C     CURNT,RPRN                                     7  1876  C T02 K46           19
215  5 150         BU    ENTSB1                                         5  1883  B Y61 /             19
216  5 160         MLC   SBSVAD,X1                                      7  1888  M J83 089           19
217  5 170         LCA   FSUB,0&X1                                      7  1895  L K76 0|0           20
218  5 180         SBR   SBSVAD                                         4  1902  H J83               20
219  5 190         SBR   X1                                             4  1906  H 089               20
220  5 200         MLC   @|@,0&X1                                       7  1910  M E74 0|0           20
221  5 210         MLC   SBNM,CURNT                                     7  1917  M T05 T02           20
222  5 220         B     NMTST                                          4  1924  B T30               20
223  5 230  SUBOUT B     PUTX                                           4  1928  B 363               20
224  5 240         DCW   LOC                                            3  1934  J74                 21
225  5 250         B     PUTX                                           4  1935  B 363               21
226  6 010         DCW   SBOP                                           3  1941  J77                 21
227  6 020         B     PUTX                                           4  1942  B 363               21
228  6 030         DCW   OP                                             3  1948  J68                 21
229  6 040         MLC   @1@,SUBSW                                      7  1949  M E75 K81           21
230  6 050         MLC   X2,SAVE2                                       7  1956  M 094 J38           21
231  6 060         MLC   0&X2,SBNAME                                    7  1963  M 0!0 J41           22
232  6 070         SAR   X2                                             4  1970  Q 094               22
233  6 080         MLC   0&X2,TBNAME                                    7  1974  M 0!0 J44           22
234  6 090  SUBOT1 MLC   0&X2,SYM                                       7  1981  M 0!0 J20           22
235  6 100         SAR   X2                                             4  1988  Q 094               22
236  6 110         C     SYM,RPRN                                       7  1992  C J20 K46           22
237  6 120         BE    SUBOT2                                         5  1999  B !15 S             23
238  6 130         B     PUTX                                           4  2004  B 363               23
239  6 140         DCW   SYM                                            3  2010  J20                 23
240  6 150         B     SUBOT1                                         4  2011  B Z81               23
241  6 160  SUBOT2 B     PUTX                                           4  2015  B 363               23
242  6 170         DCW   SBNAME                                         3  2021  J41                 23
243  6 180         B     PUTX                                           4  2022  B 363               23
244  6 190         DCW   TBNAME                                         3  2028  J44                 24
245  6 200         B     PUTX                                           4  2029  B 363               24
246  6 210         DCW   MACSEP                                         3  2035  K58                 24
247  6 220         MLC   SAVE2,X2                                       7  2036  M J38 094           24
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          MLC   SBSVAD,X1                                 7  2043  M J83 089           24
249  6 240          MLC   18&X1,0&X2                                7  2050  M 0/8 0!0           24
250  6 250          CW    1&X1                                      4  2057  ) 0|1               24
251  7 010          MLC   @|@,18&X1                                7  2061  M E74 0/8           25
252  7 020          A     &18,SBSVAD                                7  2068  A E83 J83           25
253  7 030          B     PPEXT                                     4  2075  B O11               25
254  7 040  GTSYM   SBR   GT01&3                                   4  2079  H !96               25
255  7 050          B     GETX                                      4  2083  B 335               25
256  7 060          DCW   CURNT                                     3  2089  T02                 25
257  7 070          DCW   EOJ                                       3  2092  !97                 25
258  7 080  GT01    B     *                                         4  2093  B !96               26
259  7 090  EOJ     B     PUTX                                      4  2097  B 363               26
260  7 100          DCW   EOP                                       3  2103  J13                 26
261  7 110          B     SUPER                                     4  2104  B 351               26
262  7 120          DCW   @G03@                                    3  2110                      26
263  7 130  EOP     DCW   @.EP@                                    3  2113                      26
264  7 140  NAME    DCW   #3                                        3  2116                      26
265  7 150          DCW   @|@                                      1  2117                      27
266  7 160  SYM     DCW   #3                                        3  2120                      27
267  7 170  OUTSYM  DCW   #3                                        3  2123                      27
268  7 180  NOTE    DCW   @*24@                                     3  2126                      27
269  7 190  DCOP    DCW   @#DC@                                     3  2129                      27
270  7 200  OUTOP   DCW   #3                                        3  2132                      27
271  7 210  SAVE1   DCW   #3                                        3  2135                      27
272  7 220  SAVE2   DCW   #3                                        3  2138                      28
273  7 230  SBNAME  DCW   #3                                        3  2141                      28
274  7 240  TBNAME  DCW   #3                                        3  2144                      28
275  7 250  PARNM   DCW   #3                                        3  2147                      28
276  8 010  PAR     DCW   #18                                      18  2165                      28
277  8 020  OP      DCW   @.OP@                                     3  2168                      28
278  8 030  OUTOP1  DCW   #3                                        3  2171                      28
279  8 040  LOC     DCW   @.LC@                                     3  2174                      29
280  8 050  SBOP    DCW   @.SB@                                     3  2177                      29
281  8 060  ENDADR  DCW   @001@                                     3  2180                      29
282  8 070  SBSVAD  DCW   @G92@                                     3  2183                      29
283  8 080  RVOPL   DCW   #3                                        3  2186                      29
284  8 090  LLV     DCW   #2                                        2  2188                      29
285  8 100  LRV     DC    #2                                        2  2190                      29
286  8 110  CDL     DC    #3                                        3  2193                      29
287  8 120  PL      DCW   @003@                                     3  2196                      29
288  8 130  RVOPR   DCW   #3                                        3  2199                      30
289  8 140  RLV     DCW   #2                                        2  2201                      30
290  8 150  RRV     DC    #2                                        2  2203                      30
291  8 160  CDR     DC    #3                                        3  2206                      30
292  8 170  PR      DCW   #3                                        3  2209                      30
293  8 180  ZERO    DCW   @A0Q@                                     3  2212                      30
294  8 190          DCW   @Z@                                      1  2213                      30
295  8 200  GT      DCW   @A0@                                     2  2215                      30
296  8 210  TBADR   DCW   &KVTAB                                   3  2218  ?58                 30
297  8 220  PRADR   DCW   &PAR                                     3  2221  J65                 31
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230  GNNM    DCW   @JA0@                                      3  2224                      31
299  8 240          DCW   #3                                         3  2227                      31
300  8 250          DC    @2020@                                     4  2231                      31
301  9 010  CDVCLS  DC    CDCLS                                      3  2234  ?99                 31
302  9 020  SCMP    DCW   @)05@                                      3  2237                      31
303  9 030  SUNTL   DCW   @*18@                                      3  2240                      31
304  9 040  SIF     DCW   @)19@                                      3  2243                      31
305  9 050  RPRN    DCW   @  )@                                      3  2246                      31
306  9 060  SOR     DCW   @$31@                                      3  2249                      32
307  9 070  XSW     DCW   @0@                                        1  2250                      32
308  9 080  SCSW    DC    @0@                                        1  2251                      32
309  9 090  SCSW1   DC    @0@                                        1  2252                      32
310  9 100  LFTSW   DCW   @1@                                        1  2253                      32
311  9 110  DIFF    DCW   #2                                         2  2255                      32
312  9 120  MACSEP  DCW   @.MC@                                      3  2258                      32
313  9 130  FSUB    DCW   #18                                       18  2276                      32
314  9 140  SEOP    DCW   @.SE@                                      3  2279                      32
315  9 150  RELSW   DCW   @0@                                        1  2280                      33
316  9 160  SUBSW   DC    @0@                                        1  2281                      33
317  9 170  KVOP    DCW   @.KV@                                      3  2284                      33
318  9 180  KVSW    DCW   @0@                                        1  2285                      33
319  9 190  GNLB    B     GNLAB                                      4  2286  B C25               33
320  9 200          DCW   PARNM                                      3  2292  J47                 33
321  9 210  GNLB3   B     PUTPAR                                     4  2293  B N37               33
322  9 220          DCW   PARNM                                      3  2299  J47                 33
323  9 230          B     OUTMAC                                     4  2300  B P27               34
324  9 240          MLC   PARNM,F&3&X3                               7  2304  M J47 FC7           34
325  9 250          BCE   GNLB1,CLSSW,B                              8  2311  B L44 ?84 B         34
326 10 010          MCM   F&10&X3,F&4&X3                             7  2319  P FD4 FC8           34
327 10 020  GNLB5   S     &6,ENDADR                                  7  2326  S E84 J80           34
328 10 030  GNLB2   MZ    @ @,ENDADR                                 7  2333  Y E85 J80           35
329 10 040          B     LFPLCK                                     4  2340  B V53               35
330 10 050  GNLB1   MCM   F&7&X3,F&4&X3                             7  2344  P FD1 FC8           35
331 10 060          MLC   @N@,CLSSW                                  7  2351  M E86 ?84           35
332 10 070  GNLB4   S     &3,ENDADR                                  7  2358  S E73 J80           35
333 10 080          B     GNLB2                                      4  2365  B L33               35
334 10 090  GNGT    A     &1,GT                                      7  2369  A E80 K15           36
335 10 100          MLC   GT,PARNM                                   7  2376  M K15 J47           36
336 10 110          MLC                                              1  2383  M                   36
337 10 120          C     GT,GTSAVE                                  7  2384  C K15 T07           36
338 10 130          BH    GNLB3                                      5  2391  B K93 U             36
339 10 140          MLC   GT,GTSAVE                                  7  2396  M K15 T07           36
340 10 150          B     GNLB3                                      4  2403  B K93               36
341 10 160  LKNAME  SBR   X2                                         4  2407  H 094               37
342 10 170          MLC   2&X2,LKFEXT&3                             7  2411  M 0!2 N36           37
343 10 180          MLC   F&X3,CDVCLS-7                              7  2418  M FC4 K27           37
344 10 190          C     F-1&X3,@$1@                                7  2425  C FC3 E88           37
345 10 200          BU    LK01                                       5  2432  B M48 /             37
346 10 210          MLC   @%1@,CDVCLS-8                             7  2437  M E90 K26           37
347 10 220          B     LK02                                       4  2444  B M67               38
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230  LK01   C     F-1&X3,@%1@                               7  2448  C FC3 E90           38
349 10 240         BU    LK05                                      5  2455  B M78 /             38
350 10 250         MLC   @$1@,CDVCLS-8                             7  2460  M E88 K26           38
351 11 010  LK02   MLC   &CDVCLS,X1                               7  2467  M E93 089           38
352 11 020         B     LK10                                      4  2474  B N29               38
353 11 030  LK05   MLC   TBADR,X1                                 7  2478  M K18 089           39
354 11 040  LK04   BCE   LKFEXT,0&X1,]                           8  2485  B N33 0|0 ]         39
355 11 050         C     F&X3,0&X1                                 7  2493  C FC4 0|0           39
356 11 060         BE    LK09                                      5  2500  B N18 S             39
357 11 070         C     0&X1                                      4  2505  C 0|0               39
358 11 080         C                                               1  2509  C                   39
359 11 090         SAR   X1                                        4  2510  Q 089               39
360 11 100         B     LK04                                      4  2514  B M85               40
361 11 110  LK09   C     @   @,0&X1                                7  2518  C E96 0|0           40
362 11 120         SBR   X1                                        4  2525  H 089               40
363 11 130  LK10   B     3&X2                                      4  2529  B 0!3               40
364 11 140  LKFEXT B     *                                         4  2533  B N36               40
365 11 150  PUTPAR SBR   X1                                        4  2537  H 089               40
366 11 160         MLC   2&X1,PPAR1&3                            7  2541  M 0|2 N58           40
367 11 170         MLC   X1,SAVE1                                  7  2548  M 089 J35           41
368 11 180  PPAR1  MLC   *,PARNM                                  7  2555  M N61 J47           41
369 11 190         MLC   PRADR,X1                                 7  2562  M K21 089           41
370 11 200         MLC   PARNM,0&X1                              7  2569  M J47 0|0           41
371 11 210         SBR   X1                                        4  2576  H 089               41
372 11 220         SBR   PRADR                                     4  2580  H K21               41
373 11 230         MLC   @|@,0&X1                                7  2584  M E74 0|0           42
374 11 240         C     PARNM-2,@A@                               7  2591  C J45 E72           42
375 11 250         BH    PPEXT                                     5  2598  B O11 U             42
376 12 010         BWZ   SUBCHK,PARNM,B                           8  2603  V O22 J47 B         42
377 12 020  PPEXT  MLC   SAVE1,X1                                  7  2611  M J35 089           42
378 12 030         B     3&X1                                      4  2618  B 0|3               42
379 12 040  SUBCHK MLC   HIADR,X2                                 7  2622  M T10 094           43
380 12 050  SUBCK1 BCE   PPEXT,0&X2,|                            8  2629  B O11 0!0 |         43
381 12 060         C     0&X2,PARNM                                7  2637  C 0!0 J47           43
382 12 070         BE    SUBOUT                                    5  2644  B Z28 S             43
383 12 080         C     0&X2                                      4  2649  C 0!0               43
384 12 090         SAR   X2                                        4  2653  Q 094               43
385 12 100         B     SUBCK1                                    4  2657  B O29               43
386 12 110  OUTPAR SBR   OUTPR1&3                                 4  2661  H P26               44
387 12 120         MLC   &PAR,X2                                   7  2665  M E99 094           44
388 12 130  OUTPR3 BCE   OUTPR2,0&X2,|                            8  2672  B P02 0!0 |         44
389 12 140         MLC   0&X2,OUTSYM                              7  2680  M 0!0 J23           44
390 12 150         SAR   X2                                        4  2687  Q 094               44
391 12 160         B     PUTX                                      4  2691  B 363               44
392 12 170         DCW   OUTSYM                                   3  2697  J23                 44
393 12 180         B     OUTPR3                                    4  2698  B O72               45
394 12 190  OUTPR2 B     PUTX                                      4  2702  B 363               45
395 12 200         DCW   MACSEP                                   3  2708  K58                 45
396 12 210         MLC   &PAR,PRADR                                7  2709  M F02 K21           45
397 12 220         MLC   @|@,PAR                                  7  2716  M E74 J65           45
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230  OUTPR1 B     *                                           4  2723  B P26               45
399 12 240  OUTMAC SBR   OUTPR1&3                                    4  2727  H P26               45
400 12 250         MLC   &LOC,X2                                    7  2731  M F05 094           46
401 13 010         B     OUTPR3                                      4  2738  B O72               46
402 13 020  PLMN6  SBR   PLM6X&3                                    4  2742  H P70               46
403 13 030         S     &6,PL                                       7  2746  S E84 J96           46
404 13 040  PLMN3E MZ    @ @,PL                                      7  2753  Y E85 J96           46
405 13 050         MLC   PL,X3                                      7  2760  M J96 099           46
406 13 060  PLM6X  B     *                                           4  2767  B P70               47
407 13 070  PLMN3  SBR   PLM6X&3                                    4  2771  H P70               47
408 13 080         S     &3,PL                                       7  2775  S E73 J96           47
409 13 090         B     PLMN3E                                      4  2782  B P53               47
410 13 100         DCW   @]@                                         1  2786                      47
411 13 110         DCW   @0056@                                     4  2790                      47
412 13 120         DC    CDOUT                                       3  2793  D33                 47
413 13 130         DCW   @/10@                                       3  2796                      47
414 13 140         DCW   @0254@                                     4  2800                      48
415 13 150         DC    CDOUT                                       3  2803  D33                 48
416 13 160         DCW   @  )@                                      3  2806                      48
417 13 170         DCW   @5402@                                     4  2810                      48
418 13 180         DC    CDLPRN                                      3  2813  B22                 48
419 13 190         DCW   @  %@                                      3  2816                      48
420 13 200         DCW   @1010@                                     4  2820                      48
421 13 210         DC    CDARH                                       3  2823  ?59                 48
422 13 220         DCW   @  *@                                      3  2826                      48
423 13 230         DCW   @1212@                                     4  2830                      48
424 13 240         DC    CDARH                                       3  2833  ?59                 49
425 13 250         DCW   @  -@                                      3  2836                      49
426 14 010         DCW   @1212@                                     4  2840                      49
427 14 020         DC    CDARH                                       3  2843  ?59                 49
428 14 030         DCW   @  &@                                      3  2846                      49
429 14 040         DCW   @1010@                                     4  2850                      49
430 14 050         DC    CDARH                                       3  2853  ?59                 50
431 14 060         DCW   @  /@                                      3  2856                      50
432 14 070         DCW   @0706@                                     4  2860                      50
433 14 080         DC    CDARH                                       3  2863  ?59                 50
434 14 090         DCW   @ **@                                      3  2866                      50
435 14 100         DCW   @1442@                                     4  2870                      50
436 14 110         DC    CDASGN                                      3  2873  D26                 51
437 14 120         DCW   @*10@                                      3  2876                      51
438 14 130         DCW   @1442@                                     4  2880                      51
439 14 140         DC    CDASGN                                      3  2883  D26                 51
440 14 150         DCW   @*16@                                      3  2886                      51
441 14 160         DCW   @0505@                                     4  2890                      51
442 14 170         DC    CDUM                                        3  2893  A57                 52
443 14 180         DCW   @.UM@                                      3  2896                      52
444 14 190         DCW   @5050@                                     4  2900                      52
445 14 200         DC    CDOUT                                       3  2903  D33                 52
446 14 210         DCW   @*18@                                      3  2906                      52
447 14 220         DCW   @0050@                                     4  2910                      52
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230          DC    CDANOR                                     3  2913  D08                 53
449 14 240          DCW   @)19@                                    3  2916                      53
450 14 250          DCW   @.LE@                                    3  2919                      53
451 15 010          DC    @2020@                                   4  2923                      53
452 15 020          DC    CDRL                                     3  2926  A06                 53
453 15 030          DCW   @$20@                                    3  2929                      53
454 15 040          DCW   @2020@                                   4  2933                      53
455 15 050          DC    CDRL                                     3  2936  A06                 54
456 15 060          DCW   @.LE@                                    3  2939                      54
457 15 070          DCW   @.SW@                                    3  2942                      54
458 15 080          DC    @2020@                                   4  2946                      54
459 15 090          DC    CDCLS                                    3  2949  ?99                 54
460 15 100          DCW   @%SW@                                    3  2952                      54
461 15 110          DCW   @2020@                                   4  2956                      54
462 15 120          DC    CDCLS                                    3  2959  ?99                 55
463 15 130          DCW   @.SW@                                    3  2962                      55
464 15 140          DCW   @.GE@                                    3  2965                      55
465 15 150          DC    @2020@                                   4  2969                      55
466 15 160          DC    CDRL                                     3  2972  A06                 55
467 15 170          DCW   @$21@                                    3  2975                      55
468 15 180          DCW   @2020@                                   4  2979                      55
469 15 190          DC    CDRL                                     3  2982  A06                 56
470 15 200          DCW   @.GE@                                    3  2985                      56
471 15 210          DCW   @  #@                                    3  2988                      56
472 15 220          DC    @2020@                                   4  2992                      56
473 15 230          DC    CDRL                                     3  2995  A06                 56
474 15 240          DCW   @.NE@                                    3  2998                      56
475 15 250          DCW   @2020@                                   4  3002                      56
476 16 010          DC    CDRL                                     3  3005  A06                 57
477 16 020          DCW   @  #@                                    3  3008                      57
478 16 030          DCW   @00056@                                  4  3012                      57
479 16 040          DC    CDKV                                     3  3015  D01                 57
480 16 050          DCW   @.KV@                                    3  3018                      57
481 16 060          DCW   @5050@                                   4  3022                      57
482 16 070          DC    CDOUT                                    3  3025  D33                 58
483 16 080          DCW   @)05@                                    3  3028                      58
484 16 090          DCW   @1918@                                   4  3032                      58
485 16 100          DC    CDNOT                                    3  3035  A93                 58
486 16 110          DCW   @$30@                                    3  3038                      58
487 16 120          DCW   @0050@                                   4  3042                      58
488 16 130          DC    CDANOR                                   3  3045  D08                 59
489 16 140          DCW   @$32@                                    3  3048                      59
490 16 150          DCW   @0050@                                   4  3052                      59
491 16 160          DC    CDANOR                                   3  3055  D08                 59
492 16 170  KVTAB   DCW   @$31@                                    3  3058                      59
493 16 180  CDARH   MLC   &GNGT,LNKOT1&3                          7  3059  M F08 ?98           59
494 16 190  CDARH1  B     PLMN6                                    4  3066  B P42               60
495 16 200          MLC   F&6&X3,OUTOP1                           7  3070  M FD0 J71           60
496 16 210          B     PUTPAR                                   4  3077  B N37               60
497 16 220          DCW   F&3&X3                                  3  3083  FC7                 60
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230  CLSSW  NOP   LNKOT1                                     4  3084  N ?95               60
499 16 240         B     PUTPAR                                    4  3088  B N37               60
500 16 250         DCW   F&9&X3                                    3  3094  FD3                 60
501 17 010  LNKOT1 B     *                                         4  3095  B ?98               61
502 17 020  CDCLS  MLC   @B@,CLSSW                                 7  3099  M F09 ?84           61
503 17 030  CDRL   MLC   PR,X3                                     7  3106  M K09 099           61
504 17 040         MLC   @A0@,GT                                  7  3113  M F11 K15           61
505 17 050         C     F&X3,SOR                                  7  3120  C FC4 K49           61
506 17 060         BE    CDREL1                                    5  3127  B A46 S             61
507 17 070         MLC   PL,X3                                    7  3132  M J96 099           62
508 17 080         MLC   RVOPL,F&X3                              7  3139  M J86 FC4           62
509 17 090  CDREL1 MLC   &GNLB,LNKOT1&3                          7  3146  M F14 ?98           62
510 17 100         B     CDARH1                                    4  3153  B ?66               62
511 17 110  CDUM   B     PLMN3                                     4  3157  B P71               62
512 17 120         MLC   @  -@,OUTOP1                            7  3161  M F17 J71           62
513 17 130         B     PUTPAR                                    4  3168  B N37               63
514 17 140         DCW   ZERO                                     3  3174  K12                 63
515 17 150         B     PUTPAR                                    4  3175  B N37               63
516 17 160         DCW   F&6&X3                                    3  3181  FD0                 63
517 17 170         MLC   @B@,CLSSW                                 7  3182  M F09 ?84           63
518 17 180         B     GNGT                                      4  3189  B L69               63
519 17 190  CDNOT  MLC   PR,X3                                     7  3193  M K09 099           63
520 17 200         MLC   RVOPR,F&X3                              7  3200  M J99 FC4           64
521 17 210         B     PLMN3                                     4  3207  B P71               64
522 17 220         MCM   F&4&X3,F&1&X3                           7  3211  P FC8 FC5           64
523 17 230         B     GNLB4                                     4  3218  B L58               64
524 17 240  CDLPRN MLC   PL,X3                                    7  3222  M J96 099           64
525 17 250         BWZ   CDLP01,F&2&X3,2                         8  3229  V B49 FC6 2         64
526 18 010         C     F&1&X3,@Z@                                7  3237  C FC5 F18           65
527 18 020         BU    CDOUT                                     5  3244  B D33 /             65
528 18 030  CDLP01 B     PLMN3                                     4  3249  B P71               65
529 18 040         MCM   F&10&X3,F&7&X3                          7  3253  P FD4 FD1           65
530 18 050         MCM   F&4&X3,F&1&X3                           7  3260  P FC8 FC5           65
531 18 060         B     GNLB5                                     4  3267  B L26               65
532 18 070  CDKV1  MLC   @0@,KVSW                                 7  3271  M E79 K85           66
533 18 080         MLC   @00@,SCSW1                              7  3278  M F20 K52           66
534 18 090         MLC   @1@,LFTSW                               7  3285  M E75 K53           66
535 18 100         MLC   @001@,ENDADR                            7  3292  M F23 J80           66
536 18 110         BCE   SCANXT,SUBSW,0                          8  3299  B W50 K81 0         66
537 18 120         MLC   @0@,SUBSW                               7  3307  M E79 K81           67
538 18 130         B     PUTX                                      4  3314  B 363               67
539 18 140         DCW   SEOP                                     3  3320  K79                 67
540 18 150         B     SCANXT                                    4  3321  B W50               67
541 18 160  GNLAB  SBR   X1                                       4  3325  H 089               67
542 18 170         MLC   2&X1,GNLAB1&6                           7  3329  M 0|2 C85           67
543 18 180         BAV   *&1                                     5  3336  B C41 Z             67
544 18 190         A     &1,GNNM                                   7  3341  A E80 K24           68
545 18 200         BAV   GNLAB2                                   5  3348  B C90 Z             68
546 18 210         C     GNNM-1,@0@                                7  3353  C K23 E79           68
547 18 220         BU    GNLAB3                                    5  3360  B C72 /             68
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230         MLC   @A@,GNNM-1                               7  3365  M E72 K23          68
549 18 240  GNLAB3 MZ    @&@,GNNM-1                               7  3372  Y F24 K23          68
550 18 250  GNLAB1 MLC   GNNM,*                                    7  3379  M K24 C85          69
551 19 010         B     3&X1                                     4  3386  B 0|3              69
552 19 020  GNLAB2 MLC   @SA1@,GNNM                               7  3390  M F27 K24          69
553 19 030         B     GNLAB1                                   4  3397  B C79              69
554 19 040  CDKV   MLC   @1@,KVSW                                 7  3401  M E75 K85          69
555 19 050  CDANOR MLC   PL,PR                                    7  3408  M J96 K09          69
556 19 060         A     &3,PR                                    7  3415  A E73 K09          70
557 19 070         B     CDOUT                                    4  3422  B D33              70
558 19 080  CDASGN MLC   @A0@,GT                                  7  3426  M F11 K15          70
559 19 090  CDOUT  MLC   @003@,PL                                 7  3433  M F30 J96          70
560 19 100         MLC   PL,X3                                    7  3440  M J96 099          70
561 19 110         C     F&X3,SCMP                                7  3447  C FC4 K37          70
562 19 120         BU    CDOUT1                                   5  3454  B D87 /            71
563 19 130         B     PUTPAR                                   4  3459  B N37              71
564 19 140         DCW   F&3&X3                                   3  3465  FC7                71
565 19 150         B     PUTPAR                                   4  3466  B N37              71
566 19 160         DCW   F&9&X3                                   3  3472  FD3                71
567 19 170         MLC   &PAR,PRADR                               7  3473  M F33 K21          71
568 19 180         MLC   @|@,PAR                                 7  3480  M E74 J65          71
569 19 190  CDOUT1 C     X3,PR                                    7  3487  C 099 K09          72
570 19 200         BE    CDOUT2                                   5  3494  B E24 S            72
571 19 210         MLC   F&X3,SYM                                 7  3499  M FC4 J20          72
572 19 220         B     PUTX                                     4  3506  B 363              72
573 19 230         DCW   SYM                                      3  3512  J20                72
574 19 240         A     &3,X3                                    7  3513  A E73 099          72
575 19 250         B     CDOUT1                                   4  3520  B D87              72
576 20 010  CDOUT2 MCM   F-2&X3,F&1                               7  3524  P FC2 F35          73
577 20 020         BCE   CDKV1,KVSW,1                             8  3531  B B71 K85 1        73
578 20 030         S     PR,ENDADR                                7  3539  S K09 J80          73
579 20 040         A     &3,ENDADR                                7  3546  A E73 J80          73
580 20 050         MZ    @ @,ENDADR                               7  3553  Y E85 J80          73
581 20 060         BCE   OTKVOP,F&1,)                            8  3560  B V46 F35 )        74
582 20 070         B     LFPLCK                                   4  3568  B V53              74
583 20 080         LTORG                                                 3572
                   DCW   @A@                                      1  3572            LIT   74
                         &3                                       1  3573            LIT   74
                         @|@                                      1  3574            LIT   74
                         @1@                                      1  3575            LIT   74
                         @.KV@                                    3  3578            LIT   74
                         @0@                                      1  3579            LIT   75
                         &1                                       1  3580            LIT   75
                         @?@                                      1  3581            LIT   75
                         &18                                      2  3583            LIT   75
                         &6                                       1  3584            LIT   75
                         @ @                                      1  3585            LIT   75
                         @N@                                      1  3586            LIT   75
                         @$1@                                     2  3588            LIT   76
                         @%1@                                     2  3590            LIT   76
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

       351          &CDVCLS                                         3  3593  K34         ADCON   76
                    @   @                                           3  3596              LIT     76
       387          &PAR                                            3  3599  J65         ADCON   76
       396          &PAR                                            3  3602  J65         ADCON   76
       400          &LOC                                            3  3605  J74         ADCON   76
       493          &GNGT                                           3  3608  L69         ADCON   77
                    @B@                                             1  3609              LIT     77
                    @A0@                                            2  3611              LIT     77
       509          &GNLB                                           3  3614  K86         ADCON   77
                    @  -@                                           3  3617              LIT     77
                    @Z@                                             1  3618              LIT     77
                    @00@                                            2  3620              LIT     77
                    @001@                                           3  3623              LIT     78
                    @&@                                             1  3624              LIT     78
                    @SA1@                                           3  3627              LIT     78
                    @003@                                           3  3630              LIT     78
       567          &PAR                                            3  3633  J65         ADCON   78
584 20 090  F       DC    @ @                                       1  3634                      78
585 20 100          DC    @|@                                       1  3635                      78
586 20 110          DCW   @}@                                       1  3636                      78
587 20 120          END   INIT                                                / T18 080           79
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - G03						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89			0089			
104	1	040	X2	EQU	94			0094			
105	1	050	X3	EQU	99			0099			
106	1	060	GETX	EQU	335			0335			
107	1	070	PUTX	EQU	363			0363			
108	1	080	SUPER	EQU	351			0351			
109	1	090	CURNT	EQU	1302			1302			
110	1	100	SBNM	EQU	1305			1305			
111	1	110	GTSAVE	EQU	1307			1307			
112	1	120		ORG	1310				1310		
113	1	130	INIT	B	GTSYM		4	1310	B Y26		4
114	1	140		C	CURNT,LOC		7	1314	C T02 D92		4
115	1	150		BU	INIT1		5	1321	B T37 /		4
116	1	160		MLC	MACSEP,SYM		7	1326	M E29 D56		4
117	1	170		B	SCXT10		4	1333	B X99		4
118	1	180	INIT1	BCE	SCANXT,SCSW,0		8	1337	B W42 E23 0		4
119	1	190	ENTER	MLC	ENDADR,X3		7	1345	M D95 099		5
120	1	200		MLC	CURNT,F&2&X3		7	1352	M T02 EH7		5
121	1	210		A	&3,ENDADR		7	1359	A E30 D95		5
122	1	220		MLC	@|@,F&3&X3		7	1366	M E31 EH8		5
123	1	230	SCAN	BCE	LFPLCK,LFTSW,1		8	1373	B V10 E24 1		5
124	1	240	RTCHK	MLC	PR,X3		7	1381	M E15 099		6
125	1	250		BCE	INIT,F-2&X3,|		8	1388	B T10 EH3 |		6
126	2	010		C	F-2&X3,@A@		7	1396	C EH3 E32		6
127	2	020		BH	RTLKP		5	1403	B U19 U		6
128	2	030	RTENT	A	&3,PR		7	1408	A E30 E15		6
129	2	040		B	RTCHK		4	1415	B T81		6
130	2	050	RTLKP	B	LKNAME		4	1419	B Y61		7
131	2	060		DCW	RTNTFD		3	1425	U99		7
132	2	070		MLC	0&X1,CDR		7	1426	M 0|0 E12		7
133	2	080		MLC	RRV,DIFF		7	1433	M E09 E26		7
134	2	090		S	LLV,DIFF		7	1440	S D97 E26		7
135	2	100		BWZ	SWCODE,DIFF,K		8	1447	V U73 E26 K		7
136	2	110	FORCE	MLC	CDL,X2		7	1455	M E02 094		8
137	2	120		MLC	F&X3,SYR		7	1462	M EH5 D47		8
138	2	130		B	0&X2		4	1469	B 0!0		8
139	2	140	SWCODE	MLC	PR,PL		7	1473	M E15 E05		8
140	2	150		MLC			1	1480	M		8
141	2	160		MLC	@1@,LFTSW		7	1481	M E33 E24		8
142	2	170		A	&3,PR		7	1488	A E30 E15		9
143	2	180		B	FORCHK		4	1495	B W02		9
144	2	190	RTNTFD	MLC	SYEE,F&X3		7	1499	M ?44 EH5		9
145	2	200		B	RTLKP		4	1506	B U19		9
146	2	210	LFPLCK	MLC	@1@,LFTSW		7	1510	M E33 E24		9
147	2	220		MLC	PL,X3		7	1517	M E05 099		9

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          C     PL,NULL                                    7  1524  C E05 D39           10
149  2 240          BE    LFPLK1                                     5  1531  B V56 S             10
150  2 250          BCE   INIT,F-2&X3,|                            8  1536  B T10 EH3 |         10
151  3 010          C     F-2&X3,@A@                                 7  1544  C EH3 E32           10
152  3 020          BH    LFLKP                                      5  1551  B V67 U             10
153  3 030  LFPLK1  A     &3,PL                                      7  1556  A E30 E05           10
154  3 040          B     LFPLCK                                     4  1563  B V10               11
155  3 050  LFLKP   B     LKNAME                                     4  1567  B Y61               11
156  3 060          DCW   LFNTFD                                     3  1573  V74                 11
157  3 070  LFNTFD  MLC   PL,PR                                     7  1574  M E05 E15           11
158  3 080          A     &3,PR                                      7  1581  A E30 E15           11
159  3 090          MLC   0&X1,CDL                                   7  1588  M 0|0 E02           11
160  3 100          MLC   @0@,LFTSW                                  7  1595  M E34 E24           11
161  3 110  FORCHK  C     F&X3,SPRD                                  7  1602  C EH5 B14           12
162  3 120          BE    FORCE                                      5  1609  B U55 S             12
163  3 130          C     F&X3,KVOP                                  7  1614  C EH5 B34           12
164  3 140          BE    FORCE                                      5  1621  B U55 S             12
165  3 150          C     F&X3,SYEE                                  7  1626  C EH5 ?44           12
166  3 160          BE    FORCE                                      5  1633  B U55 S             12
167  3 170          B     RTCHK                                      4  1638  B T81               13
168  3 180  SCANXT  C     CURNT-2,@A@                                7  1642  C T00 E32           13
169  3 190          BH    SCXT1                                      5  1649  B W65 U             13
170  3 200  SCXT7   B     PUTX                                       4  1654  B 363               13
171  3 210          DCW   CURNT                                      3  1660  T02                 13
172  3 220          B     INIT                                       4  1661  B T10               13
173  3 230  SCXT1   C     CURNT,SCMP                                 7  1665  C T02 A74           13
174  3 240          BE    SCXT3                                      5  1672  B X13 S             14
175  3 250          C     CURNT,SRLK                                 7  1677  C T02 A24           14
176  4 010          BE    SCXT3                                      5  1684  B X13 S             14
177  4 020          C     CURNT,SUNTL                                7  1689  C T02 A34           14
178  4 030          BE    SCXT3                                      5  1696  B X13 S             14
179  4 040          C     CURNT,SIF                                  7  1701  C T02 A04           14
180  4 050          BU    SCXT5                                      5  1708  B X24 /             15
181  4 060  SCXT3   MLC   @1@,SCSW                                   7  1713  M E33 E23           15
182  4 070          B     ENTER                                      4  1720  B T45               15
183  4 080  SCXT5   BCE   SCXT6,SCSW1,0                             8  1724  B X68 E22 0         15
184  4 090          C     CURNT,SPRD                                 7  1732  C T02 B14           15
185  4 100          BE    ENTER                                      5  1739  B T45 S             15
186  4 110          C     CURNT,SNEXT                                7  1744  C T02 B04           16
187  4 120          BE    ENTER                                      5  1751  B T45 S             16
188  4 130          C     CURNT,SELSE                                7  1756  C T02 B24           16
189  4 140          BE    ENTER                                      5  1763  B T45 S             16
190  4 150  SCXT6   C     CURNT,NOTE                                 7  1768  C T02 D62           16
191  4 160          BE    SCXT8                                      5  1775  B X92 S             16
192  4 170          C     CURNT,DCOP                                 7  1780  C T02 D50           17
193  4 180          BU    SCXT7                                      5  1787  B W54 /             17
194  4 190  SCXT8   MLC   CURNT,SYM                                  7  1792  M T02 D56           17
195  4 200  SCXT10  B     PUTX                                       4  1799  B 363               17
196  4 210          DCW   CURNT                                      3  1805  T02                 17
197  4 220          B     GTSYM                                      4  1806  B Y26               17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          C     CURNT,SYM                                7  1810  C T02 D56           17
199  4 240          BU    SCXT10                                   5  1817  B X99 /             18
200  4 250          B     SCXT7                                    4  1822  B W54               18
201  5 010  GTSYM   SBR   GT01&3                                   4  1826  H Y43               18
202  5 020          B     GETX                                     4  1830  B 335               18
203  5 030          DCW   CURNT                                    3  1836  T02                 18
204  5 040          DCW   EOJ                                      3  1839  Y44                 18
205  5 050  GT01    B     *                                        4  1840  B Y43               18
206  5 060  EOJ     B     PUTX                                     4  1844  B 363               19
207  5 070          DCW   EOP                                      3  1850  Y60                 19
208  5 080          B     SUPER                                    4  1851  B 351               19
209  5 090          DCW   @G04@                                    3  1857                      19
210  5 100  EOP     DCW   @.EP@                                    3  1860                      19
211  5 110  LKNAME  SBR   X2                                       4  1861  H 094               19
212  5 120          MLC   2&X2,LKFEXT&3                            7  1865  M 0!2 Z30           19
213  5 130          MLC   TBADR,X1                                 7  1872  M E18 089           20
214  5 140  LK04    BCE   LKFEXT,0&X1,]                            8  1879  B Z27 0|0 ]         20
215  5 150          C     F&X3,0&X1                                7  1887  C EH5 0|0           20
216  5 160          BE    LK09                                     5  1894  B Z12 S             20
217  5 170          C     0&X1                                     4  1899  C 0|0               20
218  5 180          C                                              1  1903  C                   20
219  5 190          SAR   X1                                       4  1904  Q 089               20
220  5 200          B     LK04                                     4  1908  B Y79               21
221  5 210  LK09    C     @   @,0&X1                               7  1912  C E37 0|0           21
222  5 220          SBR   X1                                       4  1919  H 089               21
223  5 230  LK10    B     3&X2                                     4  1923  B 0!3               21
224  5 240  LKFEXT  B     *                                        4  1927  B Z30               21
225  5 250  PUTPAR  SBR   X1                                       4  1931  H 089               21
226  6 010          MLC   2&X1,PPAR1&3                            7  1935  M 0|2 Z52           21
227  6 020          MLC   X1,SAVE1                                 7  1942  M 089 D53           22
228  6 030  PPAR1   MLC   *,PARNM                                 7  1949  M Z55 D65           22
229  6 040          MLC   PRADR,X1                                 7  1956  M E21 089           22
230  6 050          MLC   PARNM,0&X1                              7  1963  M D65 0|0           22
231  6 060          SBR   X1                                       4  1970  H 089               22
232  6 070          SBR   PRADR                                    4  1974  H E21               22
233  6 080          MLC   @|@,0&X1                                7  1978  M E31 0|0           23
234  6 090  PPEXT   MLC   SAVE1,X1                                7  1985  M D53 089           23
235  6 100          B     3&X1                                     4  1992  B 0|3               23
236  6 110  OUTMAC  SBR   OUTPR1&3                                4  1996  H !75               23
237  6 120          MLC   X2,SAVE1                                 7  2000  M 094 D53           23
238  6 130          MLC   &LOC,X2                                 7  2007  M E40 094           23
239  6 140  OUTPR3  BCE   OUTPR2,0&X2,|                           8  2014  B !44 0!0 |         24
240  6 150          MLC   0&X2,OUTSYM                              7  2022  M 0!0 D59           24
241  6 160          SAR   X2                                       4  2029  Q 094               24
242  6 170          B     PUTX                                     4  2033  B 363               24
243  6 180          DCW   OUTSYM                                  3  2039  D59                 24
244  6 190          B     OUTPR3                                   4  2040  B !14               24
245  6 200  OUTPR2  B     PUTX                                     4  2044  B 363               24
246  6 210          DCW   MACSEP                                  3  2050  E29                 25
247  6 220          MLC   &PAR,PRADR                               7  2051  M E43 E21           25
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230          MLC   @|@,PAR                                    7  2058  M E31 D83           25
249  6 240          MLC   SAVE1,X2                                   7  2065  M D53 094           25
250  6 250  OUTPR1  B     *                                          4  2072  B !75               25
251  7 010  PLMN6   SBR   PLM6X&3                                    4  2076  H J04               25
252  7 020          S     &6,PL                                      7  2080  S E44 E05           25
253  7 030  PLMN3E  MZ    @ @,PL                                     7  2087  Y E45 E05           26
254  7 040          MLC   PL,X3                                      7  2094  M E05 099           26
255  7 050  PLM6X   B     *                                          4  2101  B J04               26
256  7 060  PLMN3   SBR   PLM6X&3                                    4  2105  H J04               26
257  7 070          S     &3,PL                                      7  2109  S E30 E05           26
258  7 080          B     PLMN3E                                     4  2116  B !87               26
259  7 090  CDEND   S     &12,PL                                     7  2120  S E47 E05           27
260  7 100          MZ    @ @,PL                                     7  2127  Y E45 E05           27
261  7 110          MLC   PL,X3                                      7  2134  M E05 099           27
262  7 120          MLC   F&12&X3,OUTOP1                             7  2141  M EI7 D89           27
263  7 130          B     PUTPAR                                     4  2148  B Z31               27
264  7 140          DCW   F&9&X3                                     3  2154  EI4                 27
265  7 150          B     OUTMAC                                     4  2155  B Z96               27
266  7 160          C     SYR,SELSE                                  7  2159  C D47 B24           28
267  7 170          BU    CDEND1                                     5  2166  B K24 /             28
268  7 180          B     OUTLB                                      4  2171  B B69               28
269  7 190          DCW   F&3&X3                                     3  2177  EH8                 28
270  7 200          MLC   F&6&X3,SYM                                 7  2178  M EI1 D56           28
271  7 210          MLC   SYM,F&3&X3                                 7  2185  M D56 EH8           28
272  7 220          MLC   @.EN@,F&6&X3                              7  2192  M E50 EI1           29
273  7 230          MCM   F&16&X3,F&7&X3                            7  2199  P F?1 EI2           29
274  7 240  CDENDX  S     &9,ENDADR                                  7  2206  S E51 D95           29
275  7 250          MZ    @ @,ENDADR                                 7  2213  Y E45 D95           29
276  8 010          B     LFPLCK                                     4  2220  B V10               29
277  8 020  CDEND1  B     OUTLB                                      4  2224  B B69               29
278  8 030          DCW   F&3&X3                                     3  2230  EH8                 29
279  8 040          B     OUTLB                                      4  2231  B B69               30
280  8 050          DCW   F&6&X3                                     3  2237  EI1                 30
281  8 060  CDENX2  MCM   F&13&X3,F&1&X3                            7  2238  P EI8 EH6           30
282  8 070          S     &12,ENDADR                                 7  2245  S E47 D95           30
283  8 080          MZ    @ @,ENDADR                                 7  2252  Y E45 D95           30
284  8 090          B     LFPLCK                                     4  2259  B V10               30
285  8 100  CDEN    B     PLMN6                                      4  2263  B !76               30
286  8 110          B     OUTLB                                      4  2267  B B69               31
287  8 120          DCW   F&3&X3                                     3  2273  EH8                 31
288  8 130  CDRLKX  MCM   F&7&X3,F&1&X3                            7  2274  P EI2 EH6           31
289  8 140  CDRLKY  S     &6,ENDADR                                  7  2281  S E44 D95           31
290  8 150          MZ    @ @,ENDADR                                 7  2288  Y E45 D95           31
291  8 160          B     LFPLCK                                     4  2295  B V10               31
292  8 170  CDRLKZ  MCM   F&10&X3,F&1&X3                           7  2299  P EI5 EH6           31
293  8 180          B     CDENDX                                     4  2306  B K06               32
294  8 190  CDSIZE  MLC   PL,X3                                      7  2310  M E05 099           32
295  8 200          C     F-7&X3,@*1@                                7  2317  C EG8 E53           32
296  8 210          BU    CDRMN                                      5  2324  B P22 /             32
297  8 220          B     LBLINK                                     4  2329  B B35               32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          S     &12,PL                                     7  2333  S E47 E05           32
299  8 240          MZ    @ @,PL                                     7  2340  Y E45 E05           33
300  8 250          MLC   PL,X3                                      7  2347  M E05 099           33
301  9 010          MLC   F&12&X3,OUTOP1                             7  2354  M EI7 D89           33
302  9 020          B     PUTPAR                                     4  2361  B Z31               33
303  9 030          DCW   F&3&X3                                     3  2367  EH8                 33
304  9 040          B     PUTPAR                                     4  2368  B Z31               33
305  9 050          DCW   F&9&X3                                     3  2374  EI4                 33
306  9 060          B     GNLAB                                      4  2375  B C50               34
307  9 070          DCW   F&12&X3                                    3  2381  EI7                 34
308  9 080          B     PUTPAR                                     4  2382  B Z31               34
309  9 090          DCW   F&12&X3                                    3  2388  EI7                 34
310  9 100          B     OUTMAC                                     4  2389  B Z96               34
311  9 110          B     OUTASG                                     4  2393  B C17               34
312  9 120          B     PUTPAR                                     4  2397  B Z31               34
313  9 130          DCW   F&12&X3                                    3  2403  EI7                 35
314  9 140          B     GNLAB                                      4  2404  B C50               35
315  9 150          DCW   F&12&X3                                    3  2410  EI7                 35
316  9 160          B     PUTPAR                                     4  2411  B Z31               35
317  9 170          DCW   F&12&X3                                    3  2417  EI7                 35
318  9 180          MLC   @.IM@,OUTOP1                              7  2418  M E56 D89           35
319  9 190          B     OUTMAC                                     4  2425  B Z96               35
320  9 200          MLC   F&12&X3,SYM                               7  2429  M EI7 D56           36
321  9 210          MLC   SYM,F&3&X3                               7  2436  M D56 EH8           36
322  9 220          MLC   @.IM@,F&6&X3                              7  2443  M E56 EI1           36
323  9 230          MCM   F&13&X3,F&7&X3                            7  2450  P EI8 EI2           36
324  9 240          B     CDRLKY                                     4  2457  B K81               36
325  9 250  CDASGN  B     PLMN6                                      4  2461  B !76               36
326 10 010          B     OUTASG                                     4  2465  B C17               37
327 10 020          B     CDRLKZ                                     4  2469  B K99               37
328 10 030  CDNEXT  C     LBPRD,NULL                                 7  2473  C D42 D39           37
329 10 040          BE    CDRMN                                      5  2480  B P22 S             37
330 10 050          MLC   @1@,ELSW                                  7  2485  M E33 D44           37
331 10 060          B     OUTGO                                      4  2492  B C02               37
332 10 070          DCW   LBPRD                                     3  2498  D42                 37
333 10 080          B     CDRMN                                      4  2499  B P22               38
334 10 090  CDIF    MLC   PL,X3                                      7  2503  M E05 099           38
335 10 100          MLC   F&3&X3,SYM                                 7  2510  M EH8 D56           38
336 10 110          MLC   SYM,F&X3                                   7  2517  M D56 EH5           38
337 10 120          MLC   @.IM@,F&3&X3                              7  2524  M E56 EH8           38
338 10 130          B     LBLINK                                     4  2531  B B35               38
339 10 140          B     LFPLCK                                     4  2535  B V10               39
340 10 150  CDIMP   C     SYR,SPRD                                   7  2539  C D47 B14           39
341 10 160          BU    CDIMP1                                     5  2546  B N66 /             39
342 10 170  CDIMP2  B     PLMN6                                      4  2551  B !76               39
343 10 180          B     OUTLB                                      4  2555  B B69               39
344 10 190          DCW   F&3&X3                                    3  2561  EH8                 39
345 10 200          B     CDRLKX                                     4  2562  B K74               39
346 10 210  CDIMP1  C     SYR,SELSE                                  7  2566  C D47 B24           40
347 10 220          BU    CDIMP2                                     5  2573  B N51 /             40
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          MLC   @1@,ELSW                                 7  2578  M E33 D44           40
349 10 240          B     PLMN6                                    4  2585  B !76               40
350 10 250          B     PUTPAR                                   4  2589  B Z31               40
351 11 010          DCW   F&3&X3                                   3  2595  EH8                 40
352 11 020          MLC   @.IM@,OUTOP1                             7  2596  M E56 D89           40
353 11 030          B     PUTPAR                                   4  2603  B Z31               41
354 11 040          DCW   LBPRD                                    3  2609  D42                 41
355 11 050          B     OUTMAC                                   4  2610  B Z96               41
356 11 060          B     CDRLKZ                                   4  2614  B K99               41
357 11 070  CDPRD   BCE   CDPRD1,ELSW,0                            8  2618  B O59 D44 0         41
358 11 080          MLC   @0@,ELSW                                 7  2626  M E34 D44           41
359 11 090          C     LBPRD,NULL                               7  2633  C D42 D39           41
360 11 100          BE    CDPRD1                                   5  2640  B O59 S             42
361 11 110          B     OUTLB                                    4  2645  B B69               42
362 11 120          DCW   LBPRD                                    3  2651  D42                 42
363 11 130          MLC   NULL,LBPRD                               7  2652  M D39 D42           42
364 11 140  CDPRD1 MLC   @0@,SCSW1                                7  2659  M E34 E22           42
365 11 150  CDPRD3 MLC   @001@,ENDADR                             7  2666  M E59 D95           42
366 11 160          MLC   @|@,F&1                                  7  2673  M E31 E86           43
367 11 170  CDPRD4 MLC   @003@,PL                                 7  2680  M E62 E05           43
368 11 180  CDPRD2 MLC   @01@,LFTSW                               7  2687  M E64 E24           43
369 11 190          B     LFPLCK                                   4  2694  B V10               43
370 11 200  CDKV    B     RMNSY                                    4  2698  B P30               43
371 11 210          C     PL,NULL                                  7  2702  C E05 D39           43
372 11 220          BE    CDPRD3                                   5  2709  B O66 S             44
373 11 230          B     CDPRD2                                   4  2714  B O87               44
374 11 240  CDRLNK B     LBLINK                                   4  2718  B B35               44
375 11 250  CDRMN   B     RMNSY                                    4  2722  B P30               44
376 12 010          B     LFPLCK                                   4  2726  B V10               44
377 12 020  RMNSY   SBR   RMN01&3                                 4  2730  H P62               44
378 12 030          B     PLMN3                                    4  2734  B J05               44
379 12 040          MCM   F&4&X3,F&1&X3                           7  2738  P EH9 EH6           45
380 12 050          S     &3,ENDADR                                7  2745  S E30 D95           45
381 12 060          MZ    @ @,ENDADR                               7  2752  Y E45 D95           45
382 12 070  RMN01   B     *                                        4  2759  B P62               45
383 12 080  CDOR    B     PLMN6                                    4  2763  B !76               45
384 12 090          C     SYR,SOR                                  7  2767  C D47 ?64           45
385 12 100          BE    CDAND1                                   5  2774  B Q06 S             46
386 12 110  CDOR1   B     OUTLB                                    4  2779  B B69               46
387 12 120          DCW   F&3&X3                                   3  2785  EH8                 46
388 12 130          B     CDRLKX                                   4  2786  B K74               46
389 12 140  CDAND   B     PLMN6                                    4  2790  B !76               46
390 12 150          C     SYR,SOR                                  7  2794  C D47 ?64           46
391 12 160          BE    CDOR1                                    5  2801  B P79 S             46
392 12 170  CDAND1 B     PUTPAR                                   4  2806  B Z31               47
393 12 180          DCW   F&3&X3                                   3  2812  EH8                 47
394 12 190          B     PUTPAR                                   4  2813  B Z31               47
395 12 200          DCW   F&9&X3                                   3  2819  EI4                 47
396 12 210          MLC   @.EQ@,OUTOP1                            7  2820  M E67 D89           47
397 12 220          B     OUTMAC                                   4  2827  B Z96               47
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          B     CDRLKX                                     4  2831  B K74              47
399 12 240  CDLPRN  B     PLMN3                                      4  2835  B J05              48
400 12 250          MLC   @0@,NOTSW                                7  2839  M E34 D43          48
401 13 010          C     F&X3,NOT                                   7  2846  C EH5 ?74          48
402 13 020          BU    CDLPR1                                     5  2853  B Q90 /            48
403 13 030          B     PLMN3                                      4  2858  B J05              48
404 13 040          MCM   F&4&X3,F&1&X3                              7  2862  P EH9 EH6          48
405 13 050          S     &3,ENDADR                                  7  2869  S E30 D95          49
406 13 060          MZ    @ @,ENDADR                                 7  2876  Y E45 D95          49
407 13 070          MLC   @1@,NOTSW                                  7  2883  M E33 D43          49
408 13 080  CDLPR1  B     GTSYM                                      4  2890  B Y26              49
409 13 090          MLC   CURNT,F&12&X3                             7  2894  M T02 EI7          49
410 13 100          A     &3,ENDADR                                  7  2901  A E30 D95          49
411 13 110          MLC   @|@,F&13&X3                              7  2908  M E31 EI8          50
412 13 120          C     F&12&X3,SOR                                7  2915  C EI7 ?64          50
413 13 130          BU    CDLPR2                                     5  2922  B R53 /            50
414 13 140          BCE   CDLPR4,NOTSW,0                           8  2927  B R61 D43 0        50
415 13 150  CDLPR3  MCM   F&10&X3,F&7&X3                           7  2935  P EI5 EI2          50
416 13 160          MCM   F&4&X3,F&1&X3                           7  2942  P EH9 EH6          51
417 13 170          B     CDRLKY                                     4  2949  B K81              51
418 13 180  CDLPR2  BCE   CDLPR3,NOTSW,0                           8  2953  B R35 D43 0        51
419 13 190  CDLPR4  MLC   @.IM@,OUTOP1                             7  2961  M E56 D89          51
420 13 200          B     PUTPAR                                     4  2968  B Z31              51
421 13 210          DCW   F&6&X3                                   3  2974  EI1                51
422 13 220          B     GNLAB                                      4  2975  B C50              51
423 13 230          DCW   F&6&X3                                   3  2981  EI1                52
424 13 240          B     PUTPAR                                     4  2982  B Z31              52
425 13 250          DCW   F&6&X3                                   3  2988  EI1                52
426 14 010          B     OUTMAC                                     4  2989  B Z96              52
427 14 020          B     CDLPR3                                     4  2993  B R35              52
428 14 030  CDUNTL  B     PLMN3                                      4  2997  B J05              52
429 14 040          B     PUTX                                       4  3001  B 363              52
430 14 050          DCW   F&3&X3                                   3  3007  EH8                53
431 14 060          B     PUTX                                       4  3008  B 363              53
432 14 070          DCW   F&6&X3                                   3  3014  EI1                53
433 14 080          B     CDRLKX                                     4  3015  B K74              53
434 14 090  CDEE    B     RMNSY                                      4  3019  B P30              53
435 14 100          MLC   @01@,LFTSW                               7  3023  M E64 E24          53
436 14 110          B     SCANXT                                     4  3030  B W42              53
437 14 120          DCW   @]@                                      1  3034                     54
438 14 130          DCW   @00056@                                  4  3038                     54
439 14 140          DC    CDEE                                       3  3041  ?19                54
440 14 150  SYEE    DCW   @.EE@                                    3  3044                     54
441 14 160          DCW   @5251@                                   4  3048                     54
442 14 170          DC    CDAND                                      3  3051  P90                54
443 14 180  SAND    DCW   @$32@                                    3  3054                     54
444 14 190          DCW   @5252@                                   4  3058                     54
445 14 200          DC    CDOR                                       3  3061  P63                54
446 14 210  SOR     DCW   @$31@                                    3  3064                     54
447 14 220          DCW   @1918@                                   4  3068                     55
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230         DC    CDRMN                                        3  3071  P22                 55
449 14 240  NOT    DCW   @$30@                                       3  3074                      55
450 14 250         DCW   @5500@                                      4  3078                      55
451 15 010         DC    CDLPRN                                       3  3081  Q35                 55
452 15 020         DCW   @  %@                                       3  3084                      55
453 15 030         DCW   @0055@                                      4  3088                      55
454 15 040         DC    CDRMN                                        3  3091  P22                 55
455 15 050         DCW   @  )@                                       3  3094                      55
456 15 060         DCW   @5656@                                      4  3098                      55
457 15 070         DC    CDIF                                         3  3101  N03                 56
458 15 080  SIF    DCW   @)19@                                       3  3104                      56
459 15 090         DCW   @5800@                                      4  3108                      56
460 15 100         DC    CDIMP                                        3  3111  N39                 56
461 15 110         DCW   @.IM@                                       3  3114                      56
462 15 120         DCW   @0056@                                      4  3118                      56
463 15 130         DC    CDRLNK                                       3  3121  P18                 57
464 15 140  SRLK   DCW   @.RK@                                       3  3124                      57
465 15 150         DCW   @5656@                                      4  3128                      57
466 15 160         DC    CDUNTL                                       3  3131  R97                 57
467 15 170  SUNTL  DCW   @*18@                                       3  3134                      57
468 15 180         DCW   @0015@                                      4  3138                      57
469 15 190         DC    CDSIZE                                       3  3141  L10                 58
470 15 200         DCW   @/10@                                       3  3144                      58
471 15 210         DCW   @2056@                                      4  3148                      58
472 15 220         DC    CDASGN                                       3  3151  M61                 58
473 15 230         DCW   @*10@                                       3  3154                      58
474 15 240         DCW   @2056@                                      4  3158                      58
475 15 250         DC    CDASGN                                       3  3161  M61                 59
476 16 010         DCW   @*16@                                       3  3164                      59
477 16 020         DCW   @0056@                                      4  3168                      59
478 16 030         DC    CDRMN                                        3  3171  P22                 59
479 16 040  SCMP   DCW   @)05@                                       3  3174                      59
480 16 050         DCW   @5800@                                      4  3178                      59
481 16 060         DC    CDEND                                        3  3181  J20                 60
482 16 070  SEND   DCW   @)17@                                       3  3184                      60
483 16 080         DCW   @5800@                                      4  3188                      60
484 16 090         DC    CDEN                                         3  3191  K63                 60
485 16 100         DCW   @.EN@                                       3  3194                      60
486 16 110         DCW   @0056@                                      4  3198                      60
487 16 120         DC    CDNEXT                                       3  3201  M73                 61
488 16 130  SNEXT  DCW   @*25@                                       3  3204                      61
489 16 140         DCW   @0060@                                      4  3208                      61
490 16 150         DC    CDPRD                                        3  3211  O18                 61
491 16 160  SPRD   DCW   @.PD@                                       3  3214                      61
492 16 170         DCW   @0060@                                      4  3218                      61
493 16 180         DC    CDRMN                                        3  3221  P22                 62
494 16 190  SELSE  DCW   @*02@                                       3  3224                      62
495 16 200         DCW   @0056@                                      4  3228                      62
496 16 210         DC    CDKV                                         3  3231  O98                 62
497 16 220  KVOP   DCW   @.KV@                                       3  3234                      62
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  KVTAB   EQU   KVOP                                          3234
499 16 240  LBLINK  SBR   LBLNK1&3                                   4  3235  H B68               62
500 16 250          MLC   @1@,SCSW1                                  7  3239  M E33 E22           63
501 17 010          C     LBPRD,NULL                                  7  3246  C D42 D39           63
502 17 020          BU    LBLNK1                                      5  3253  B B65 /             63
503 17 030          B     GNLAB                                       4  3258  B C50               63
504 17 040          DCW   LBPRD                                       3  3264  D42                 63
505 17 050  LBLNK1  B     *                                           4  3265  B B68               63
506 17 060  OUTLB   SBR   X2                                          4  3269  H 094               63
507 17 070          MLC   @.LB@,OUTOP1                               7  3273  M E70 D89           64
508 17 080  OUTGLB MLC   2&X2,OUTPPR                                 7  3280  M 0!2 B93           64
509 17 090          B     PUTPAR                                      4  3287  B Z31               64
510 17 100  OUTPPR DCW   #3                                          3  3293                      64
511 17 110          B     OUTMAC                                      4  3294  B Z96               64
512 17 120          B     3&X2                                        4  3298  B 0!3               64
513 17 130  OUTGO   SBR   X2                                          4  3302  H 094               64
514 17 140          MLC   @)20@,OUTOP1                               7  3306  M E73 D89           65
515 17 150          B     OUTGLB                                      4  3313  B B80               65
516 17 160  OUTASG SBR   OUTAS1&3                                    4  3317  H C49               65
517 17 170          MLC   F&6&X3,OUTOP1                               7  3321  M EI1 D89           65
518 17 180          B     PUTPAR                                      4  3328  B Z31               65
519 17 190          DCW   F&3&X3                                     3  3334  EH8                 65
520 17 200          B     PUTPAR                                      4  3335  B Z31               65
521 17 210          DCW   F&9&X3                                     3  3341  EI4                 66
522 17 220          B     OUTMAC                                      4  3342  B Z96               66
523 17 230  OUTAS1  B     *                                           4  3346  B C49               66
524 17 240  GNLAB   SBR   X1                                          4  3350  H 089               66
525 17 250          MLC   2&X1,GNLAB1&6                              7  3354  M 0|2 D18           66
526 18 010          BAV   *&1                                        5  3361  B C66 Z             66
527 18 020          A     &1,GNNM                                     7  3366  A E74 D36           66
528 18 030          BAV   GNLAB2                                     5  3373  B D23 Z             67
529 18 040          BCE   GNLAB4,GNNM-1,0                           8  3378  B C98 D35 0         67
530 18 050          BCE   GNLAB4,GNNM-1,1                           8  3386  B C98 D35 1         67
531 18 060          B     GNLAB3                                      4  3394  B D05               67
532 18 070  GNLAB4  MLC   @S@,GNNM-1                                 7  3398  M E75 D35           67
533 18 080  GNLAB3  MZ    @S@,GNNM-1                                 7  3405  Y E75 D35           67
534 18 090  GNLAB1  MLC   GNNM,*                                     7  3412  M D36 D18           68
535 18 100          B     3&X1                                        4  3419  B 0|3               68
536 18 110  GNLAB2  MLC   @SS1@,GNNM                                7  3423  M E78 D36           68
537 18 120          B     GNLAB1                                      4  3430  B D12               68
538 18 130  GNNM    DCW   @JS0@                                      3  3436                      68
539 18 140  NULL    DCW   @000@                                      3  3439                      68
540 18 150  LBPRD   DCW   @000@                                      3  3442                      68
541 18 160  NOTSW   DCW   @0@                                        1  3443                      69
542 18 170  ELSW    DCW   @0@                                        1  3444                      69
543 18 180  SYR     DCW   #3                                         3  3447                      69
544 18 190  DCOP    DCW   @#DC@                                      3  3450                      69
545 18 200  SAVE1   DCW   #3                                         3  3453                      69
546 18 210  SYM     DCW   #3                                         3  3456                      69
547 18 220  OUTSYM  DCW   #3                                         3  3459                      69
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230  NOTE    DCW   @*24@                                     3  3462                      70
549 18 240  PARNM   DCW   #3                                        3  3465                      70
550 18 250  PAR     DCW   #18                                      18  3483                      70
551 19 010  OP      DCW   @.OP@                                     3  3486                      70
552 19 020  OUTOP1  DCW   #3                                        3  3489                      70
553 19 030  LOC     DCW   @.LC@                                     3  3492                      70
554 19 040  ENDADR  DCW   @001@                                     3  3495                      70
555 19 050  LLV     DCW   #2                                        2  3497                      71
556 19 060  LRV     DC    #2                                        2  3499                      71
557 19 070  CDL     DC    #3                                        3  3502                      71
558 19 080  PL      DCW   @003@                                     3  3505                      71
559 19 090  RLV     DCW   #2                                        2  3507                      71
560 19 100  RRV     DC    #2                                        2  3509                      71
561 19 110  CDR     DC    #3                                        3  3512                      71
562 19 120  PR      DCW   #3                                        3  3515                      71
563 19 130  TBADR   DCW   &KVTAB                                    3  3518  B34                 71
564 19 140  PRADR   DCW   &PAR                                      3  3521  D83                 71
565 19 150  SCSW1   DC    @0@                                       1  3522                      71
566 19 160  SCSW    DCW   @0@                                       1  3523                      71
567 19 170  LFTSW   DC    @1@                                       1  3524                      72
568 19 180  DIFF    DCW   #2                                        2  3526                      72
569 19 190  MACSEP  DCW   @.MC@                                     3  3529                      72
570 19 200          LTORG                                                  3530
                    DCW   &3                                        1  3530            LIT     72
                          @|@                                       1  3531            LIT     72
                          @A@                                       1  3532            LIT     73
                          @1@                                       1  3533            LIT     73
                          @0@                                       1  3534            LIT     73
                          @   @                                     3  3537            LIT     73
       238                &LOC                                      3  3540  D92       ADCON   73
       247                &PAR                                      3  3543  D83       ADCON   73
                          &6                                        1  3544            LIT     73
                          @ @                                       1  3545            LIT     74
                          &12                                       2  3547            LIT     74
                          @.EN@                                     3  3550            LIT     74
                          &9                                        1  3551            LIT     74
                          @*1@                                      2  3553            LIT     74
                          @.IM@                                     3  3556            LIT     74
                          @001@                                     3  3559            LIT     74
                          @003@                                     3  3562            LIT     75
                          @01@                                      2  3564            LIT     75
                          @.EQ@                                     3  3567            LIT     75
                          @.LB@                                     3  3570            LIT     75
                          @)20@                                     3  3573            LIT     75
                          &1                                        1  3574            LIT     75
                          @S@                                       1  3575            LIT     75
                          @SS1@                                     3  3578            LIT     76
571 19 210          DC    @NNNNNN@                                  6  3584                      76
572 19 220  F       DC    @ @                                       1  3585                      76
573 19 230          DC    @|@                                       1  3586                      76
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 574 19 240         DCW   @}@                                         1  3587                      76
 575 19 250         END   INIT                                                 / T10 080           77
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - G04 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - G04						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89			0089			
104	1	040	X2	EQU	94			0094			
105	1	050	X3	EQU	99			0099			
106	1	060	SUPER	EQU	351			0351			
107	1	070	PUTX	EQU	363			0363			
108	1	080	GETX	EQU	335			0335			
109	1	090	DUMP	EQU	359			0359			
110	1	100	SBDPSV	EQU	998			0998			
111	1	110	CURNT	EQU	1302			1302			
112	1	120	SBNM	EQU	1305			1305			
113	1	130	GTSAVE	EQU	1307			1307			
114	1	140		ORG	1310				1310		
115	1	150	START	B	GTSYM		4	1310	B Q02		4
116	1	160		C	CURNT,SPROC		7	1314	C T02 C97		4
117	1	170		BU	START		5	1321	B T10 /		4
118	1	180	PTEST	B	PUTX		4	1326	B 363		4
119	1	190		DCW	CURNT		3	1332	T02		4
120	1	200	INIT	B	GTSYM		4	1333	B Q02		4
121	1	210	TEST	MLC	@0@,DPYSW		7	1337	M D72 D08		4
122	1	220		BCE	TEST1,SUBSW,0		8	1344	B T66 D37 0		5
123	1	230		B	PUTX		4	1352	B 363		5
124	1	240		DCW	SE		3	1358	D17		5
125	1	250		MLC	@0@,SUBSW		7	1359	M D72 D37		5
126	2	010	TEST1	C	CURNT,NOTE		7	1366	C T02 D71		5
127	2	020		BE	INIT2		5	1373	B T90 S		5
128	2	030		C	CURNT,DCOP		7	1378	C T02 D03		6
129	2	040		BU	INIT3		5	1385	B U24 /		6
130	2	050	INIT2	MLC	CURNT,SYM		7	1390	M T02 D23		6
131	2	060	INIT1	B	PUTX		4	1397	B 363		6
132	2	070		DCW	CURNT		3	1403	T02		6
133	2	080		B	GTSYM		4	1404	B Q02		6
134	2	090		C	CURNT,SYM		7	1408	C T02 D23		6
135	2	100		BU	INIT1		5	1415	B T97 /		7
136	2	110		B	PTEST		4	1420	B T26		7
137	2	120	INIT3	C	CURNT,LOC		7	1424	C T02 D29		7
138	2	130		BU	LKTBLE		5	1431	B U47 /		7
139	2	140		MLC	MACSEP,SYM		7	1436	M D35 D23		7
140	2	150		B	INIT1		4	1443	B T97		7
141	2	160	LKTBLE	MLC	&TAB,X2		7	1447	M D75 094		7
142	2	170	LKTBL1	C	0&X2,CURNT		7	1454	C 0!0 T02		8
143	2	180		BE	LKTBL2		5	1461	B U86 S		8
144	2	190		C	0&X2		4	1466	C 0!0		8
145	2	200		SAR	X2		4	1470	Q 094		8
146	2	210		BCE	INIT,0&X2,]		8	1474	B T33 0!0]		8
147	2	220		B	LKTBL1		4	1482	B U54		8

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230  LKTBL2 C     @   @,0&X2                                 7  1486  C D78 0!0           8
149  2 240         SBR   X2                                        4  1493  H 094               9
150  2 250         MLC   0&X2,X2                                   7  1497  M 0!0 094           9
151  3 010         B     0&X2                                      4  1504  B 0!0               9
152  3 020  STOP   MLC   CURNT,OUTOP                               7  1508  M T02 C28           9
153  3 030         B     GTSYM                                     4  1515  B Q02               9
154  3 040         C     CURNT,SRUN                                7  1519  C T02 C76           9
155  3 050         BU    STP1                                      5  1526  B V46 /             9
156  3 060  GOSP   MLC   CURNT,OUTOP                               7  1531  M T02 C28          10
157  3 070         B     OUTMC0                                    4  1538  B ?42              10
158  3 080         B     INIT                                      4  1542  B T33              10
159  3 090  STP1   MLC   CURNT,PAR1                               7  1546  M T02 C31          10
160  3 100         B     OUTMC1                                    4  1553  B ?61              10
161  3 110         B     INIT                                      4  1557  B T33              10
162  3 120  LBLE   MLC   CURNT,OUTOP                               7  1561  M T02 C28          10
163  3 130         B     GTSYM                                     4  1568  B Q02              11
164  3 140         B     STP1                                      4  1572  B V46              11
165  3 150  GO     B     ENTPAR                                    4  1576  B Q20              11
166  3 160         C     CURNT,SDPND                               7  1580  C T02 D65          11
167  3 170         BE    DPND                                      5  1587  B W11 S            11
168  3 180         MLC   @)20@,OUTOP                              7  1592  M D81 C28          11
169  3 190         B     OUTLOC                                    4  1599  B A70              11
170  3 200         B     OUTPAR                                    4  1603  B Q82              12
171  3 210         B     TEST                                      4  1607  B T37              12
172  3 220  DPND   MLC   CURNT,OUTOP                               7  1611  M T02 C28          12
173  3 230         B     ACDPY1                                    4  1618  B X45              12
174  3 240  DISPLY MLC   @1@,DPYSW                                7  1622  M D82 D08          12
175  3 250  ACCEPT MLC   CURNT,OUTOP                               7  1629  M T02 C28          12
176  4 010         B     ENTPAR                                    4  1636  B Q20              12
177  4 020         MLC   NULL,NAME                                 7  1640  M C88 D68          13
178  4 030         C     CURNT,SFRM                                7  1647  C T02 C79          13
179  4 040         BE    ACDPY1                                    5  1654  B X45 S            13
180  4 050         C     CURNT,SUPON                               7  1659  C T02 C82          13
181  4 060         BE    ACDPY1                                    5  1666  B X45 S            13
182  4 070  ACDPY2 B     OUTLOC                                    4  1671  B A70              13
183  4 080         B     PUTX                                      4  1675  B 363              13
184  4 090         DCW   CNT                                       3  1681  C94                14
185  4 100         B     PUTX                                      4  1682  B 363              14
186  4 110         DCW   NAME                                      3  1688  D68                14
187  4 120         B     PUTX                                      4  1689  B 363              14
188  4 130         DCW   SVN                                       3  1695  C91                14
189  4 140         B     OUTPAR                                    4  1696  B Q82              14
190  4 150         BCE   TEST,DPYSW1,0                             8  1700  B T37 D07 0        14
191  4 160         MLC   @0@,DPYSW1                                7  1708  M D72 D07          15
192  4 170         C     SBNM,SBDPSV                               7  1715  C T05 998          15
193  4 180         BH    ACDPY3                                    5  1722  B X34 U            15
194  4 190         MLC   SBNM,SBDPSV                               7  1727  M T05 998          15
195  4 200  ACDPY3 MLC   SAVE,SBNM                                 7  1734  M D14 T05          15
196  4 210         B     TEST                                      4  1741  B T37              15
197  4 220  ACDPY1 B     GTSYM                                     4  1745  B Q02              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         B     NMTST                                      4  1749  B N84               16
199  4 240         DCW   *&1                                        3  1755  X56                 16
200  4 250         B     ACDPY2                                     4  1756  B W71               16
201  5 010  ALTER  B     GTSYM                                      4  1760  B Q02               16
202  5 020  ALTER1 MLC   CURNT,PAR1                                7  1764  M T02 C31           16
203  5 030         B     GTSYM                                      4  1771  B Q02               16
204  5 040         C     CURNT,SPRCD                                7  1775  C T02 D00           17
205  5 050         BU    TEST                                       5  1782  B T37 /             17
206  5 060         MLC   CURNT,OUTOP                               7  1787  M T02 C28           17
207  5 070         B     GTSYM                                      4  1794  B Q02               17
208  5 080         MLC   CURNT,PAR2                                7  1798  M T02 C34           17
209  5 090         B     OUTMC2                                     4  1805  B ?76               17
210  5 100         B     GTSYM                                      4  1809  B Q02               17
211  5 110         C     CURNT-2,@A@                                7  1813  C T00 D83           18
212  5 120         BH    TEST                                       5  1820  B T37 U             18
213  5 130         B     ALTER1                                     4  1825  B X64               18
214  5 140  CLOPEN MLC   CURNT,OUTOP                               7  1829  M T02 C28           18
215  5 150  CLS01  B     GTSYM                                      4  1836  B Q02               18
216  5 160         C     CURNT-2,@A@                                7  1840  C T00 D83           18
217  5 170         BH    TEST                                       5  1847  B T37 U             18
218  5 180         MLC   CURNT,PAR1                                7  1852  M T02 C31           19
219  5 190         B     OUTMC1                                     4  1859  B ?61               19
220  5 200         B     CLS01                                      4  1863  B Y36               19
221  5 210  READ   MLC   CURNT,OUTOP                               7  1867  M T02 C28           19
222  5 220         B     GTSYM                                      4  1874  B Q02               19
223  5 230         MLC   CURNT,PAR1                                7  1878  M T02 C31           19
224  5 240         B     GTSYM                                      4  1885  B Q02               19
225  5 250         MLC   CURNT,PAR2                                7  1889  M T02 C34           20
226  6 010         B     OUTMC2                                     4  1896  B ?76               20
227  6 020         B     INIT                                       4  1900  B T33               20
228  6 030  UNTIL  B     GTSYM                                      4  1904  B Q02               20
229  6 040         MLC   CURNT,GLF                                 7  1908  M T02 D20           20
230  6 050         B     GTSYM                                      4  1915  B Q02               20
231  6 060         C     CURNT,@.P1@                                7  1919  C T02 D86           20
232  6 070         BE    P1RTN                                      5  1926  B J71 S             21
233  6 080         C     CURNT,@.P2@                                7  1931  C T02 D89           21
234  6 090         BE    P2RTN                                      5  1938  B L01 S             21
235  6 100         MLC   LST10,OUTOP                               7  1943  M C46 C28           21
236  6 110         B     OUTLOC                                     4  1950  B A70               21
237  6 120         B     PUTX                                       4  1954  B 363               21
238  6 130         DCW   GLF                                        3  1960  D20                 21
239  6 140         C     OUTOP,@.PC@                                7  1961  C C28 D92           22
240  6 150         BE    UNTL01                                     5  1968  B Z96 S             22
241  6 160         C     OUTOP,@.PE@                                7  1973  C C28 D95           22
242  6 170         BE    UNTL02                                     5  1980  B !07 S             22
243  6 180         B     OUTLST                                     4  1985  B R72               22
244  6 190         DCW   @008@                                      3  1991                      22
245  6 200         B     TEST                                       4  1992  B T37               22
246  6 210  UNTL01 B     OUTLST                                     4  1996  B R72               23
247  6 220         DCW   @003@                                      3  2002                      23
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
248	6	230		B	TEST		4	2003	B T37	23
249	6	240	UNTL02	B	OUTLST		4	2007	B R72	23
250	6	250		DCW	@006@		3	2013		23
251	7	010		B	TEST		4	2014	B T37	23
252	7	020	WRITE	MLC	@0@,WRSW		7	2018	M D72 D36	23
253	7	030		MLC	CURNT,OUTOP		7	2025	M T02 C28	24
254	7	040		B	GTSYM		4	2032	B Q02	24
255	7	050		MLC	CURNT,PAR1		7	2036	M T02 C31	24
256	7	060		B	GTSYM		4	2043	B Q02	24
257	7	070		C	CURNT,SFRM		7	2047	C T02 C79	24
258	7	080		BU	WRT04		5	2054	B !88 /	24
259	7	090		MLC	@1@,WRSW		7	2059	M D82 D36	25
260	7	100		B	GTSYM		4	2066	B Q02	25
261	7	110		MLC	@.WF@,OUTOP		7	2070	M D98 C28	25
262	7	120		MLC	CURNT,PAR2		7	2077	M T02 C34	25
263	7	130		B	GTSYM		4	2084	B Q02	25
264	7	140	WRT04	C	CURNT,SAFT		7	2088	C T02 D40	25
265	7	150		BE	WRT02		5	2095	B J24 S	26
266	7	160	WRT03	BCE	WRT01,WRSW,1		8	2100	B J16 D36 1	26
267	7	170		B	OUTMC1		4	2108	B ?61	26
268	7	180		B	TEST		4	2112	B T37	26
269	7	190	WRT01	B	OUTMC2		4	2116	B ?76	26
270	7	200		B	TEST		4	2120	B T37	26
271	7	210	WRT02	B	PUTX		4	2124	B 363	26
272	7	220		DCW	LOC		3	2130	D29	27
273	7	230		B	PUTX		4	2131	B 363	27
274	7	240		DCW	CURNT		3	2137	T02	27
275	7	250		B	PUTX		4	2138	B 363	27
276	8	010		DCW	OP		3	2144	D32	27
277	8	020		B	GTSYM		4	2145	B Q02	27
278	8	030		B	PUTX		4	2149	B 363	27
279	8	040		DCW	CURNT		3	2155	T02	28
280	8	050		B	PUTX		4	2156	B 363	28
281	8	060		DCW	MACSEP		3	2162	D35	28
282	8	070		B	GTSYM		4	2163	B Q02	28
283	8	080		B	WRT03		4	2167	B J00	28
284	8	090	P1RTN	MLC	CURNT,OUTOP		7	2171	M T02 C28	28
285	8	100		B	OUTLOC		4	2178	B A70	28
286	8	110		B	GTSYM		4	2182	B Q02	29
287	8	120		B	GTSYM		4	2186	B Q02	29
288	8	130		B	GTSYM		4	2190	B Q02	29
289	8	140		B	GTSYM		4	2194	B Q02	29
290	8	150		B	GTSYM		4	2198	B Q02	29
291	8	160		MLC	CURNT,PAR4		7	2202	M T02 C40	29
292	8	170		B	GTSYM		4	2209	B Q02	29
293	8	180		B	GTSYM		4	2213	B Q02	30
294	8	190		MLC	CURNT,PAR5		7	2217	M T02 C43	30
295	8	200		B	GTSYM		4	2224	B Q02	30
296	8	210		MLC	CURNT,PAR1		7	2228	M T02 C31	30
297	8	220	P1RT2	B	GTSYM		4	2235	B Q02	30

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
298	8	230		MLC	CURNT,PAR3		7	2239	M T02 C37	30
299	8	240		B	PUTX		4	2246	B 363	30
300	8	250		DCW	PAR1		3	2252	C31	31
301	9	010		B	PUTX		4	2253	B 363	31
302	9	020		DCW	GLF		3	2259	D20	31
303	9	030		B	PUTX		4	2260	B 363	31
304	9	040		DCW	PAR3		3	2266	C37	31
305	9	050		B	PUTX		4	2267	B 363	31
306	9	060		DCW	PAR4		3	2273	C40	31
307	9	070		B	PUTX		4	2274	B 363	32
308	9	080		DCW	PAR5		3	2280	C43	32
309	9	090	P1RT1	B	GTSYM		4	2281	B Q02	32
310	9	100		C	CURNT,MACSEP		7	2285	C T02 D35	32
311	9	110		BU	P1RT1		5	2292	B K81 /	32
312	9	120		B	PTEST		4	2297	B T26	32
313	9	130	P2RTN	MLC	CURNT,OUTOP		7	2301	M T02 C28	32
314	9	140		B	OUTLOC		4	2308	B A70	33
315	9	150		B	GTSYM		4	2312	B Q02	33
316	9	160		MLC	CURNT,PAR1		7	2316	M T02 C31	33
317	9	170		B	GTSYM		4	2323	B Q02	33
318	9	180		B	GTSYM		4	2327	B Q02	33
319	9	190		B	GTSYM		4	2331	B Q02	33
320	9	200		B	GTSYM		4	2335	B Q02	33
321	9	210		B	GTSYM		4	2339	B Q02	34
322	9	220		MLC	CURNT,PAR4		7	2343	M T02 C40	34
323	9	230		B	GTSYM		4	2350	B Q02	34
324	9	240		B	GTSYM		4	2354	B Q02	34
325	9	250		MLC	CURNT,PAR5		7	2358	M T02 C43	34
326	10	010		B	GTSYM		4	2365	B Q02	34
327	10	020		B	P1RT2		4	2369	B K35	34
328	10	030	EXAMNE	MLC	CURNT,OUTOP		7	2373	M T02 C28	35
329	10	040		B	GTSYM		4	2380	B Q02	35
330	10	050		B	NMTST		4	2384	B N84	35
331	10	060		DCW	*&1		3	2390	L91	35
332	10	070		B	OUTLOC		4	2391	B A70	35
333	10	080		B	PUTX		4	2395	B 363	35
334	10	090		DCW	NAME		3	2401	D68	35
335	10	100		B	PUTX		4	2402	B 363	36
336	10	110		DCW	CURNT		3	2408	T02	36
337	10	120		B	GTSYM		4	2409	B Q02	36
338	10	130		B	PUTX		4	2413	B 363	36
339	10	140		DCW	CURNT		3	2419	T02	36
340	10	150		B	GTSYM		4	2420	B Q02	36
341	10	160		C	CURNT,SFRST		7	2424	C T02 D43	36
342	10	170		BU	EXAM1		5	2431	B M40 /	37
343	10	180		B	GTSYM		4	2436	B Q02	37
344	10	190	EXAM1	B	PUTX		4	2440	B 363	37
345	10	200		DCW	CURNT		3	2446	T02	37
346	10	210		B	GTSYM		4	2447	B Q02	37
347	10	220		C	CURNT,SRPL		7	2451	C T02 D46	37

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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230         BE    EXAM3                               5  2458  B M97 S             37
349 10 240  EXAM2  C     CURNT,SBY                           7  2463  C T02 D49           38
350 10 250         BU    EXAM4                               5  2470  B N05 /             38
351 11 010         B     GTSYM                               4  2475  B Q02               38
352 11 020         B     PUTX                                4  2479  B 363               38
353 11 030         DCW   CURNT                               3  2485  T02                 38
354 11 040  EXAM5  B     PUTX                                4  2486  B 363               38
355 11 050         DCW   MACSEP                              3  2492  D35                 38
356 11 060         B     TEST                                4  2493  B T37               39
357 11 070  EXAM3  B     GTSYM                               4  2497  B Q02               39
358 11 080         B     EXAM2                               4  2501  B M63               39
359 11 090  EXAM4  B     PUTX                                4  2505  B 363               39
360 11 100         DCW   NULL                                3  2511  C88                 39
361 11 110         B     EXAM5                               4  2512  B M86               39
362 11 120  EOJ    C     GTSAVE,@A0@                         7  2516  C T07 E00           39
363 11 130         BE    EOJ1                                5  2523  B N70 S             40
364 11 140         B     PUTX                                4  2528  B 363               40
365 11 150         DCW   DCOP                                3  2534  D03                 40
366 11 160         B     PUTX                                4  2535  B 363               40
367 11 170         DCW   ZAOP                                3  2541  D06                 40
368 11 180         MLC   GTSAVE,OUTSYM                       7  2542  M T07 D26           40
369 11 190         MLC   @Z@,OUTSYM-2                        7  2549  M E01 D24           40
370 11 200         B     PUTX                                4  2556  B 363               41
371 11 210         DCW   OUTSYM                              3  2562  D26                 41
372 11 220         B     PUTX                                4  2563  B 363               41
373 11 230         DCW   DCOP                                3  2569  D03                 41
374 11 240  EOJ1   B     PUTX                                4  2570  B 363               41
375 11 250         DCW   EOP                                 3  2576  D62                 41
376 12 010         B     SUPER                               4  2577  B 351               41
377 12 020         DCW   @G05@                               3  2583                      42
378 12 030  NMTST  SBR   X3                                  4  2584  H 099               42
379 12 040         MLC   2&X3,NMFEXT&3                       7  2588  M 0?2 O18           42
380 12 050         C     CURNT-2,@A@                         7  2595  C T00 D83           42
381 12 060         BH    NMFEXT                              5  2602  B O15 U             42
382 12 070         B     NAMRTN                              4  2607  B O19               42
383 12 080         B     3&X3                                4  2611  B 0?3               42
384 12 090  NMFEXT B     *                                   4  2615  B O18               43
385 12 100  NAMRTN SBR   NAMR01&3                            4  2619  H Q01               43
386 12 110         MLC   CURNT,NAME                          7  2623  M T02 D68           43
387 12 120         B     GTSYM                               4  2630  B Q02               43
388 12 130         C     CURNT,SBOP                          7  2634  C T02 D56           43
389 12 140         BU    NAMR01                              5  2641  B P98 /             43
390 12 150         BCE   NAMR04,DPYSW,0                      8  2646  B O82 D08 0         43
391 12 160         B     PUTX                                4  2654  B 363               44
392 12 170         DCW   DPSBOP                              3  2660  C85                 44
393 12 180         MLC   @10@,DPYSW                          7  2661  M E03 D08           44
394 12 190         MLC   SBNM,SAVE                           7  2668  M T05 D14           44
395 12 200         MLC   SBDPY,SBNM                         7  2675  M D11 T05           44
396 12 210  NAMR04 MLC   @1@,SUBSW                          7  2682  M D82 D37           44
397 12 220         A     &1,SBNM                             7  2689  A E04 T05           45
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          C     SBNM,@?@                                   7  2696  C T05 E05           45
399 12 240          BU    NAMR02                                     5  2703  B P15 /             45
400 12 250          MLC   @A@,SBNM                                   7  2708  M D83 T05           45
401 13 010  NAMR02  MLC   NAME,CURNT                                 7  2715  M D68 T02           45
402 13 020          B     PUTX                                       4  2722  B 363               45
403 13 030          DCW   LOC                                        3  2728  D29                 46
404 13 040          B     PUTX                                       4  2729  B 363               46
405 13 050          DCW   SBOP                                       3  2735  D56                 46
406 13 060          B     PUTX                                       4  2736  B 363               46
407 13 070          DCW   OP                                         3  2742  D32                 46
408 13 080  NAMR03  B     PUTX                                       4  2743  B 363               46
409 13 090          DCW   CURNT                                      3  2749  T02                 46
410 13 100          B     GTSYM                                      4  2750  B Q02               47
411 13 110          C     CURNT,RPRN                                 7  2754  C T02 D59           47
412 13 120          BU    NAMR03                                     5  2761  B P43 /             47
413 13 130          B     PUTX                                       4  2766  B 363               47
414 13 140          DCW   SBNM                                       3  2772  T05                 47
415 13 150          B     PUTX                                       4  2773  B 363               47
416 13 160          DCW   NAME                                       3  2779  D68                 47
417 13 170          MLC   SBNM,NAME                                  7  2780  M T05 D68           48
418 13 180          B     PUTX                                       4  2787  B 363               48
419 13 190          DCW   MACSEP                                     3  2793  D35                 48
420 13 200          B     GTSYM                                      4  2794  B Q02               48
421 13 210  NAMR01  B     *                                          4  2798  B Q01               48
422 13 220  GTSYM   SBR   GT01&3                                     4  2802  H Q19               48
423 13 230          B     GETX                                       4  2806  B 335               48
424 13 240          DCW   CURNT                                      3  2812  T02                 49
425 13 250          DCW   EOJ                                        3  2815  N16                 49
426 14 010  GT01    B     *                                          4  2816  B Q19               49
427 14 020  ENTPAR  SBR   ENTP01&3                                   4  2820  H Q81               49
428 14 030          MLC   @G92@,X2                                   7  2824  M E08 094           49
429 14 040          MLC   @000@,CNT                                  7  2831  M E11 C94           49
430 14 050          B     GTSYM                                      4  2838  B Q02               49
431 14 060  ENTP02  B     NMTST                                      4  2842  B N84               50
432 14 070          DCW   ENTPEX                                     3  2848  Q71                 50
433 14 080          LCA   NAME,0&X2                                  7  2849  L D68 0!0           50
434 14 090          SBR   X2                                         4  2856  H 094               50
435 14 100          A     &1,CNT                                     7  2860  A E04 C94           50
436 14 110          B     ENTP02                                     4  2867  B Q42               50
437 14 120  ENTPEX  MLC   @|@,0&X2                                  7  2871  M E12 0!0           50
438 14 130  ENTP01  B     *                                          4  2878  B Q81               51
439 14 140  OUTPAR  SBR   OUTP01&3                                   4  2882  H R33               51
440 14 150          MLC   @G92@,X2                                   7  2886  M E08 094           51
441 14 160  OUTP02  BCE   OUTPEX,0&X2,|                             8  2893  B R23 0!0 |         51
442 14 170          MLC   0&X2,OUTSYM                                7  2901  M 0!0 D26           51
443 14 180          SAR   X2                                         4  2908  Q 094               51
444 14 190          B     PUTX                                       4  2912  B 363               51
445 14 200          DCW   OUTSYM                                     3  2918  D26                 52
446 14 210          B     OUTP02                                     4  2919  B Q93               52
447 14 220  OUTPEX  B     PUTX                                       4  2923  B 363               52
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230          DCW   MACSEP                             3  2929  D35                 52
449 14 240  OUTP01  B     *                                  4  2930  B R33               52
450 14 250  ENTLST  MLC   &LST1,X2                           7  2934  M E15 094           52
451 15 010  ENTLT1  B     GTSYM                              4  2941  B Q02               52
452 15 020          C     CURNT,MACSEP                       7  2945  C T02 D35           53
453 15 030          BE    INIT                               5  2952  B T33 S             53
454 15 040          MLC   CURNT,0&X2                        7  2957  M T02 0!0           53
455 15 050          SBR   X2                                 4  2964  H 094               53
456 15 060          B     ENTLT1                             4  2968  B R41               53
457 15 070  OUTLST  SBR   X3                                 4  2972  H 099               53
458 15 080          MLC   @000@,OTCNT                        7  2976  M E11 D52           53
459 15 090          MLC   &LST1,X2                           7  2983  M E18 094           54
460 15 100  OUTL1   C     2&X3,OTCNT                         7  2990  C 0?2 D52           54
461 15 110          BE    OUTL2                              5  2997  B ?31 S             54
462 15 120          MLC   0&X2,OUTSYM                       7  3002  M 0!0 D26           54
463 15 130          SAR   X2                                 4  3009  Q 094               54
464 15 140          B     PUTX                               4  3013  B 363               54
465 15 150          DCW   OUTSYM                            3  3019  D26                 54
466 15 160          A     &1,OTCNT                           7  3020  A E04 D52           55
467 15 170          B     OUTL1                              4  3027  B R90               55
468 15 180  OUTL2   B     PUTX                               4  3031  B 363               55
469 15 190          DCW   MACSEP                            3  3037  D35                 55
470 15 200          B     3&X3                               4  3038  B 0?3               55
471 15 210  OUTMC0  SBR   OUTMXX&3                          4  3042  H ?60               55
472 15 220          MLC   @0@,PRSW                           7  3046  M D72 D53           55
473 15 230  OUTM11  B     OUTMAC                             4  3053  B A06               56
474 15 240  OUTMXX  B     *                                  4  3057  B ?60               56
475 15 250  OUTMC1  SBR   OUTMXX&3                          4  3061  H ?60               56
476 16 010          MLC   @1@,PRSW                           7  3065  M D82 D53           56
477 16 020          B     OUTM11                             4  3072  B ?53               56
478 16 030  OUTMC2  SBR   OUTMXX&3                          4  3076  H ?60               56
479 16 040          MLC   @2@,PRSW                           7  3080  M E19 D53           56
480 16 050          B     OUTM11                             4  3087  B ?53               57
481 16 060  OUTMC3  SBR   OUTMXX&3                          4  3091  H ?60               57
482 16 070          MLC   @3@,PRSW                           7  3095  M E20 D53           57
483 16 080          B     OUTM11                             4  3102  B ?53               57
484 16 090  OUTMAC  SBR   OUTM01&3                          4  3106  H A69               57
485 16 100          B     OUTLOC                             4  3110  B A70               57
486 16 110          BCE   OUTSEP,PRSW,0                      8  3114  B A59 D53 0         57
487 16 120          B     PUTX                               4  3122  B 363               58
488 16 130          DCW   PAR1                               3  3128  C31                 58
489 16 140          BCE   OUTSEP,PRSW,1                      8  3129  B A59 D53 1         58
490 16 150          B     PUTX                               4  3137  B 363               58
491 16 160          DCW   PAR2                               3  3143  C34                 58
492 16 170          BCE   OUTSEP,PRSW,2                      8  3144  B A59 D53 2         58
493 16 180          B     PUTX                               4  3152  B 363               58
494 16 190          DCW   PAR3                               3  3158  C37                 59
495 16 200  OUTSEP  B     PUTX                               4  3159  B 363               59
496 16 210          DCW   MACSEP                            3  3165  D35                 59
497 16 220  OUTM01  B     *                                  4  3166  B A69               59
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230  OUTLOC SBR   OUTL01&3                                      4  3170  H A98               59
499 16 240          B     PUTX                                        4  3174  B 363               59
500 16 250          DCW   LOC                                         3  3180  D29                 59
501 17 010          B     PUTX                                        4  3181  B 363               60
502 17 020          DCW   OUTOP                                       3  3187  C28                 60
503 17 030          B     PUTX                                        4  3188  B 363               60
504 17 040          DCW   OP                                          3  3194  D32                 60
505 17 050  OUTL01 B     *                                           4  3195  B A98               60
506 17 060          DCW   @]@                                        1  3199                      60
507 17 070          DCW   PTEST                                      3  3202  T26                 60
508 17 080          DC    @.DY@                                       3  3205                      61
509 17 090          DCW   PTEST                                      3  3208  T26                 61
510 17 100          DC    @.SE@                                       3  3211                      61
511 17 110          DCW   GOSP                                       3  3214  V31                 61
512 17 120          DC    @)99@    SPECIAL GO TO  NO PARAMETER       3  3217                      61
513 17 130          DCW   GOSP                                       3  3220  V31                 61
514 17 140          DC    @.XF@    OVERLAY OPERATOR                  3  3223                      61
515 17 150          DCW   READ                                       3  3226  Y67                 61
516 17 160          DC    @.RT@    RETURN OPERATOR                   3  3229                      62
517 17 170          DCW   ENTLST                                     3  3232  R34                 62
518 17 180          DC    @.LT@    LIST  OPERATOR                    3  3235                      62
519 17 190          DCW   EXAMNE                                     3  3238  L73                 62
520 17 200          DC    @)30@    EXAMINE                           3  3241                      62
521 17 210          DCW   UNTIL                                      3  3244  Z04                 62
522 17 220          DC    @*18@    UNTIL                             3  3247                      62
523 17 230          DCW   LBLE                                       3  3250  V61                 62
524 17 240          DC    @*36@    MOVE  GM                          3  3253                      63
525 17 250          DCW   LBLE                                       3  3256  V61                 63
526 18 010          DC    @*17@    BEFORE                            3  3259                      63
527 18 020          DCW   LBLE                                       3  3262  V61                 63
528 18 030          DC    @*22@    AFTER                             3  3265                      63
529 18 040          DCW   CLOPEN                                     3  3268  Y29                 63
530 18 050          DC    @)14@    OPEN                              3  3271                      63
531 18 060          DCW   READ                                       3  3274  Y67                 63
532 18 070          DC    @)13@    READ                              3  3277                      64
533 18 080          DCW   STOP                                       3  3280  V08                 64
534 18 090          DC    @)11@    STOP                              3  3283                      64
535 18 100          DCW   ALTER                                      3  3286  X60                 64
536 18 110          DC    @)10@    ALTER                             3  3289                      64
537 18 120          DCW   CLOPEN                                     3  3292  Y29                 64
538 18 130          DC    @)09@    CLOSE                             3  3295                      64
539 18 140          DCW   WRITE                                      3  3298  !18                 64
540 18 150          DC    @)08@    WRITE                             3  3301                      65
541 18 160          DCW   ACCEPT                                     3  3304  W29                 65
542 18 170          DC    @)07@    ACCEPT                            3  3307                      65
543 18 180          DCW   DISPLY                                     3  3310  W22                 65
544 18 190          DC    @)04@    DISPLAY                           3  3313                      65
545 18 200          DCW   GO                                         3  3316  V76                 65
546 18 210          DC    @)20@    GO                                3  3319                      65
547 18 220          DCW   LBLE                                       3  3322  V61                 65
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230  TAB     DC    @.LB@                                       3  3325                      66
549 18 240  OUTOP   DCW   #3                                          3  3328                      66
550 18 250  PAR1    DCW   #3                                          3  3331                      66
551 19 010  PAR2    DCW   #3                                          3  3334                      66
552 19 020  PAR3    DCW   #3                                          3  3337                      66
553 19 030  PAR4    DCW   #3                                          3  3340                      67
554 19 040  PAR5    DCW   #3                                          3  3343                      67
555 19 050  LST10   DCW   #3                                          3  3346                      67
556 19 060          DCW   #24                                        24  3370                      67
557 19 070  LST1    DCW   #3                                          3  3373                      67
558 19 080  SRUN    DCW   @*30@                                       3  3376                      67
559 19 090  SFRM    DCW   @*28@                                       3  3379                      68
560 19 100  SUPON   DCW   @*23@                                       3  3382                      68
561 19 110  DPSBOP  DCW   @.DY@                                       3  3385                      68
562 19 120  NULL    DCW   @000@                                       3  3388                      68
563 19 130  SVN     DCW   @.VN@                                       3  3391                      68
564 19 140  CNT     DCW   @000@                                       3  3394                      68
565 19 150  SPROC   DCW   @*01@                                       3  3397                      68
566 19 160  SPRCD   DCW   @*11@                                       3  3400                      69
567 19 170  DCOP    DCW   @#DC@                                       3  3403                      69
568 19 180  ZAOP    DCW   @#ZA@                                       3  3406                      69
569 19 190  DPYSW1  DCW   @0@                                         1  3407                      69
570 19 200  DPYSW   DC    @0@                                         1  3408                      69
571 19 210  SBDPY   DCW   @I0?@                                       3  3411                      69
572 19 220  SAVE    DCW   #3                                          3  3414                      69
573 19 230  SE      DCW   @.SE@                                       3  3417                      69
574 19 240  GLF     DCW   #3                                          3  3420                      70
575 19 250  SYM     DCW   #3                                          3  3423                      70
576 20 010  OUTSYM  DCW   #3                                          3  3426                      70
577 20 020  LOC     DCW   @.LC@                                       3  3429                      70
578 20 030  OP      DCW   @.OP@                                       3  3432                      70
579 20 040  MACSEP  DCW   @.MC@                                       3  3435                      70
580 20 050  WRSW    DCW   @0@                                         1  3436                      70
581 20 060  SUBSW   DCW   @0@                                         1  3437                      71
582 20 070  SAFT    DCW   @*22@                                       3  3440                      71
583 20 080  SFRST   DCW   @*38@                                       3  3443                      71
584 20 090  SRPL    DCW   @*40@                                       3  3446                      71
585 20 100  SBY     DCW   @*35@                                       3  3449                      71
586 20 110  OTCNT   DCW   @000@                                       3  3452                      71
587 20 120  PRSW    DCW   @0@                                         1  3453                      71
588 20 130  SBOP    DCW   @.SB@                                       3  3456                      72
589 20 140  RPRN    DCW   @  )@                                       3  3459                      72
590 20 150  EOP     DCW   @.EP@                                       3  3462                      72
591 20 160  SDPND   DCW   @*03@                                       3  3465                      72
592 20 170  NAME    DCW   #3                                          3  3468                      72
593 20 180  NOTE    DCW   @*24@                                       3  3471                      72
594 20 190          LTORG                                                    3472
                    DCW   @0@                                         1  3472          LIT     72
       141                &TAB                                        3  3475  C25     ADCON   73
                          @   @                                       3  3478          LIT     73
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
					@)20@	3	3481		LIT	73
					@1@	1	3482		LIT	73
					@A@	1	3483		LIT	73
					@.P1@	3	3486		LIT	73
					@.P2@	3	3489		LIT	73
					@.PC@	3	3492		LIT	74
					@.PE@	3	3495		LIT	74
					@.WF@	3	3498		LIT	74
					@A0@	2	3500		LIT	74
					@Z@	1	3501		LIT	74
					@10@	2	3503		LIT	74
					&1	1	3504		LIT	74
					@?@	1	3505		LIT	75
					@G92@	3	3508		LIT	75
					@000@	3	3511		LIT	75
					@|@	1	3512		LIT	75
		450			&LST1	3	3515	C73	ADCON	75
		459			&LST1	3	3518	C73	ADCON	75
					@2@	1	3519		LIT	75
					@3@	1	3520		LIT	76
595	20	200		DCW	@}@	1	3521			76
596	20	210		END	START			/ T10 080		77

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - G05 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - G05						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89			0089			
104	1	040	X2	EQU	94			0094			
105	1	050	X3	EQU	99			0099			
106	1	060	GETX	EQU	335			0335			
107	1	070	PUTX	EQU	363			0363			
108	1	080	SUPER	EQU	351			0351			
109	1	090		ORG	1300				1300		
110	1	100	START	MLC	&F,TABADR		7	1300	M ?08 A31		4
111	1	110	RTURN	B	INIT		4	1307	B T18		4
112	1	120	NTINT	B	PUTX		4	1311	B 363		4
113	1	130		DCW	SYM		3	1317	A34		4
114	1	140	INIT	B	GETX		4	1318	B 335		4
115	1	150		DCW	SYM		3	1324	A34		4
116	1	160		DCW	EOJ		3	1327	K96		4
117	1	170		C	SYM,LOC		7	1328	C A34 A40		5
118	1	180		BU	NTINT		5	1335	B T11 /		5
119	1	190		B	GETX		4	1340	B 335		5
120	1	200		DCW	SYMOP		3	1346	A37		5
121	1	210		DCW	EOJ		3	1349	K96		5
122	1	220		C	SYMOP,IMP		7	1350	C A37 A52		5
123	1	230		BE	IMRTTN		5	1357	B !06 S		5
124	1	240	INIT5	B	RELTST		4	1362	B V72		6
125	1	250		DCW	ARINT		3	1368	V54		6
126	2	010	INIT2	B	GETX		4	1369	B 335		6
127	2	020		DCW	SYM		3	1375	A34		6
128	2	030		DCW	EOJSET		3	1378	L10		6
129	2	040		C	SYM,LOC		7	1379	C A34 A40		6
130	2	050		BE	INIT1		5	1386	B U14 S		6
131	2	060		C	SYM,SEOP		7	1391	C A34 A58		7
132	2	070		BE	ENTSE		5	1398	B J88 S		7
133	2	080		MLC	&NTINT,RTURN&3		7	1403	M ?11 T10		7
134	2	090		B	OUTPUT		4	1410	B L17		7
135	2	100	INIT1	B	GETX		4	1414	B 335		7
136	2	110		DCW	SYMOP		3	1420	A37		7
137	2	120		DCW	EOJSET		3	1423	L10		7
138	2	130	INIT3	B	RELTST		4	1424	B V72		8
139	2	140		DCW	INIT4		3	1430	U35		8
140	2	150		B	INIT2		4	1431	B T69		8
141	2	160	INIT4	C	SYMOP,@ **@		7	1435	C A37 ?14		8
142	2	170		BE	ENTMAC		5	1442	B J18 S		8
143	2	180		C	SYMOP-1,@ @		7	1447	C A36 ?16		8
144	2	190		BE	ENTMAC		5	1454	B J18 S		8
145	2	200		C	SYMOP,@.SB@		7	1459	C A37 ?19		9
146	2	210		BE	ENTMAC		5	1466	B J18 S		9
147	2	220		C	SYMOP,GO		7	1471	C A37 A55		9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         BE    GORTN                                      5  1478  B Z18 S             9
149  2 240         C     SYMOP,IMP                                  7  1483  C A37 A52           9
150  2 250         BE    IMREL                                      5  1490  B Z40 S             9
151  3 010         C     SYMOP,@)97@                                7  1495  C A37 ?22          10
152  3 020         BE    ENTMAC                                     5  1502  B J18 S            10
153  3 030         C     SYMOP,@)98@                                7  1507  C A37 ?25          10
154  3 040         BE    ENTMAC                                     5  1514  B J18 S            10
155  3 050         C     SYMOP,LBOP                                 7  1519  C A37 A61          10
156  3 060         BE    LBRTN                                      5  1526  B X48 S            10
157  3 070         C     SYMOP,EQOP                                 7  1531  C A37 A64          11
158  3 080         BE    EQRTN                                      5  1538  B X21 S            11
159  3 090         MLC   &ARINT,RTURN&3                             7  1543  M ?28 T10          11
160  3 100         B     OUTPUT                                     4  1550  B L17              11
161  3 110  ARINT  B     PUTX                                       4  1554  B 363              11
162  3 120         DCW   SYM                                        3  1560  A34                11
163  3 130         B     PUTX                                       4  1561  B 363              11
164  3 140         DCW   SYMOP                                      3  1567  A37                12
165  3 150         B     INIT                                       4  1568  B T18              12
166  3 160  RELTST SBR   X3                                         4  1572  H 099              12
167  3 170         MLC   2&X3,RFLEXT&3                            7  1576  M 0?2 W29          12
168  3 180         MLC   X3,SAVE                                    7  1583  M 099 A70          12
169  3 190         BCE   ENTREL,SYMOP-2,$                         8  1590  B W78 A35 $        12
170  3 200         BCE   ENTREL,SYMOP-2,%                         8  1598  B W78 A35 %        13
171  3 210         C     SYMOP,@  #@                                7  1606  C A37 ?31          13
172  3 220         BE    ENTREL                                     5  1613  B W78 S            13
173  3 230         BCE   RELTS1,SYMOP-2,.                          8  1618  B W30 A35 .        13
174  3 240  RFLEXT B     *                                          4  1626  B W29              13
175  3 250  RELTS1 C     SYMOP,@LE@                                 7  1630  C A37 ?33          13
176  4 010         BE    ENTREL                                     5  1637  B W78 S            14
177  4 020         C     SYMOP,@SW@                                 7  1642  C A37 ?35          14
178  4 030         BE    ENTREL                                     5  1649  B W78 S            14
179  4 040         C     SYMOP,@NE@                                 7  1654  C A37 ?37          14
180  4 050         BE    ENTREL                                     5  1661  B W78 S            14
181  4 060         C     SYMOP,@GE@                                 7  1666  C A37 ?39          14
182  4 070         BU    RFLEXT                                     5  1673  B W26 /            15
183  4 080  ENTREL MLC   SYMOP,LASTOP                              7  1678  M A37 A67          15
184  4 090         MLC   &FREL,FADR                                 7  1685  M ?42 A73          15
185  4 100         B     ENTER                                      4  1692  B L28              15
186  4 110         B     ENTTAB                                     4  1696  B J40              15
187  4 120         DCW   FREL&1                                     3  1702  A75                15
188  4 130         MLC   TABADR,SVAD                              7  1703  M A31 A28          15
189  4 140         MLC   SAVE,X3                                    7  1710  M A70 099          16
190  4 150         B     3&X3                                       4  1717  B 0?3              16
191  4 160  EQRTN  MLC   &FIMP,FADR                                7  1721  M ?45 A73          16
192  4 170         B     ENTER                                      4  1728  B L28              16
193  4 180         MLC   FIMP&12,PAR2                             7  1732  M B43 A96          16
194  4 190         MLC                                              1  1739  M                  16
195  4 200         B     LKRPL                                      4  1740  B P17              16
196  4 210         B     INIT2                                      4  1744  B T69              17
197  4 220  LBRTN  MLC   &FLB,FADR                                 7  1748  M ?48 A73          17
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
198	4	230		B	ENTER	4	1755	B L28	17
199	4	240		B	GETOP	4	1759	B K11	17
200	4	250		DCW	LBGO3	3	1765	X78	17
201	5	010		C	SYMOP,GO	7	1766	C A37 A55	17
202	5	020		BE	LBGO1	5	1773	B Y08 S	17
203	5	030	LBGO3	B	ENTTAB	4	1778	B J40	18
204	5	040		DCW	FLB&1	3	1784	B57	18
205	5	050		C	SYMOP,IMP	7	1785	C A37 A52	18
206	5	060		BU	INIT3	5	1792	B U24 /	18
207	5	070		B	OUTP	4	1797	B M49	18
208	5	080		DCW	F	3	1803	B67	18
209	5	090		B	IMRTTN	4	1804	B !06	18
210	5	100	LBGO1	MLC	&FGO,FADR	7	1808	M ?51 A73	19
211	5	110		B	ENTER	4	1815	B L28	19
212	5	120		MLC	FGO&9,PAR2	7	1819	M B54 A96	19
213	5	130		MLC	FLB&9,PAR1	7	1826	M B65 A93	19
214	5	140		B	LKRPL	4	1833	B P17	19
215	5	150	LBGO2	B	REVREL	4	1837	B P91	19
216	5	160		B	GETOP	4	1841	B K11	19
217	5	170		DCW	GOOUT	3	1847	Y75	20
218	5	180		C	SYMOP,IMP	7	1848	C A37 A52	20
219	5	190		BU	GOOUT	5	1855	B Y75 /	20
220	5	200		MLC	&FIMP,FADR	7	1860	M ?54 A73	20
221	5	210		B	ENTER	4	1867	B L28	20
222	5	220		B	IMOUT	4	1871	B Y86	20
223	5	230	GOOUT	B	OUTP	4	1875	B M49	20
224	5	240		DCW	F	3	1881	B67	21
225	5	250		B	START	4	1882	B T00	21
226	6	010	IMOUT	MLC	LBOP,FIMP&3	7	1886	M A61 B34	21
227	6	020		MLC	@|@,FIMP&10	7	1893	M ?55 B41	21
228	6	030		B	OUTP	4	1900	B M49	21
229	6	040		DCW	F	3	1906	B67	21
230	6	050		B	OUTP	4	1907	B M49	21
231	6	060		DCW	FIMP	3	1913	B31	22
232	6	070		B	START	4	1914	B T00	22
233	6	080	GORTN	MLC	&FGO,FADR	7	1918	M ?58 A73	22
234	6	090		B	ENTER	4	1925	B L28	22
235	6	100		MLC	FGO&9,PAR2	7	1929	M B54 A96	22
236	6	110		B	LBGO2	4	1936	B Y37	22
237	6	120	IMREL	MLC	&FIMP,FADR	7	1940	M ?61 A73	22
238	6	130		B	ENTER	4	1947	B L28	23
239	6	140		MLC	FIMP&12,PAR2	7	1951	M B43 A96	23
240	6	150		B	REVREL	4	1958	B P91	23
241	6	160		MLC	LBOP,FIMP&3	7	1962	M A61 B34	23
242	6	170		MLC	@|@,FIMP&10	7	1969	M ?55 B41	23
243	6	180		B	ENTTAB	4	1976	B J40	23
244	6	190		DCW	FIMP&1	3	1982	B32	23
245	6	200		B	GETOP	4	1983	B K11	24
246	6	210		DCW	GOOUT	3	1989	Y75	24
247	6	220		C	SYMOP,IMP	7	1990	C A37 A52	24

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          BE    IMREL                                      5  1997  B Z40 S             24
249  6 240          B     INIT3                                      4  2002  B U24               24
250  6 250  IMRTTN  MLC   &FIMP,FADR                                 7  2006  M ?64 A73           24
251  7 010          B     ENTER                                      4  2013  B L28               24
252  7 020          B     GETOP                                      4  2017  B K11               25
253  7 030          DCW   IMOUT1                                    3  2023  !36                 25
254  7 040          C     SYMOP,GO                                   7  2024  C A37 A55           25
255  7 050          BE    IMRTT1                                     5  2031  B !54 S             25
256  7 060  IMOUT1  B     OUTP                                       4  2036  B M49               25
257  7 070          DCW   FIMP                                      3  2042  B31                 25
258  7 075          MLC   &F,TABADR                                  7  2043  M ?67 A31           25
259  7 080          B     INIT5                                      4  2050  B T62               26
260  7 090  IMRTT1  MLC   &FGO,FADR                                  7  2054  M ?70 A73           26
261  7 100          B     ENTER                                      4  2061  B L28               26
262  7 110          MLC   FGO&9,PAR1                                 7  2065  M B54 A93           26
263  7 120          MLC   FIMP&12,PAR2                              7  2072  M B43 A96           26
264  7 130          MLC   EQOP,FIMP&3                                7  2079  M A64 B34           26
265  7 140          MLC   PAR1,FIMP&12                               7  2086  M A93 B43           27
266  7 150          MLC   PAR2,FGO&9                                 7  2093  M A96 B54           27
267  7 160          B     OUTP                                       4  2100  B M49               27
268  7 170          DCW   FGO                                        3  2106  B45                 27
269  7 180          B     OUTP                                       4  2107  B M49               27
270  7 190          DCW   FIMP                                       3  2113  B31                 27
271  7 200          B     START                                      4  2114  B T00               27
272  7 210  ENTMAC  MLC   &FARSB,FADR                                7  2118  M ?73 A73           28
273  7 220          B     ENTER                                      4  2125  B L28               28
274  7 230          B     ENTTAB                                     4  2129  B J40               28
275  7 240          DCW   FARSB&1                                    3  2135  B06                 28
276  7 250          B     INIT2                                      4  2136  B T69               28
277  8 010  ENTTAB  SBR   X3                                         4  2140  H 099               28
278  8 020          MLC   2&X3,TBPAR&3                              7  2144  M 0?2 J65           28
279  8 030          MLC   TABADR,X1                                 7  2151  M A31 089           29
280  8 040          SW    1&X1                                       4  2158  , 0|1               29
281  8 050  TBPAR   MCM   *,1&X1                                    7  2162  P J68 0|1           29
282  8 060          SBR   X1                                         4  2169  H 089               29
283  8 070          C     @  @,0&X1                                  7  2173  C ?16 0|0           29
284  8 080          SBR   TABADR                                    4  2180  H A31               29
285  8 090          B     3&X3                                       4  2184  B 0?3               29
286  8 100  ENTSE   B     SETAB                                      4  2188  B J96               30
287  8 110          B     INIT2                                      4  2192  B T69               30
288  8 120  SETAB   SBR   SEXT&3                                    4  2196  H K10               30
289  8 130          B     ENTTAB                                     4  2200  B J40               30
290  8 140          DCW   FSE&1                                      3  2206  A98                 30
291  8 150  SEXT    B     *                                          4  2207  B K10               30
292  8 160  GETOP   SBR   X2                                         4  2211  H 094               30
293  8 170          MLC   2&X2,GETFLS&3                            7  2215  M 0!2 K95           31
294  8 180  GTOP2   B     GETX                                       4  2222  B 335               31
295  8 190          DCW   SYM                                       3  2228  A34                 31
296  8 200          DCW   EOJSET                                    3  2231  L10                 31
297  8 210          C     SYM,LOC                                    7  2232  C A34 A40           31
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 220          BU    GTOP1                                      5  2239  B K65 /             31
299  8 230          B     GETX                                       4  2244  B 335               31
300  8 240          DCW   SYMOP                                     3  2250  A37                 32
301  8 250          DCW   EOJSET                                    3  2253  L10                 32
302  9 010          MLC   &ARINT,RTURN&3                            7  2254  M ?76 T10           32
303  9 020          B     3&X2                                       4  2261  B 0!3               32
304  9 030  GTOP1   C     SYM,SEOP                                   7  2265  C A34 A58           32
305  9 040          BU    GTFL1                                      5  2272  B K85 /             32
306  9 050          B     SETAB                                      4  2277  B J96               32
307  9 060          B     GTOP2                                      4  2281  B K22               33
308  9 070  GTFL1   MLC   &NTINT,RTURN&3                           7  2285  M ?79 T10           33
309  9 080  GETFLS  B     3&X2                                       4  2292  B 0!3               33
310  9 090  EOJ     B     PUTX                                       4  2296  B 363               33
311  9 100          DCW   EOP                                      3  2302  A49                 33
312  9 110          B     351                                        4  2303  B 351               33
313  9 120          DCW   @G06@                                    3  2309                      33
314  9 130  EOJSET  MLC   &EOJ,RTURN&3                            7  2310  M ?82 T10           34
315  9 140  OUTPUT  B     OUTP                                       4  2317  B M49               34
316  9 150          DCW   F                                        3  2323  B67                 34
317  9 160          B     START                                      4  2324  B T00               34
318  9 170  ENTER   SBR   ENT01&3                                  4  2328  H M11               34
319  9 180          MLC   FADR,X2                                   7  2332  M A73 094           34
320  9 190          MLC   SYMOP,3&X2                               7  2339  M A37 0!3           34
321  9 200          C     @   @,3&X2                               7  2346  C ?85 0!3           35
322  9 210          SBR   X2                                       4  2353  H 094               35
323  9 220  ENT02   B     GETX                                       4  2357  B 335               35
324  9 230          DCW   ENTSYM                                   3  2363  A22                 35
325  9 240          DCW   EOJSET                                    3  2366  L10                 35
326  9 250          C     ENTSYM,MACSEP                              7  2367  C A22 A46           35
327 10 010          BE    ENT03                                      5  2374  B L94 S             35
328 10 020          MLC   ENTSYM,6&X2                               7  2379  M A22 0!6           36
329 10 030          SBR   X2                                       4  2386  H 094               36
330 10 040          B     ENT02                                      4  2390  B L57               36
331 10 050  ENT03   MLC   @|@,4&X2                                 7  2394  M ?55 0!4           36
332 10 060          MLC   &INIT,RTURN&3                            7  2401  M ?88 T10           36
333 10 070  ENT01   B     *                                          4  2408  B M11               36
334 10 080          DCW   @]@                                      1  2412                      36
335 10 090          DCW   @  #@                                    3  2415                      37
336 10 100          DC    @.NE@                                      3  2418                      37
337 10 110          DCW   @  #@                                    3  2421                      37
338 10 120          DCW   @.SW@                                    3  2424                      37
339 10 130          DC    @%SW@                                      3  2427                      37
340 10 140          DCW   @.SW@                                    3  2430                      37
341 10 150          DCW   @$21@                                    3  2433                      37
342 10 160          DC    @.GE@                                      3  2436                      37
343 10 170          DCW   @$21@                                    3  2439                      37
344 10 180          DCW   @$20@                                    3  2442                      37
345 10 190          DC    @.LE@                                      3  2445                      38
346 10 200  RVTAB   DCW   @$20@                                    3  2448                      38
347 10 210  OUTP    SBR   X3                                       4  2449  H 099               38
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 220         MLC   2&X3,X2                                    7  2453  M 0?2 094           38
349 10 230         C     @   @,0&X2                                 7  2460  C ?85 0!0           38
350 10 240         SBR   X2                                         4  2467  H 094               39
351 10 250         B     OUTP3                                      4  2471  B N64               39
352 11 010  OUTP1  MLC   6&X2,OUTSYM                               7  2475  M 0!6 A19           39
353 11 020         SAR   X2                                         4  2482  Q 094               39
354 11 030         C     OUTSYM,@...@                               7  2486  C A19 ?91           39
355 11 040         BE    OUTP1                                      5  2493  B M75 S             39
356 11 050         B     PUTX                                       4  2498  B 363               39
357 11 060         DCW   OUTSYM                                    3  2504  A19                 40
358 11 070         C     OUTSYM,SEOP                                7  2505  C A19 A58           40
359 11 080         BU    OUTP2                                      5  2512  B N33 /             40
360 11 090         BCE   OUTEX1,4&X2,|                             8  2517  B O14 0!4 |         40
361 11 100         BCE   OUTP5,4&X2,1                              8  2525  B N72 0!4 1         40
362 11 110  OUTP2  BCE   OUTEXT,4&X2,|                            8  2533  B O07 0!4 |         40
363 11 120         BWZ   OUTMC,4&X2,1                             8  2541  V N53 0!4 1         41
364 11 130         B     OUTP1                                      4  2549  B M75               41
365 11 140  OUTMC  CW    4&X2                                       4  2553  ) 0!4               41
366 11 150  OUTP4  B     PUTX                                       4  2557  B 363               41
367 11 160         DCW   MACSEP                                    3  2563  A46                 41
368 11 170  OUTP3  BCE   OUTP1,5&X2,.                             8  2564  B M75 0!5 .         41
369 11 180  OUTP5  B     PUTX                                       4  2572  B 363               41
370 11 190         DCW   LOC                                        3  2578  A40                 42
371 11 200         C     6&X2,@.LE@                                 7  2579  C 0!6 ?94           42
372 11 210         BE    LEOUT                                      5  2586  B O18 S             42
373 11 220         C     6&X2,@.GE@                                 7  2591  C 0!6 ?97           42
374 11 230         BE    GEOUT                                      5  2598  B O29 S             42
375 11 240         B     OUTP1                                      4  2603  B M75               42
376 11 250  OUTEXT B     PUTX                                       4  2607  B 363               42
377 12 010         DCW   MACSEP                                    3  2613  A46                 43
378 12 020  OUTEX1 B     3&X3                                       4  2614  B 0?3               43
379 12 030  LEOUT  MLC   @$20@,OUTSYM                              7  2618  M A00 A19           43
380 12 040         B     LGEOT                                      4  2625  B O36               43
381 12 050  GEOUT  MLC   @$21@,OUTSYM                              7  2629  M A03 A19           43
382 12 060  LGEOT  B     PUTX                                       4  2636  B 363               43
383 12 070         DCW   OUTSYM                                    3  2642  A19                 43
384 12 080         B     PUTX                                       4  2643  B 363               44
385 12 090         DCW   OP                                         3  2649  A43                 44
386 12 100         MLC   12&X2,OUTSYM                              7  2650  M 0J2 A19           44
387 12 110         B     PUTX                                       4  2657  B 363               44
388 12 120         DCW   OUTSYM                                    3  2663  A19                 44
389 12 130         MLC   15&X2,OUTSYM                              7  2664  M 0J5 A19           44
390 12 140         B     PUTX                                       4  2671  B 363               44
391 12 150         DCW   OUTSYM                                    3  2677  A19                 45
392 12 160         B     GNLAB                                      4  2678  B R43               45
393 12 170         DCW   OUTSYM                                    3  2684  A19                 45
394 12 180         B     PUTX                                       4  2685  B 363               45
395 12 190         DCW   OUTSYM                                    3  2691  A19                 45
396 12 200         MLC   OUTSYM,12&X2                              7  2692  M A19 0J2           45
397 12 210         MLC   @...@,15&X2                               7  2699  M ?91 0J5           45
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 220          MLC   IMP,6&X2                                 7  2706  M A52 0!6           46
399 12 230          B     OUTP4                                    4  2713  B N57               46
400 12 240  LKRPL   SBR   LK01&3                                  4  2717  H P90               46
401 12 250          MLC   TABADR,X1                                7  2721  M A31 089           46
402 13 010  LK02    BCE   LK01,0&X1,]                             8  2728  B P87 0|0 ]         46
403 13 020          C     0&X1,PAR1                                7  2736  C 0|0 A93           46
404 13 030          BU    LK03                                     5  2743  B P75 /             47
405 13 040          C     0&X1                                     4  2748  C 0|0               47
406 13 050          SAR   X2                                       4  2752  Q 094               47
407 13 060          C     3&X2,LBOP                                7  2756  C 0!3 A61           47
408 13 070          BE    LK03                                     5  2763  B P75 S             47
409 13 080          MLC   PAR2,0&X1                               7  2768  M A96 0|0           47
410 13 090  LK03    C     0&X1                                     4  2775  C 0|0               47
411 13 100          SAR   X1                                       4  2779  Q 089               48
412 13 110          B     LK02                                     4  2783  B P28               48
413 13 120  LK01    B     *                                        4  2787  B P90               48
414 13 130  REVREL  SBR   REV01&3                                  4  2791  H Q38               48
415 13 140          MLC   SVAD,X1                                  7  2795  M A28 089           48
416 13 150          MLC   PAR2,0&X1                                7  2802  M A96 0|0           48
417 13 160          C     0&X1                                     4  2809  C 0|0               48
418 13 170          SAR   X1                                       4  2813  Q 089               49
419 13 180          MLC   3&X1,RVNM                               7  2817  M 0|3 A25           49
420 13 190          B     REVOPL                                   4  2824  B Q39               49
421 13 200          MLC   RVNM,3&X1                               7  2828  M A25 0|3           49
422 13 210  REV01   B     *                                        4  2835  B Q38               49
423 13 220  REVOPL  SBR   RVOPL1&3                                4  2839  H R42               49
424 13 230          C     RVNM-1,@$1@                              7  2843  C A24 A05           49
425 13 240          BU    RVOPL2                                   5  2850  B Q66 /             50
426 13 250          MLC   @%1@,RVNM-1                             7  2855  M A07 A24           50
427 14 010          B     RVOPL1                                   4  2862  B R39               50
428 14 020  RVOPL2  C     RVNM-1,@%1@                              7  2866  C A24 A07           50
429 14 030          BU    RVOPL3                                   5  2873  B Q89 /             50
430 14 040          MLC   @$1@,RVNM-1                             7  2878  M A05 A24           50
431 14 050          B     RVOPL1                                   4  2885  B R39               50
432 14 060  RVOPL3  MLC   &RVTAB,X2                               7  2889  M A10 094           51
433 14 070  RVOPL4  BCE   RVOPL1,0&X2,]                           8  2896  B R39 0!0 ]         51
434 14 080          C     0&X2,RVNM                                7  2904  C 0!0 A25           51
435 14 090          SAR   X2                                       4  2911  Q 094               51
436 14 100          BE    RVOPL5                                   5  2915  B R32 S             51
437 14 110          C     1&X2                                     4  2920  C 0!1               51
438 14 120          SAR   X2                                       4  2924  Q 094               51
439 14 130          B     RVOPL4                                   4  2928  B Q96               52
440 14 140  RVOPL5  MLC   0&X2,RVNM                               7  2932  M 0!0 A25           52
441 14 150  RVOPL1  B     *                                        4  2939  B R42               52
442 14 160  GNLAB   SBR   X1                                       4  2943  H 089               52
443 14 170          MLC   2&X1,GNPAR&6                           7  2947  M 0|2 ?01           52
444 14 180          A     &1,GNNM                                  7  2954  A A11 A16           52
445 14 190          BCE   GNLAB1,GNNM-1,0                         8  2961  B R81 A15 0         53
446 14 200          C     GNNM-1,@1@                               7  2969  C A15 A12           53
447 14 210          BU    GNLAB2                                   5  2976  B R88 /             53
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 220  GNLAB1 MLC   @S@,GNNM-1                                  7  2981  M A13 A15          53
449 14 230  GNLAB2 MZ    @S@,GNNM-1                                  7  2988  Y A13 A15          53
450 14 240  GNPAR  MLC   GNNM,*                                      7  2995  M A16 ?01          54
451 14 250         B     3&X1                                        4  3002  B 0|3              54
452 15 010         LTORG                                                   3006
       110         DCW   &F                                          3  3008  B67         ADCON  54
       133               &NTINT                                      3  3011  T11         ADCON  54
                         @ **@                                       3  3014              LIT    54
                         @  @                                        2  3016              LIT    54
                         @.SB@                                       3  3019              LIT    54
                         @)97@                                       3  3022              LIT    55
                         @)98@                                       3  3025              LIT    55
       159               &ARINT                                      3  3028  V54         ADCON  55
                         @  #@                                       3  3031              LIT    55
                         @LE@                                        2  3033              LIT    55
                         @SW@                                        2  3035              LIT    55
                         @NE@                                        2  3037              LIT    55
                         @GE@                                        2  3039              LIT    56
       184               &FREL                                       3  3042  A74         ADCON  56
       191               &FIMP                                       3  3045  B31         ADCON  56
       197               &FLB                                        3  3048  B56         ADCON  56
       210               &FGO                                        3  3051  B45         ADCON  56
       220               &FIMP                                       3  3054  B31         ADCON  56
                         @|@                                         1  3055              LIT    56
       233               &FGO                                        3  3058  B45         ADCON  57
       237               &FIMP                                       3  3061  B31         ADCON  57
       250               &FIMP                                       3  3064  B31         ADCON  57
       258               &F                                          3  3067  B67         ADCON  57
       260               &FGO                                        3  3070  B45         ADCON  57
       272               &FARSB                                      3  3073  B05         ADCON  57
       302               &ARINT                                      3  3076  V54         ADCON  57
       308               &NTINT                                      3  3079  T11         ADCON  58
       314               &EOJ                                        3  3082  K96         ADCON  58
                         @   @                                       3  3085              LIT    58
       332               &INIT                                       3  3088  T18         ADCON  58
                         @...@                                       3  3091              LIT    58
                         @.LE@                                       3  3094              LIT    58
                         @.GE@                                       3  3097              LIT    58
                         @$20@                                       3  3100              LIT    59
                         @$21@                                       3  3103              LIT    59
                         @$1@                                        2  3105              LIT    59
                         @%1@                                        2  3107              LIT    59
       432               &RVTAB                                      3  3110  M48         ADCON  59
                         &1                                          1  3111              LIT    59
                         @1@                                         1  3112              LIT    59
                         @S@                                         1  3113              LIT    60
453 15 020  GNNM   DCW   @SS0@                                       3  3116                     60
454 15 030  OUTSYM DCW   #3                                          3  3119                     60
455 15 040  ENTSYM DCW   #3                                          3  3122                     60
456 15 050  RVNM   DCW   #3                                          3  3125                     60
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

457 15 060  SVAD    DCW   #3                                          3  3128                      60
458 15 070  TABADR  DCW   #3                                          3  3131                      60
459 15 080  SYM     DC    #3                                          3  3134                      61
460 15 090  SYMOP   DCW   #3                                          3  3137                      61
461 15 100  LOC     DCW   @.LC@                                       3  3140                      61
462 15 110  OP      DCW   @.OP@                                       3  3143                      61
463 15 120  MACSEP  DCW   @.MC@                                       3  3146                      61
464 15 130  EOP     DCW   @.EP@                                       3  3149                      62
465 15 140  IMP     DCW   @.IM@                                       3  3152                      62
466 15 150  GO      DCW   @)20@                                       3  3155                      62
467 15 160  SEOP    DCW   @.SE@                                       3  3158                      62
468 15 170  LBOP    DCW   @.LB@                                       3  3161                      62
469 15 180  EQOP    DCW   @.EQ@                                       3  3164                      62
470 15 190  LASTOP  DCW   #3                                          3  3167                      62
471 15 200  SAVE    DCW   #3                                          3  3170                      63
472 15 210  FADR    DCW   #3                                          3  3173                      63
473 15 220  FREL    DC    @ @                                         1  3174                      63
474 15 230          DC    #16                                        16  3190                      63
475 15 240  PAR1    DCW   #3                                          3  3193                      63
476 15 250  PAR2    DCW   #3                                          3  3196                      63
477 16 010  FSE     DC    @ @                                         1  3197                      63
478 16 020          DC    @....SE@                                    6  3203                      63
479 16 030          DC    @|@                                         1  3204                      63
480 16 040  FARSB   DC    @ @                                         1  3205                      63
481 16 050          DC    #25                                        25  3230                      64
482 16 060  FIMP    DC    @ @                                         1  3231                      64
483 16 070          DC    #13                                        13  3244                      64
484 16 080  FGO     DC    @ @                                         1  3245                      65
485 16 090          DC    #10                                        10  3255                      65
486 16 100  FLB     DC    @ @                                         1  3256                      65
487 16 110          DC    #10                                        10  3266                      65
488 16 120  F       DC    @]@                                         1  3267                      65
489 16 130          DCW   @}@          GROUP MARK                     1  3268                      65
490 16 140          END   START                                                / T00 080            66
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - G06 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - G06					
102	1	020		CTL	631 11					
103	1	030	X1	EQU	89			0089		
104	1	040	X2	EQU	94			0094		
105	1	050	X3	EQU	99			0099		
106	1	060	GETX	EQU	335			0335		
107	1	070	PUTX	EQU	363			0363		
108	1	080	SUPER	EQU	351			0351		
109	1	090		ORG	1300			1300		
110	1	100	START	MLC	@0000@,ADDSW		7	1300	M A00 A93	4
111	1	110		MLC	&F,TABADR		7	1307	M A03 B08	4
112	1	120		MLC	@N@,ASBSW1		7	1314	M A04 K52	4
113	1	130		MLC	@N@,ASBSW2		7	1321	M A04 K72	4
114	1	140	RTURN	B	INIT		4	1328	B T39	4
115	1	150	NTINT	B	PUTX		4	1332	B 363	4
116	1	160		DCW	SYM		3	1338	B17	4
117	1	170	INIT	B	GETX		4	1339	B 335	5
118	1	180		DCW	SYM		3	1345	B17	5
119	1	190		DCW	EOJ		3	1348	?72	5
120	1	200		C	SYM,LOC		7	1349	C B17 B50	5
121	1	210		BU	NTINT		5	1356	B T32 /	5
122	1	220		B	GETX		4	1361	B 335	5
123	1	230		DCW	SYMOP		3	1367	B20	5
124	1	240		DCW	EOJ		3	1370	?72	6
125	1	250		B	ARHTST		4	1371	B U95	6
126	2	010		DCW	ARINT		3	1377	U44	6
127	2	020	INIT2	B	GETX		4	1378	B 335	6
128	2	030		DCW	SYM		3	1384	B17	6
129	2	040		DCW	EOJSET		3	1387	?86	6
130	2	050		C	SYM,LOC		7	1388	C B17 B50	6
131	2	060		BE	INIT1		5	1395	B U11 S	7
132	2	070		MLC	&NTINT,RTURN&3		7	1400	M A07 T31	7
133	2	080		B	OPTM		4	1407	B O01	7
134	2	090	INIT1	B	GETX		4	1411	B 335	7
135	2	100		DCW	SYMOP		3	1417	B20	7
136	2	110		DCW	EOJSET		3	1420	?86	7
137	2	120		C	SYMOP,SASGN		7	1421	C B20 A68	7
138	2	130		BE	INIT3		5	1428	B U62 S	8
139	2	140		B	ARHTST		4	1433	B U95	8
140	2	150		DCW	INIT4		3	1439	U84	8
141	2	160		B	INIT2		4	1440	B T78	8
142	2	170	ARINT	B	PUTX		4	1444	B 363	8
143	2	180		DCW	SYM		3	1450	B17	8
144	2	190		B	PUTX		4	1451	B 363	8
145	2	200		DCW	SYMOP		3	1457	B20	9
146	2	210		B	INIT		4	1458	B T39	9
147	2	220	INIT3	MLC	&INIT,RTURN&3		7	1462	M A10 T31	9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         MLC   &FASG,FADR                               7  1469  M A13 B02           9
149  2 240         B     ENTER                                    4  1476  B W16               9
150  2 250         B     ASGN                                     4  1480  B J49               9
151  3 010  INIT4  MLC   &ARINT,RTURN&3                           7  1484  M A16 T31           9
152  3 020         B     OPTM                                     4  1491  B O01              10
153  3 030  ARHTST SBR   X3                                       4  1495  H 099              10
154  3 040         MLC   2&X3,AFLEXT&3                           7  1499  M 0?2 V96          10
155  3 050         MLC   X3,SAVE                                 7  1506  M 099 B38          10
156  3 060         C     SYMOP,SBOP                               7  1513  C B20 B29          10
157  3 070         BU    ARHT01                                   5  1520  B V47 /            10
158  3 080         MLC   &FSUB,FADR                               7  1525  M A19 B02          11
159  3 090  ARHT03 B     ENTER                                    4  1532  B W16              11
160  3 100  ATREXT MLC   SAVE,X3                                 7  1536  M B38 099          11
161  3 110         B     3&X3                                     4  1543  B 0?3              11
162  3 120  ARHT01 C     SYMOP,PLUS                               7  1547  C B20 B26          11
163  3 130         BU    ARHT04                                   5  1554  B V85 /            11
164  3 140         BCE   ARHT02,ARSW,1                           8  1559  B V74 A92 1        12
165  3 150         MLC   @1@,ADDSW                               7  1567  M A20 A93          12
166  3 160  ARHT02 MLC   &FARH,FADR                              7  1574  M A23 B02          12
167  3 170         B     ARHT03                                   4  1581  B V32              12
168  3 180  ARHT04 BCE   ARHT05,SYMOP-2,                         8  1585  B V97 B18          12
169  3 190  AFLEXT B     *                                        4  1593  B V96              12
170  3 200  ARHT05 BCE   AFLEXT,SYMOP,#                         8  1597  B V93 B20 #        13
171  3 210         MLC   @10@,ADDSW                             7  1605  M A25 A93          13
172  3 220         B     ARHT02                                   4  1612  B V74              13
173  3 230  ENTER  SBR   ENT01&3                                 4  1616  H X44              13
174  3 240         MLC   FADR,X2                                 7  1620  M B02 094          13
175  3 250         MLC   SYMOP,3&X2                              7  1627  M B20 0!3          13
176  4 010  ENT02  B     GETX                                     4  1634  B 335              14
177  4 020         DCW   ENTSYM                                  3  1640  A80                14
178  4 030         DCW   EOJSET                                  3  1643  ?86                14
179  4 040         C     ENTSYM,MACSEP                            7  1644  C A80 B53          14
180  4 050         BE    ENT03                                    5  1651  B W71 S            14
181  4 060         MLC   ENTSYM,6&X2                            7  1656  M A80 0!6          14
182  4 070         SBR   X2                                       4  1663  H 094              14
183  4 080         B     ENT02                                    4  1667  B W34              15
184  4 090  ENT03  MLC   @|@,4&X2                               7  1671  M A26 0!4          15
185  4 100         C     FADR,&FSUB                               7  1678  C B02 A29          15
186  4 110         BU    ENT04                                    5  1685  B X01 /            15
187  4 120         C     @   @,0&X2                               7  1690  C A32 0!0          15
188  4 130         SBR   SBAD                                     4  1697  H B05              15
189  4 140  ENT04  MLC   FADR,X2                                 7  1701  M B02 094          16
190  4 150         MLC   TABADR,X3                              7  1708  M B08 099          16
191  4 160         SW    1&X3                                     4  1715  , 0?1              16
192  4 170         MCM   1&X2,1&X3                              7  1719  P 0!1 0?1          16
193  4 180         SBR   X3                                       4  1726  H 099              16
194  4 190         C     @  @,0&X3                                7  1730  C A34 0?0          16
195  4 200         SBR   TABADR                                   4  1737  H B08              17
196  4 210  ENT01  B     *                                        4  1741  B X44              17
197  4 220  OUTP   SBR   X3                                       4  1745  H 099              17
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         MLC   2&X3,X2                                     7  1749  M 0?2 094           17
199  4 240  OUTP6  C     @   @,0&X2                                  7  1756  C A32 0!0           17
200  4 250         SBR   X2                                          4  1763  H 094               17
201  5 010  OUTP5  BCE   OUTP4,5&X2,.                                8  1767  B X79 0!5 .         17
202  5 020         B     OUTP3                                       4  1775  B Y80               18
203  5 030  OUTP4  C     6&X2,@...@                                  7  1779  C 0!6 A37           18
204  5 040         SAR   X2                                          4  1786  Q 094               18
205  5 050         BE    OUTP4                                       5  1790  B X79 S             18
206  5 060         B     OUTP6                                       4  1795  B X56               18
207  5 070  OUTP1  MLC   6&X2,OUTSYM                                 7  1799  M 0!6 B23           18
208  5 080         SAR   X2                                          4  1806  Q 094               18
209  5 090         C     OUTSYM,@***@                                7  1810  C B23 A40           19
210  5 100         BE    OUTP2                                       5  1817  B Y41 S             19
211  5 110         C     OUTSYM,@...@                                7  1822  C B23 A37           19
212  5 120         BE    OUTP2                                       5  1829  B Y41 S             19
213  5 130         B     PUTX                                        4  1834  B 363               19
214  5 140         DCW   OUTSYM                                      3  1840  B23                 19
215  5 150  OUTP2  BCE   OUTEXT,4&X2,|                               8  1841  B Z07 0!4 |         19
216  5 160         BWZ   OUTMC,4&X2,1                               8  1849  V Y61 0!4 1         20
217  5 170         B     OUTP1                                       4  1857  B X99               20
218  5 180  OUTMC  CW    4&X2                                        4  1861  ) 0!4               20
219  5 190         BCE   OUTP1,5&X2,.                                8  1865  B X99 0!5 .         20
220  5 200         B     PUTX                                        4  1873  B 363               20
221  5 210         DCW   MACSEP                                      3  1879  B53                 20
222  5 220  OUTP3  B     PUTX                                        4  1880  B 363               20
223  5 230         DCW   LOC                                         3  1886  B50                 21
224  5 240         CW    4&X2                                        4  1887  ) 0!4               21
225  5 250         C     6&X2,AUGP1                                  7  1891  C 0!6 A99           21
226  6 010         BE    OUTAUG                                      5  1898  B Z18 S             21
227  6 020         B     OUTP1                                       4  1903  B X99               21
228  6 030  OUTEXT B     PUTX                                        4  1907  B 363               21
229  6 040         DCW   MACSEP                                      3  1913  B53                 21
230  6 050         B     3&X3                                        4  1914  B 0?3               22
231  6 060  OUTAUG B     PUTX                                        4  1918  B 363               22
232  6 070         DCW   AUGOP                                       3  1924  B35                 22
233  6 080         B     PUTX                                        4  1925  B 363               22
234  6 090         DCW   OP                                          3  1931  B56                 22
235  6 100         MLC   12&X2,OUTSYM                                7  1932  M 0J2 B23           22
236  6 110         B     PUTX                                        4  1939  B 363               22
237  6 120         DCW   OUTSYM                                      3  1945  B23                 23
238  6 130         MLC   18&X2,OUTSYM                                7  1946  M 0J8 B23           23
239  6 140         B     PUTX                                        4  1953  B 363               23
240  6 150         DCW   OUTSYM                                      3  1959  B23                 23
241  6 160         B     PUTX                                        4  1960  B 363               23
242  6 170         DCW   MACSEP                                      3  1966  B53                 23
243  6 180         MLC   @***@,12&X2                                 7  1967  M A40 0J2           23
244  6 190         MLC   AUGOP,6&X2                                  7  1974  M B35 0!6           24
245  6 200         B     OUTP3                                       4  1981  B Y80               24
246  6 210  SUBCHK SBR   SUBEXT&3                                    4  1985  H J48               24
247  6 220         SBR   X3                                          4  1989  H 099               24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         C     @  @,0&X3                                      7  1993  C A34 0?0           24
249  6 240         C                                                    1  2000  C                   24
250  6 250         SBR   X3                                             4  2001  H 099               24
251  7 010         MLC   0&X3,SBPRAD                                    7  2005  M 0?0 B11           25
252  7 020         MLC   SBPRAD,SUB01&3                                 7  2012  M B11 !22           25
253  7 030  SUB01  MLC   *,PRSBNM                                       7  2019  M !25 B14           25
254  7 040         C     PRSBNM,AGSBNM                                  7  2026  C B14 A71           25
255  7 050         BE    SUBEXT                                         5  2033  B J45 S             25
256  7 060         MLC   X1,X3                                          7  2038  M 089 099           26
257  7 070  SUB02  C     0&X3                                           4  2045  C 0?0               26
258  7 080         SAR   X3                                             4  2049  Q 099               26
259  7 090         C     3&X3,SBOP                                      7  2053  C 0?3 B29           26
260  7 100         BU    SUB02                                          5  2060  B !45 /             26
261  7 110         C     25&X3                                          4  2065  C 0B5               26
262  7 120         SAR   X3                                             4  2069  Q 099               26
263  7 130         C     @      @,0&X3                                  7  2073  C A46 0?0           27
264  7 140         SBR   X3                                             4  2080  H 099               27
265  7 150         C     3&X3,PRSBNM                                    7  2084  C 0?3 B14           27
266  7 160         BE    SUB04                                          5  2091  B J08 S             27
267  7 170         C     0&X3                                           4  2096  C 0?0               27
268  7 180         SAR   X3                                             4  2100  Q 099               27
269  7 190         B     SUB02                                          4  2104  B !45               27
270  7 200  SUB04  C     0&X3,0&X2                                      7  2108  C 0?0 0!0           28
271  7 210         BU    SUBEXT                                         5  2115  B J45 /             28
272  7 220         MLC   @.@,6&X3                                       7  2120  M A47 0?6           28
273  7 230         MLC   6&X3                                           4  2127  M 0?6               28
274  7 240         MLC   SBPRAD,SUB03&6                                 7  2131  M B11 J44           28
275  7 250  SUB03  MLC   AGSBNM,*                                       7  2138  M A71 J44           28
276  8 010  SUBEXT B     *                                              4  2145  B J48               29
277  8 020  ASGN   MLC   FASG&9,PAR1                                    7  2149  M C15 B41           29
278  8 030         MLC   FASG&12,PAR2                                   7  2156  M C18 B44           29
279  8 040         BWZ   OUTPUT,PAR2-1,2                                8  2163  V ?46 B43 2         29
280  8 050         BWZ   ASGNSB,PAR1,B                                  8  2171  V M73 B41 B         29
281  8 060  ASGN1  MLC   TABADR,X1                                      7  2179  M B08 089           30
282  8 070         MLC   @000@,RSNMCT                                   7  2186  M A50 A89           30
283  8 080  ASGN2  BCE   ASGEXT,0&X1,]                                  8  2193  B L78 0|0 ]         30
284  8 090         C     0&X1                                           4  2201  C 0|0               30
285  8 100         SAR   X1                                             4  2205  Q 089               30
286  8 110         C     0&X1,PAR2                                      7  2209  C 0|0 B44           30
287  8 120         BU    ASGN2                                          5  2216  B J93 /             31
288  8 130  ASGN3  BCE   ASGEND,0&X1,]                                  8  2221  B L53 0|0 ]         31
289  8 140         C     0&X1                                           4  2229  C 0|0               31
290  8 150         SAR   X1                                             4  2233  Q 089               31
291  8 160         BCE   ASGN3,1&X1,.                                   8  2237  B K21 0|1 .         31
292  8 170         A     &1,RSNMCT                                      7  2245  A A51 A89           31
293  8 180  ASBSW1 BWZ   SUBCHK,9&X1,B                                  8  2252  V Z85 0|9 B         32
294  8 190         C     9&X1,PAR1                                      7  2260  C 0|9 B41           32
295  8 200         BE    ASGN5                                          5  2267  B L12 S             32
296  8 210  ASBSW2 BWZ   SUBCHK,12&X1,B                                 8  2272  V Z85 0/2 B         32
297  8 220         C     12&X1,PAR1                                     7  2280  C 0/2 B41           32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230          BU    ASGN3                                     5  2287  B K21 /             33
299  8 240          BCE   ASGN5,3&X1,&                              8  2292  B L12 0|3 &         33
300  8 250          C     3&X1,MPY                                  7  2300  C 0|3 A77           33
301  9 010          BU    ASGN6                                     5  2307  B L19 /             33
302  9 020  ASGN5   A     &1,RSNMCT                                 7  2312  A A51 A89           33
303  9 030  ASGN6   BCE   ASGXT2,ADSW1,1                           8  2319  B L64 A90 1         34
304  9 040          BCE   ASGEXT,ADDSW,0                            8  2327  B L78 A93 0         34
305  9 050          MLC   @1@,ADSW1                                7  2335  M A20 A90           34
306  9 060          MLC   RSNMCT,SAVCNT                             7  2342  M A89 A74           34
307  9 070          B     ASGN3                                     4  2349  B K21               34
308  9 080  ASGEND  A     &1,RSNMCT                                 7  2353  A A51 A89           35
309  9 090          B     ASGEXT                                    4  2360  B L78               35
310  9 100  ASGXT2  MLC   SAVCNT,RSNMCT                           7  2364  M A74 A89           35
311  9 110          MLC   @0@,ADDSW                                 7  2371  M A52 A93           35
312  9 120  ASGEXT  MLC   @0@,ADSW1                                7  2378  M A52 A90           35
313  9 130  ASGXT1  MLC   TABADR,X1                                7  2385  M B08 089           35
314  9 140  ASGEX1  C     0&X1                                      4  2392  C 0|0               36
315  9 150          SAR   X1                                        4  2396  Q 089               36
316  9 160          C     RSNMCT,@001@                              7  2400  C A89 A55           36
317  9 170          BE    OPTENT                                    5  2407  B O08 S             36
318  9 180          C     3&X1,SASGN                                7  2412  C 0|3 A68           36
319  9 190          BU    ASGEX1                                    5  2419  B L92 /             36
320  9 200          MLC   MEOP,3&X1                                7  2424  M B59 0|3           36
321  9 210          MLC   @***@,12&X1                              7  2431  M A40 0/2           37
322  9 220  ASGEX2  C     0&X1,PAR2                                 7  2438  C 0|0 B44           37
323  9 230          BE    ASGEX3                                    5  2445  B M62 S             37
324  9 240          C     0&X1                                      4  2450  C 0|0               37
325  9 250          SAR   X1                                        4  2454  Q 089               37
326 10 010          B     ASGEX2                                    4  2458  B M38               37
327 10 020  ASGEX3  MLC   PAR1,0&X1                                7  2462  M B41 0|0           37
328 10 030          B     OPTENT                                    4  2469  B O08               38
329 10 040  ASGNSB  MLC   @1@,SUBSW                                7  2473  M A20 A91           38
330 10 050          MLC   TABADR,X1                                 7  2480  M B08 089           38
331 10 060  ASGNS1  BCE   ASGN1,0&X1,]                             8  2487  B J79 0|0 ]         38
332 10 070          C     0&X1                                      4  2495  C 0|0               38
333 10 080          SAR   X1                                        4  2499  Q 089               38
334 10 090          C     3&X1,SBOP                                 7  2503  C 0|3 B29           39
335 10 100          BU    ASGNS1                                    5  2510  B M87 /             39
336 10 110          C     25&X1                                     4  2515  C 0S5               39
337 10 120          SAR   X1                                        4  2519  Q 089               39
338 10 130          C     @      @,0&X1                             7  2523  C A61 0|0           39
339 10 140          SBR   X1                                        4  2530  H 089               39
340 10 150          C     3&X1,PAR1                                 7  2534  C 0|3 B41           39
341 10 160          BE    ASGNS2                                    5  2541  B N58 S             40
342 10 170          C     0&X1                                      4  2546  C 0|0               40
343 10 180          SAR   X1                                        4  2550  Q 089               40
344 10 190          B     ASGNS1                                    4  2554  B M87               40
345 10 200  ASGNS2  MLC   @.@,6&X1                                7  2558  M A47 0|6           40
346 10 210          MLC   6&X1                                      4  2565  M 0|6               40
347 10 220          MLC   @V@,ASBSW1                               7  2569  M A62 K52           40
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          MLC   @V@,ASBSW2                          7  2576  M A62 K72           41
349 10 240          MLC   PAR1,AGSBNM                         7  2583  M B41 A71           41
350 10 250          MLC   SBAD,X2                             7  2590  M B05 094           41
351 11 010          B     ASGN1                               4  2597  B J79               41
352 11 020  OPTM    MLC   TABADR,X1                           7  2601  M B08 089           41
353 11 030  OPTENT MLC   @000@,OPNMCT                        7  2608  M A50 A83           41
354 11 040  OPTAGN BCE   OUTPUT,0&X1,]                       8  2615  B ?46 0|0 ]         42
355 11 050          C     0&X1                                4  2623  C 0|0               42
356 11 060          SAR   X1                                  4  2627  Q 089               42
357 11 070          BCE   OPTAGN,1&X1,.                       8  2631  B O15 0|1 .         42
358 11 080          A     &1,OPNMCT                           7  2639  A A51 A83           42
359 11 090          MLC   15&X1,PAR3                         7  2646  M 0/5 B47           42
360 11 100          MLC                                       1  2653  M                   42
361 11 110          MLC                                       1  2654  M                   43
362 11 120          C     3&X1,PLUS                           7  2655  C 0|3 B26           43
363 11 130          BE    OPTADD                              5  2662  B P24 S             43
364 11 140          C     3&X1,MNS                            7  2667  C 0|3 A96           43
365 11 150          BU    OPTAGN                              5  2674  B O15 /             43
366 11 160  OPTSUB C     PAR1,PAR3                           7  2679  C B41 B47           43
367 11 170          BE    SBTRTN                              5  2686  B P06 S             43
368 11 180          BWZ   OPTAGN,PAR1-1,2                    8  2691  V O15 B40 2         44
369 11 190          B     LKUP                                4  2699  B R13               44
370 11 200          DCW   PAR1                                3  2705  B41                 44
371 11 210  SBTRTN MLC   SUBOP,3&X1                          7  2706  M B32 0|3           44
372 11 220  SBT01  MLC   @***@,9&X1                          7  2713  M A40 0|9           44
373 11 230          B     OPTAGN                              4  2720  B O15               44
374 11 240  OPTADD BWZ   OPTAD1,PAR2-1,2                    8  2724  V P52 B43 2         45
375 11 250          C     PAR1,PAR3                           7  2732  C B41 B47           45
376 12 010          BE    OPTAD4                              5  2739  B Q02 S             45
377 12 020          B     SWITCH                              4  2744  B ?16               45
378 12 030          B     OPTAD3                              4  2748  B P80               45
379 12 040  OPTAD1 BWZ   OPTAD2,PAR1-1,2                    8  2752  V Q62 B40 2         45
380 12 050          C     PAR2,PAR3                           7  2760  C B44 B47           46
381 12 060          BU    OPTAD3                              5  2767  B P80 /             46
382 12 070          B     SWITCH                              4  2772  B ?16               46
383 12 080          B     OPTAD4                              4  2776  B Q02               46
384 12 090  OPTAD3 B     LKUP                                4  2780  B R13               46
385 12 100          DCW   PAR1                                3  2786  B41                 46
386 12 110          MLC   PAR3,9&X1                           7  2787  M B47 0|9           46
387 12 120          BWZ   OPTAD5,PAR2-1,2                    8  2794  V Q39 B43 2         47
388 12 130  OPTAD4 BCE   AUGRTN,ADDSW,0                      8  2802  B Q51 A93 0         47
389 12 140          B     LKUP                                4  2810  B R13               47
390 12 150          DCW   PAR2                                3  2816  B44                 47
391 12 160  SQLMAC MLC   @.@,15&X1                          7  2817  M A47 0/5           47
392 12 170          MLC   15&X1                               4  2824  M 0/5               47
393 12 180          MLC   @1@,ADSW1                          7  2828  M A20 A90           48
394 12 190          B     OPTAGN                              4  2835  B O15               48
395 12 200  OPTAD5 C     PAR2,PAR3                           7  2839  C B44 B47           48
396 12 210          BE    SQLMAC                              5  2846  B Q17 S             48
397 12 220  AUGRTN MLC   AUGOP,3&X1                          7  2851  M B35 0|3           48
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230          B     SBT01                                     4  2858  B P13               48
399 12 240  OPTAD2  C     PAR1,PAR3                                 7  2862  C B41 B47           49
400 12 250          BE    AUGRTN                                    5  2869  B Q51 S             49
401 13 010          C     PAR2,PAR3                                 7  2874  C B44 B47           49
402 13 020          BE    OPTAD6                                    5  2881  B R05 S             49
403 13 030          BCE   OPTAGN,ADSW1,0                           8  2886  B O15 A90 0         49
404 13 040          MLC   AUGP1,3&X1                               7  2894  M A99 0|3           49
405 13 050          B     OPTAGN                                    4  2901  B O15               50
406 13 060  OPTAD6  B     SWITCH                                    4  2905  B ?16               50
407 13 070          B     AUGRTN                                    4  2909  B Q51               50
408 13 080  LKUP    SBR   X3                                       4  2913  H 099               50
409 13 090          MLC   OPNMCT,LKNMCT                            7  2917  M A83 A86           50
410 13 100          MLC   2&X3,LKPAR&6                             7  2924  M 0?2 R75           50
411 13 110          MLC   X1,X2                                    7  2931  M 089 094           50
412 13 120  LK02    BCE   OPTAGN,0&X2,]                           8  2938  B O15 0!0 ]         51
413 13 130          C     0&X2                                      4  2946  C 0!0               51
414 13 140          SAR   X2                                       4  2950  Q 094               51
415 13 150          BCE   LK02,1&X2,.                              8  2954  B R38 0!1 .         51
416 13 160          A     &1,LKNMCT                                 7  2962  A A51 A86           51
417 13 170  LKPAR   C     15&X2,*                                   7  2969  C 0J5 R75           51
418 13 180          BU    LK02                                      5  2976  B R38 /             52
419 13 190          BWZ   LK03,PAR3-1,B                           8  2981  V ?05 B46 B         52
420 13 200          C     RSNMCT,LKNMCT                             7  2989  C A89 A86           52
421 13 210          BL    LK03                                      5  2996  B ?05 T             52
422 13 220          B     OPTAGN                                    4  3001  B O15               52
423 13 230  LK03    MLC   PAR3,15&X2                               7  3005  M B47 0J5           52
424 13 240          B     3&X3                                      4  3012  B 0?3               53
425 13 250  SWITCH  SBR   SWTCH1&3                                 4  3016  H ?45               53
426 14 010          MLC   PAR1,12&X1                               7  3020  M B41 0/2           53
427 14 020          MLC   PAR2,9&X1                                7  3027  M B44 0|9           53
428 14 030          MLC   12&X1,PAR2                               7  3034  M 0/2 B44           53
429 14 040          MLC                                            1  3041  M                   53
430 14 050  SWTCH1  B     *                                         4  3042  B ?45               53
431 14 060  OUTPUT  BCE   OUTT01,SUBSW,0                           8  3046  B ?61 A91 0         54
432 14 070          B     OUTP                                      4  3054  B X45               54
433 14 080          DCW   FSUB                                     3  3060  B80                 54
434 14 090  OUTT01  B     OUTP                                      4  3061  B X45               54
435 14 100          DCW   F                                       3  3067  C20                 54
436 14 110          B     START                                     4  3068  B T00               54
437 14 120  EOJ     B     PUTX                                      4  3072  B 363               54
438 14 130          DCW   EOP                                     3  3078  B62                 55
439 14 140          B     SUPER                                     4  3079  B 351               55
440 14 150          DCW   @H01@                                   3  3085                      55
441 14 160  EOJSET  MLC   &EOJ,RTURN&3                            7  3086  M A65 T31           55
442 14 170          B     OUTPUT                                    4  3093  B ?46               55
443 14 180          LTORG                                                  3097
                    DCW   @0000@                                    4  3100              LIT     55
       111                &F                                       3  3103  C20         ADCON   55
                          @N@                                      1  3104              LIT     56
       132                &NTINT                                   3  3107  T32         ADCON   56
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

       147          &INIT                                           3  3110  T39         ADCON   56
       148          &FASG                                           3  3113  C06         ADCON   56
       151          &ARINT                                          3  3116  U44         ADCON   56
       158          &FSUB                                           3  3119  B80         ADCON   56
                    @1@                                             1  3120              LIT     56
       166          &FARH                                           3  3123  B63         ADCON   57
                    @10@                                            2  3125              LIT     57
                    @|@                                             1  3126              LIT     57
       185          &FSUB                                           3  3129  B80         ADCON   57
                    @   @                                           3  3132              LIT     57
                    @  @                                            2  3134              LIT     57
                    @...@                                           3  3137              LIT     57
                    @***@                                           3  3140              LIT     58
       263          @      @                                        6  3146              LIT     58
                    @.@                                             1  3147              LIT     58
                    @000@                                           3  3150              LIT     58
                    &1                                              1  3151              LIT     58
                    @0@                                             1  3152              LIT     58
                    @001@                                           3  3155              LIT     58
       338          @      @                                        6  3161              LIT     59
                    @V@                                             1  3162              LIT     59
       441          &EOJ                                            3  3165  ?72         ADCON   59
444 14 190  SASGN  DCW   @*16@                                      3  3168                      59
445 14 200  AGSBNM DCW   #3                                         3  3171                      59
446 14 210  SAVCNT DCW   #3                                         3  3174                      59
447 14 220  MPY    DCW   @  *@                                      3  3177                      59
448 14 230  ENTSYM DCW   #3                                         3  3180                      60
449 14 240  OPNMCT DCW   #3                                         3  3183                      60
450 14 250  LKNMCT DCW   #3                                         3  3186                      60
451 15 010  RSNMCT DCW   @999@                                     3  3189                      60
452 15 020  ADSW1  DC    @0@                                       1  3190                      60
453 15 030  SUBSW  DC    @0@                                       1  3191                      60
454 15 040  ARSW   DC    @0@                                       1  3192                      60
455 15 050  ADDSW  DC    @0@                                       1  3193                      60
456 15 060  MNS    DCW   @  -@                                     3  3196                      60
457 15 070  AUGP1  DCW   @ &&@                                     3  3199                      60
458 15 080  FADR   DCW   #3                                        3  3202                      60
459 15 090  SBAD   DCW   #3                                        3  3205                      61
460 15 100  TABADR DCW   F                                         3  3208  C20                 61
461 15 110  SBPRAD DCW   #3                                        3  3211                      61
462 15 120  PRSBNM DCW   #3                                        3  3214                      61
463 15 130  SYM    DCW   #3                                        3  3217                      61
464 15 140  SYMOP  DCW   #3                                        3  3220                      61
465 15 150  OUTSYM DCW   #3                                        3  3223                      61
466 15 160  PLUS   DCW   @  &@                                     3  3226                      62
467 15 170  SBOP   DCW   @.SB@                                     3  3229                      62
468 15 180  SUBOP  DCW   @)97@                                     3  3232                      62
469 15 190  AUGOP  DCW   @)98@                                     3  3235                      62
470 15 200  SAVE   DCW   #3                                        3  3238                      62
471 15 210  PAR1   DCW   #3                                        3  3241                      62
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
472	15	220	PAR2	DCW	#3	3	3244		62
473	15	230	PAR3	DCW	#3	3	3247		63
474	15	240	LOC	DCW	@.LC@	3	3250		63
475	15	250	MACSEP	DCW	@.MC@	3	3253		63
476	16	010	OP	DCW	@.OP@	3	3256		63
477	16	020	MEOP	DCW	@.ME@	3	3259		63
478	16	030	EOP	DCW	@.EP@	3	3262		63
479	16	040	FARH	DC	@ @	1	3263		63
480	16	050		DCW	#16	16	3279		63
481	16	060	FSUB	DC	@ @	1	3280		64
482	16	070		DCW	#25	25	3305		64
483	16	080	FASG	DC	@ @	1	3306		64
484	16	090		DCW	#13	13	3319		65
485	16	100	F	DC	@]@	1	3320		65
486	16	110		DCW	@}@ GR MK.	1	3321		65
487	16	120		END	INIT			/ T39 080	66

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
```

1401 COBOL - H01 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
101	1	010	000	JOB	1401 COBOL - H01							
102	1	020		CTL	631 11							
103	1	030		ORG	1300					1300		
104	1	040	X1	EQU	89				0089			
105	1	050	X2	EQU	94				0094			
106	1	060	X3	EQU	99				0099			
107	1	070	GETX	EQU	335				0335			
108	1	080	SUPER	EQU	351				0351			
109	1	090	PUTX	EQU	363				0363			
110	1	100	IORW	EQU	343				0343			
111	1	110		RWD	4			5	1300	U %U4	R	4
112	1	120	START	B	GETSYM			4	1305	B K79		4
113	1	130		DCW	SX			3	1311	W34		4
114	1	140			EOTP			3	1314	U61		4
115	1	150		C	SX,VDS			7	1315	C W34 W37		4
116	1	160		BE	START1			5	1322	B T39 S		4
117	1	170		C	SX,VTE			7	1327	C W34 W40		4
118	1	180		BU	START			5	1334	B T05 /		5
119	1	190	START1	MLC	SX,TEST	DATA-DESCRIPTION FROM TAPE 4		7	1339	M W34 W43		5
120	1	200		MLC	VTE,SX			7	1346	M W40 W34		5
121	1	210		B	PUTSX			4	1353	B P29		5
122	1	220		B	GETSYM			4	1357	B K79		5
123	1	230		DCW	NAME			3	1363	W46		5
124	1	240			EOTP			3	1366	U61		5
125	1	250		B	PUTX			4	1367	B 363		6
126	2	010		DCW	NAME			3	1373	W46		6
127	2	020		B	GETSYM			4	1374	B K79		6
128	2	030		DCW	SIZE1			3	1380	W49		6
129	2	040			EOTP			3	1383	U61		6
130	2	050		B	PUTX			4	1384	B 363		6
131	2	060		DCW	SIZE1			3	1390	W49		6
132	2	070		B	GETSYM			4	1391	B K79		7
133	2	080		DCW	SIZE2			3	1397	W52		7
134	2	090			EOTP			3	1400	U61		7
135	2	100		B	PUTX			4	1401	B 363		7
136	2	110		DCW	SIZE2			3	1407	W52		7
137	2	120	START2	B	GETSYM			4	1408	B K79		7
138	2	130		DCW	SX			3	1414	W34		7
139	2	140			EOTP			3	1417	U61		8
140	2	150		C	SX,VSBSC			7	1418	C W34 W55		8
141	2	160		BE	SBSC			5	1425	B W75 S		8
142	2	170		C	SX,TEST			7	1430	C W34 W43		8
143	2	180		BE	START3			5	1437	B U50 S		8
144	2	190		B	PUTSX			4	1442	B P29		8
145	2	200		B	START2			4	1446	B U08		8
146	2	210	START3	B	PUTX			4	1450	B 363		9
147	2	220		DCW	VTE			3	1456	W40		9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     START                                       4  1457  B T05               9
149  2 240  EOTP   B     GETSX                                       4  1461  B P11               9
150  2 250         C     SX,VPROC                                    7  1465  C W34 W58           9
151  3 010         BU    EOTP                                        5  1472  B U61 /             9
152  3 020         MLC   SLTBL,NEXTSL        INITIALIZE SL-TABLE    7  1477  M W61 W64           9
153  3 030  EOTP1  C     SX,VDC                                      7  1484  C W34 W67          10
154  3 040         BE    EOTP1A                                      5  1491  B V08 S            10
155  3 050         C     SX,VNOTE                                    7  1496  C W34 W70          10
156  3 060         BU    EOTP1B                                      5  1503  B V39 /            10
157  3 070  EOTP1A MLC   SX,TEST                                     7  1508  M W34 W43          10
158  3 080  EOTPAA B     PUTSX                                       4  1515  B P29              10
159  3 090         B     GETSX                                       4  1519  B P11              10
160  3 100         C     SX,TEST                                     7  1523  C W34 W43          11
161  3 110         BU    EOTPAA                                      5  1530  B V15 /            11
162  3 120         B     EOTP3                                       4  1535  B V97              11
163  3 130  EOTP1B BCE   EOTP3,SBSMOD,0                             8  1539  B V97 W71 0        11
164  3 140         C     SX,VSE                                      7  1547  C W34 W74          11
165  3 150         BU    EOTP2                                       5  1554  B V77 /            11
166  3 160         MLC   @0@,SBSMOD          TURN SUBSCRIPT MODE OFF 7  1559  M P44 W71          12
167  3 170         MLC   SLTBL,NEXTSL        REINITIALIZE SL TABLE   7  1566  M W61 W64          12
168  3 180         B     EOTP3                                       4  1573  B V97              12
169  3 190  EOTP2  C     SX-2,@A@                                    7  1577  C W32 P45          12
170  3 200         BH    EOTP3                                       5  1584  B V97 U            12
171  3 210  EOTP2A BWZ   GTSLNM,SX,B         YES, SL                8  1589  V Z67 W34 B        12
172  3 220  EOTP3  B     PUTSX                                       4  1597  B P29              13
173  3 230  EOTP4  B     GETSX                                       4  1601  B P11              13
174  3 240         C     SX,VSBSC                                    7  1605  C W34 W55          13
175  3 250         BE    SBSMAC                                      5  1612  B X95 S            13
176  4 010         B     EOTP1                                       4  1617  B U84              13
177  4 020  EOJ    B     PUTSX                                       4  1621  B P29              13
178  4 030         B     SUPER                                       4  1625  B 351              13
179  4 040         DCW   @H02@                                      3  1631                     14
180  4 050  SX     DCW   #3                                         3  1634                     14
181  4 060  VDS          @.DS@                                       3  1637                     14
182  4 070  VTE          @.TE@                                       3  1640                     14
183  4 080  TEST         #3                                          3  1643                     14
184  4 090  NAME         #3                                          3  1646                     14
185  4 100  SIZE1        #3                                          3  1649                     14
186  4 110  SIZE2        #3                                          3  1652                     15
187  4 120  VSBSC        @.SB@                                       3  1655                     15
188  4 130  VPROC        @*01@                                       3  1658                     15
189  4 140  SLTBL        #3                                          3  1661                     15
190  4 150  NEXTSL       #3                                          3  1664                     15
191  4 160  VDC          @#DC@                                       3  1667                     15
192  4 170  VNOTE        @*24@                                       3  1670                     15
193  4 180  SBSMOD       @0@                                         1  1671                     16
194  4 190  VSE          @.SE@                                       3  1674                     16
195  4 200  SBSC   MLC   NAMARG,X2                                  7  1675  M X91 094          16
196  4 210         SW    1&X2                                        4  1682  , 0!1              16
197  4 220  SBS01  B     GETSYM              BUILD NAME-TABLE        4  1686  B K79              16
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         DCW   SX                                             3  1692  W34               16
199  4 240               EOTP                                           3  1695  U61               16
200  4 250         A     &3,X2                                          7  1696  A P46 094         17
201  5 010         C     SX,VSBSC                                       7  1703  C W34 W55         17
202  5 020         BE    SBSFIN                                         5  1710  B X26 S           17
203  5 030         MLC   SX,0&X2             ENTER RELATED-NAMES        7  1715  M W34 0!0         17
204  5 040         B     SBS01                                          4  1722  B W86             17
205  5 050  SBSFIN MLC   NAME,0&X2           ENTER DATA-NAME            7  1726  M W46 0!0         17
206  5 060         MLC   X2,NAMARG           UPDATE NAME-TABLE ARGUEMENT 7  1733  M 094 X91         18
207  5 070         MLC   SIZEND,X3           BUILD SIZE-TABLE           7  1740  M X94 099         18
208  5 080         MLC   NAME,0&X3           ENTER NAME                 7  1747  M W46 0?0         18
209  5 090         MLC   SIZE1               SIZE1                      4  1754  M W49             18
210  5 100         MLC   SIZE2               SIZE2                      4  1758  M W52             18
211  5 110         SBR   SIZEND              UPDATE E-O-SIZE-TABLE POINTER 4  1762  H X94             18
212  5 120         SBR   X3                                             4  1766  H 099             18
213  5 130         SW    1&X3                                           4  1770  , 0?1             19
214  5 140         MLC   @|@,0&X3            SIZE-TABLE STOPPER         7  1774  M P47 0?0         19
215  5 150         SBR   SLTBL               UPDATE FUTURE ARGUEMENT FOR 4  1781  H W61             19
216  5 160         B     START2              SL-TABLE                   4  1785  B U08             19
217  5 170  NAMARG DCW   GM-1                                           3  1791  P81               19
218  5 180  SIZEND       @G98@                                          3  1794                    19
219  5 190  SBSMAC B     PUTSX               .SB                        4  1795  B P29             19
220  5 200         B     GETSX                                          4  1799  B P11             20
221  5 210         B     PUTSX               .LC                        4  1803  B P29             20
222  5 220         B     GETX                                           4  1807  B 335             20
223  5 230         DCW   NAME                                           3  1813  W46               20
224  5 240               EOJ                                            3  1816  W21               20
225  5 250         B     PUTX                                           4  1817  B 363             20
226  6 010         DCW   NAME                NAME                       3  1823  W46               20
227  6 020         B     PUTSZS              SIZES                      4  1824  B !28             21
228  6 030  SBSM01 B     GETSX                                          4  1828  B P11             21
229  6 040         B     PUTSX                                          4  1832  B P29             21
230  6 050         BWZ   SBSM02,SX,B         BRANCH WHEN SL             8  1836  V Y55 W34 B       21
231  6 060         B     PUTX                                           4  1844  B 363             21
232  6 070         DCW   VSD                                            3  1850  K25               21
233  6 080         B     SBSM01                                         4  1851  B Y28             21
234  6 090  SBSM02 MLC   NEXTSL,X2           BUILD SL-TABLE             7  1855  M W64 094         22
235  6 100         MLCWA SX,0&X2             SL                         7  1862  L W34 0!0         22
236  6 110         MLCWA NAME                DATA-NAME                  4  1869  L W46             22
237  6 120         MLCWA @|@                 STOPPER                    4  1873  L P47             22
238  6 130         SBR   X2                                             4  1877  H 094             22
239  6 140         SBR   NEXTSL,1&X2         UPDATE POINTER             7  1881  H W64 0!1         22
240  6 150         MLC   @1@,SBSMOD          TURN SUBSCRIPT-MODE ON     7  1888  M P48 W71         23
241  6 160         B     GETSX                                          4  1895  B P11             23
242  6 170         B     GETSX                                          4  1899  B P11             23
243  6 180         B     PUTSX                                          4  1903  B P29             23
244  6 190  NMERSW B     EOTP4                                          4  1907  B W01             23
245  6 200         MLC   @B@,NMERSW                                     7  1911  M P49 Z07         23
246  6 210         MLC   &MSG,NMERPT                                    7  1918  M P52 Z31         23
247  6 220  NMER01 B     PUTX                                           4  1925  B 363             24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  NMERPT DCW   *                                           3  1931  Z31               24
249  6 240         A     &3,NMERPT                                   7  1932  A P46 Z31         24
250  6 250         C     NMERPT,&MSGMX                               7  1939  C Z31 P55         24
251  7 010         BU    NMER01                                      5  1946  B Z25 /           24
252  7 020         B     EOTP4                                       4  1951  B W01             24
253  7 030  MSG    DCW   @#DC@                                       3  1957                    24
254  7 040  MSGEND DC    @***H0A#DC@                                 9  1966                    25
255  7 050  MSGMX  EQU   MSGEND&3                                      1969
256  7 060  GTSLNM MLC   SLTBL,X3                                    7  1967  M W61 099         25
257  7 070  GTSL01 BCE   SLNFD,0&X3,|                                8  1974  B K26 0?0 |       25
258  7 080         C     0&X3,SX                                     7  1982  C 0?0 W34         25
259  7 090         SAR   X3                                          4  1989  Q 099             25
260  7 100         BE    SLFND                                       5  1993  B !13 S           26
261  7 110         MLC   0&X3,0&X3                                   7  1998  M 0?0 0?0         26
262  7 120         SBR   X3                                          4  2005  H 099             26
263  7 130         B     GTSL01                                      4  2009  B Z74             26
264  7 140  SLFND  B     PUTSX              SL                       4  2013  B P29             26
265  7 150         MLC   0&X3,SX                                     7  2017  M 0?0 W34         26
266  7 160         B     EOTP3                                       4  2024  B V97             26
267  7 170  PUTSZS MLC   NAMARG,X2                                   7  2028  M X91 094         27
268  7 180  PTSZ01 BCE   NAMNFD,0&X2,|       FIND NAME               8  2035  B J65 0!0 |       27
269  7 190         C     0&X2,NAME                                   7  2043  C 0!0 W46         27
270  7 200         SAR   X2                                          4  2050  Q 094             27
271  7 210         BE    NAMFND                                      5  2054  B !74 S           27
272  7 220         MLC   0&X2,0&X2                                   7  2059  M 0!0 0!0         27
273  7 230         SBR   X2                                          4  2066  H 094             28
274  7 240         B     PTSZ01                                      4  2070  B !35             28
275  7 250  NAMFND BW    SIZFIN,1&X2                                 8  2074  V J87 0!1 1       28
276  8 010         MLC   0&X2,SIZNAM        CURRENT-RELATED-NAME     7  2082  M 0!0 K75         28
277  8 020         SAR   X2                                          4  2089  Q 094             28
278  8 030  SIZ00  MLC   SIZARG,X3                                   7  2093  M K78 099         28
279  8 040  SIZ01  BCE   SIZNFD,0&X3,|       FIND SIZES              8  2100  B K26 0?0 |       29
280  8 050         C     0&X3,SIZNAM                                 7  2108  C 0?0 K75         29
281  8 060         SAR   X3                                          4  2115  Q 099             29
282  8 070         BE    SIZFND                                      5  2119  B J35 S           29
283  8 080         MLC   0&X3,0&X3                                   7  2124  M 0?0 0?0         29
284  8 090         B     SIZ01                                       4  2131  B J00             29
285  8 100  SIZFND MLC   0&X3,SX                                     7  2135  M 0?0 W34         30
286  8 110         SAR   X3                                          4  2142  Q 099             30
287  8 120         B     PUTSX              SIZE1                    4  2146  B P29             30
288  8 130         MLC   0&X3,SX                                     7  2150  M 0?0 W34         30
289  8 140  SIZ02  B     PUTSX              SIZE2                    4  2157  B P29             30
290  8 150  SWITCH B     NAMFND                                      4  2161  B !74             30
291  8 160  NAMNFD MLC   @000@,SX                                   7  2165  M P58 W34         30
292  8 170         B     PUTSX                                       4  2172  B P29             31
293  8 180         B     PUTSX                                       4  2176  B P29             31
294  8 190         MLC   @N@,NMERSW                                 7  2180  M P59 Z07         31
295  8 200  SIZFIN B     PUTX                                        4  2187  B 363             31
296  8 210         DCW   VSD                                         3  2193  K25               31
297  8 220         MLC   &LBL,SWITCH&3                              7  2194  M P62 J64         31
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         MLC   NAME,SIZNAM                               7  2201  M W46 K75          31
299  8 240         B     SIZ00                                     4  2208  B !93              32
300  8 250  LBL    MLC   &NAMFND,SWITCH&3                          7  2212  M P65 J64          32
301  9 010         B     SBSM01                                    4  2219  B Y28              32
302  9 020  VSD    DCW   @.SD@                                     3  2225                     32
303  9 030  SLNFD  CC    1                                         2  2226  F 1                32
304  9 040         CS    332                                       4  2228  / 332              32
305  9 050         CS                                              1  2232  /                  32
306  9 060         MLC   MSGG,260                                  7  2233  M K72 260          33
307  9 070         W                                               1  2240  2                  33
308  9 080         CC    1                                         2  2241  F 1                33
309  9 090         B     359                                       4  2243  B 359              33
310  9 100  MSGG   DCW   @SYSTEM FAILURE- PHASE H01.@             26  2272                     34
311  9 110  SIZNFD EQU   SLNFD                                        2226
312  9 120  SIZNAM DCW   #3                                        3  2275                     34
313  9 130  SIZARG       @G98@                                     3  2278                     34
314  9 140  GETSYM SBR   X1                                        4  2279  H 089              34
315  9 150  GETT1  SBR   GET3&3,6&X1                              7  2283  H L60 0|6          35
316  9 160         MLC   2&X1,GET2&6                              7  2290  M 0|2 L44          35
317  9 170         MLC   5&X1,GET7&3                              7  2297  M 0|5 M06          35
318  9 180         C     GET1&3,&CMAX                              7  2304  C L34 P68          35
319  9 190         BE    GET4                                      5  2311  B L61 S            35
320  9 200         MA    @003@,GET1&3                                                 MACRO
321               SW    GET1&3-2                                  4  2316  , L32        GEN   35
322               A     @003@,GET1&3                              7  2320  A P71 L34    GEN   36
323               CW    GET1&3-2                                  4  2327  ) L32        GEN   36
324  9 210  GET1   MLC   CMAX,C1                                  7  2331  M P09 M09          36
325  9 220  GET2   MLC   C1,*                                     7  2338  M M09 L44          36
326  9 230         C     C1,@.EB@                                  7  2345  C M09 P74          36
327  9 240         BE    GET4                                      5  2352  B L61 S            36
328  9 250  GET3   B     0                                         4  2357  B 000              37
329 10 010  GET4   SW    GETGM                                     4  2361  , P10              37
330 10 020         B     IORW                                      4  2365  B 343              37
331 10 030         RT    4,CIN1                                    8  2369  M %U4 M10 R        37
332 10 040         DCW   GET5                                     3  2379  L91                37
333 10 050         MLC   &CIN2,GET1&3                            7  2380  M P77 L34          37
334 10 060         B     GET1                                      4  2387  B L31              37
335 10 070  GET5   RWD   4                                         5  2391  U %U4 R            38
336 10 080  GET6   MLC   &CMAX,GET1&3                            7  2396  M P80 L34          38
337 10 090  GET7   B     0                                         4  2403  B 000              38
338 10 100  C1     DCW   #3                                        3  2409                     38
339 10 110  CIN1   DA    1X300                                        2410   2709             38
340 10 120  CIN2         1,3                                          2412             FIELD  38
341 10 130  CMAX         300                                          2709             SBFLD
342 10 140  GETGM   DC    @}@                                       1  2710                     39
343 10 150  GETSX  SBR   GTSEX&3            GETSX                   4  2711  H P28              39
344 10 160         B     GETX                                      4  2715  B 335              39
345 10 170         DCW   &SX                                       3  2721  W34                39
346 10 180               &EOJ                                      3  2724  W21                39
347 10 190  GTSEX  B     *                                         4  2725  B P28              40
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SEQ PG LIN  LABEL  OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 200  PUTSX  SBR   PTSEX&3          PUTSX    4  2729  H P43              40
349 10 210         B     PUTX                      4  2733  B 363              40
350 10 220         DCW   &SX                       3  2739  W34                40
351 10 230  PTSEX  B     *                         4  2740  B P43              40
352 10 240         LTORG                                    2744
                   DCW   @0@                       1  2744            LIT     40
                         @A@                       1  2745            LIT     40
                         &3                        1  2746            LIT     41
                         @|@                       1  2747            LIT     41
                         @1@                       1  2748            LIT     41
                         @B@                       1  2749            LIT     41
       246               &MSG                      3  2752  Z57       ADCON   41
       250               &MSGMX                    3  2755  Z69       ADCON   41
                         @000@                     3  2758            LIT     41
                         @N@                       1  2759            LIT     42
       297               &LBL                      3  2762  K12       ADCON   42
       300               &NAMFND                   3  2765  !74       ADCON   42
       318               &CMAX                     3  2768  P09       ADCON   42
                         @003@                     3  2771            LIT     42
                         @.EB@                     3  2774            LIT     42
       333               &CIN2                     3  2777  M12       ADCON   42
       336               &CMAX                     3  2780  P09       ADCON   43
353 10 250         DCW   @|@                       1  2781                      43
354 11 010  GM           @}@                       1  2782                      43
355 11 020         END   START                             / T05 080           44
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - H02 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - H02					
102	1	020		CTL	631 11					
103	1	030		ORG	1300			1300		
104	1	040	SCRBKT	EQU	1126			1126		
105	1	050	X1	EQU	89			0089		
106	1	060	X2	EQU	94			0094		
107	1	070	X3	EQU	99			0099		
108	1	080	PUTX	EQU	363			0363		
109	1	090	GETX	EQU	335			0335		
110	1	100	SUPER	EQU	351			0351		
111	1	110	IORW	EQU	343			0343		
112	1	120	NEXTTE	DCW	#3 PHASE H02		3	1302		4
113	1	130	SX	DCW	#3		3	1305		4
114	1	140	ITSW	DCW	@0@		1	1306		4
115	1	150	VTE	DCW	@.TE@		3	1309		4
116	1	160	TBARG	DCW	FGCON		3	1312	J80	4
117	1	170	VITOP	DCW	@.IT@		3	1315		4
118	1	180	FIRST	DCW	@1@		1	1316		4
119	1	190	VPROC	DCW	@*01@		3	1319		5
120	1	200	T2MAX	DCW	#3		3	1322		5
121	1	210	GETPHS	B	IORW		4	1323	B 343	5
122	1	220		RT	1,START		8	1327	M %U1 T57 R	5
123	1	230		DCW	*&1		3	1337	T38	5
124	1	240		CW	START&20		4	1338	) T77	5
125	1	250		B	IORW		4	1342	B 343	5
126	2	010		RTW	1,START		8	1346	L %U1 T57 R	6
127	2	020		DCW	*&1		3	1356	T57	6
128	2	030	GTPHGM	DCW	@}@		1	1357		6
129	2	040		ORG	GTPHGM			1357		

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

130  1 010         JOB   1401 COBOL - H03
131  2 060  START  EQU   GTPHGM            PHAZE H03                    1357
132  2 070         BCE   STRT1,ITSW,0                                 8  1357  B T90 T06 0          7
133  2 080         MLC   @0@,ITSW                                      7  1365  M V15 T06            7
134  2 090         MLC   @0@,FIRST                                     7  1372  M V15 T16            7
135  2 100         MLC   FRTARG,TBARG                                  7  1379  M V02 T12            7
136  2 110         B     STRT2                                         4  1386  B U62                7
137  2 120  STRT1  BCE   STRT2,FIRST,0                                 8  1390  B U62 T16 0          8
138  2 130         BCE   STRT1A,SCRBKT,6                             8  1398  B U33 /26 6          8
139  2 140         BCE   STRT1B,SCRBKT,2                             8  1406  B U44 /26 2          8
140  2 150         BCE   STRT1C,SCRBKT,8                             8  1414  B U55 /26 8          8
141  2 160         MLC   MAX4,T2MAX                                  7  1422  M V05 T22            8
142  2 170         B     STRT2                                       4  1429  B U62                9
143  2 180  STRT1A MLC   MAX6,T2MAX                                  7  1433  M V14 T22            9
144  2 190         B     STRT2                                       4  1440  B U62                9
145  2 200  STRT1B MLC   MAX2,T2MAX                                  7  1444  M V11 T22            9
146  2 210         B     STRT2                                       4  1451  B U62                9
147  2 220  STRT1C MLC   MAX8,T2MAX                                  7  1455  M V08 T22            9
148  2 230  STRT2  MLC   T2MAX,NEXTTE                                7  1462  M T22 T02           10
149  2 240         MLC   T2MAX,CLEAR&3                               7  1469  M T22 U83           10
150  2 250         SW    GM&100                                      4  1476  , W16               10
151  3 010  CLEAR  CS    *                                           4  1480  / U83               10
152  3 020         SBR   CLEAR&3                                     4  1484  H U83               10
153  3 030         BW    CLEAR,GM&100                                8  1488  V U80 W16 1         10
154  3 040         B     GETPHS                                      4  1496  B T23               10
155  3 050  FRTARG DCW   FGCON                                       3  1502  J80                 11
156  3 060  MAX4   DCW   @G98@                                      3  1505                      11
157  3 070  MAX8   DCW   @F3W@                                      3  1508                      11
158  3 080  MAX2   DCW   @C9O@                                      3  1511                      11
159  3 090  MAX6   DCW   @C9F@                                      3  1514                      11
160  3 100         LTORG                                                   1515
                   DCW   @0@                                       1  1515            LIT     11
161  3 110  GM     DCW   @}@                                       1  1516                      11
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

162  1 010          JOB   1401 COBOL - H04
163  3 130          ORG   START              PHASE H04                      1357
164  3 140  STRT4   B     GETX                                        4  1357  B 335             12
165  3 150          DCW   SX                                          3  1363  T05               12
166  3 160          DCW   *-2                                         3  1366  T64               12
167  3 170          C     SX,VPROC                                    7  1367  C T05 T19         12
168  3 180          BE    GETPHS                                      5  1374  B T23 S           12
169  3 190          C     SX,VTE                                      7  1379  C T05 T09         12
170  3 200          BU    STRT6                                       5  1386  B U43 /           12
171  3 210          B     BLDTBL                                      4  1391  B U74             13
172  3 220  STRT4A BCE   STRT4,ITSW,0                                8  1395  B T57 T06 0       13
173  3 230          B     PUTX                                        4  1403  B 363             13
174  3 240          DCW   VITOP                                       3  1409  T15               13
175  3 250  STRT5   B     PUTX                                        4  1410  B 363             13
176  4 010          DCW   SX                                          3  1416  T05               13
177  4 020          B     GETX                                        4  1417  B 335             13
178  4 030          DCW   SX                                          3  1423  T05               14
179  4 040          DCW   *-2                                         3  1426  U24               14
180  4 050          C     SX,VPROC                                    7  1427  C T05 T19         14
181  4 060          BE    GETPHS                                      5  1434  B T23 S           14
182  4 070          B     STRT5                                       4  1439  B U10             14
183  4 080  STRT6   BCE   STRT6A,FIRST,1                             8  1443  B U63 T16 1       14
184  4 090          C     SX,VITOP                                    7  1451  C T05 T15         14
185  4 100          BE    STRT4                                       5  1458  B T57 S           15
186  4 110  STRT6A B     PUTX                                        4  1463  B 363             15
187  4 120          DCW   SX                                          3  1469  T05               15
188  4 130          B     STRT4                                       4  1470  B T57             15
189  4 140  BLDTBL MLC   NEXTTE,X3                                   7  1474  M T02 099         15
190  4 150          C     0&X3,SAFEFD                                 7  1481  C 0?0 W88         15
191  4 160          BU    BTOV                                        5  1488  B V78 /           15
192  4 170          MLC   TBARG,X2                                   7  1493  M T12 094         16
193  4 180          B     GETX                                        4  1500  B 335             16
194  4 190          DCW   SX                                          3  1506  T05               16
195  4 200          DCW   *-2                                         3  1509  V07               16
196  4 210          MLNS  7&X2,7&X2                                   7  1510  D 0!7 0!7         16
197  4 220          SBR   TBARG                                      4  1517  H T12             16
198  4 230          MLCWA SX                                          4  1521  L T05             16
199  4 240          MLCWA                                             1  1525  L                 17
200  4 250  BT01    B     GETX                                        4  1526  B 335             17
201  5 010          DCW   SX                                          3  1532  T05               17
202  5 020          DCW   *-2                                         3  1535  V33               17
203  5 030          C     SX,VTE                                      7  1536  C T05 T09         17
204  5 040          BE    BTFIN                                       5  1543  B V63 S           17
205  5 050          MLCWA SX,0&X3                                     7  1548  L T05 0?0         17
206  5 060          SBR   X3                                          4  1555  H 099             18
207  5 070          B     BT01                                        4  1559  B V26             18
208  5 080  BTFIN   MLCWA @|@,0&X3                                   7  1563  L W89 0?0         18
209  5 090          SBR   NEXTTE                                     4  1570  H T02             18
210  5 100          B     STRT4A                                      4  1574  B T95             18
211  5 110  BTOV    MLC   @1@,ITSW                                   7  1578  M W90 T06         18
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

212  5 120         B     STRT4A                                       4  1585  B T95               18
213  5 130         DCW   #50                                        50  1638                      20
214  5 140  SAFEFD DC    #50                                        50  1688                      22
215  5 150         LTORG                                                   1689
                   DCW   @|@                                         1  1689            LIT     22
                         @1@                                         1  1690            LIT     22
216  5 160         ORG   2150     ADDR MUST BE TO RIGHT OF H05 GM          2150
217  5 170         DCW   @$@                                         1  2150                      23
218  5 180         DCW   TALLY                                       3  2153  !85                 23
219  5 190         DCW   @A05@                                       3  2156                      23
220  5 200         DCW   FGCONA                                      3  2159  J10                 23
221  5 210         DCW   @A01@                                       3  2162                      23
222  5 220         DCW   FGCONA                                      3  2165  J10                 23
223  5 230         DCW   @A02@                                       3  2168                      23
224  5 240         DCW   FGCONA                                      3  2171  J10                 24
225  5 250         DCW   @A09@                                       3  2174                      24
226  6 010         DCW   FGCONN                                      3  2177  J35                 24
227  6 020  FGCON  DCW   @A08@                                       3  2180                      24
228  6 030         DCW   @}@                                         1  2181                      24
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

229  1 010          JOB   1401 COBOL - H05
230  6 050          ORG   START              PHASE H05                      1357
231  6 060          MLCWA T2MAX,FGCON&3                              7  1357  L T22 J83           25
232  6 070          BCE   PROCD,ITSW,0                               8  1364  B T76 T06 0         25
233  6 080          B     PUTSX                                      4  1372  B Z78               25
234  6 090  PROCD   BCE   PROCD1,FIRST,1                           8  1376  B U22 T16 1         25
235  6 100          B     GTPTIL                                     4  1384  B Z93               25
236  6 110          DCW   VNTFND                                    3  1390  Y31                 25
237  6 120          B     GETSX                                      4  1391  B Z60               25
238  6 130          C     SX,VSBSC                                   7  1395  C T05 Y34           26
239  6 140          BU    PROCD2                                     5  1402  B V52 /             26
240  6 150          B     GETSX                                      4  1407  B Z60               26
241  6 160          MLC   @1@,SBSW                                   7  1411  M J36 Y35           26
242  6 170          B     PROCD2                                     4  1418  B V52               26
243  6 180  PROCD1  B     GETSX                                      4  1422  B Z60               26
244  6 190          C     SX,VNOTE                                   7  1426  C T05 Y38           26
245  6 200          BU    PROC1C                                     5  1433  B U57 /             27
246  6 210          B     PUTSX                                      4  1438  B Z78               27
247  6 220          B     GTPTIL                                     4  1442  B Z93               27
248  6 230          DCW   VNOTE                                    3  1448  Y38                 27
249  6 240  PROC1H  B     PUTSX                                      4  1449  B Z78               27
250  6 250          B     PROCD1                                     4  1453  B U22               27
251  7 010  PROC1C  C     SX,VDC                                     7  1457  C T05 Z59           27
252  7 020          BU    PROC1D                                     5  1464  B U84 /             28
253  7 030          B     PUTSX                                      4  1469  B Z78               28
254  7 040          B     GTPTIL                                     4  1473  B Z93               28
255  7 050          DCW   VDC                                      3  1479  Z59                 28
256  7 060          B     PROC1H                                     4  1480  B U49               28
257  7 070  PROC1D  BCE   PROCD5,SX-2,)                            8  1484  B W27 T03 )         28
258  7 080          BCE   PROCD5,SX-2,.                            8  1492  B W27 T03 .         28
259  7 090          C     SX-2,@S@                                   7  1500  C T03 J37           29
260  7 100          BH    PROC1B                                     5  1507  B V28 U             29
261  7 110          C     SX-2,@Y@                                   7  1512  C T03 J38           29
262  7 120          BL    PROC1B                                     5  1519  B V28 T             29
263  7 130          B     PROCD2                                     4  1524  B V52               29
264  7 140  PROC1B  BWZ   PROC1A,SX-2,B                            8  1528  V V40 T03 B         29
265  7 150          B     PROCD5                                     4  1536  B W27               30
266  7 160  PROC1A  BWZ   PROCD2,SX-1,2                           8  1540  V V52 T04 2         30
267  7 170          B     PROCD5                                     4  1548  B W27               30
268  7 180  PROCD2  BWZ   PROCD6,SX,B                             8  1552  V X41 T05 B         30
269  7 190          MLZS  SX,SXSAVE                                  7  1560  Y T05 Y28           30
270  7 200          MLZS  @ @,SX                                     7  1567  Y J39 T05           30
271  7 210          B     GTADDR                                     4  1574  B Y45               31
272  7 220  PRC2A   C     ADDR,@000@                                 7  1578  C Z13 J42           31
273  7 230          BU    PROCD3                                     5  1585  B W65 /             31
274  7 240          BCE   PROCD5,ITSW,0                            8  1590  B W27 T06 0         31
275  7 250          B     PUTX                                       4  1598  B 363               31
276  8 010          DCW   VNTFND                                    3  1604  Y31                 31
277  8 020          BCE   PROCD5,SBSW,0                            8  1605  B W27 Y35 0         31
278  8 030          MLC   @0@,SBSW                                   7  1613  M J43 Y35           32
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
279  8 040          B     PUTX                                 4  1620  B 363              32
280  8 050          DCW   VSBSC                                3  1626  Y34                32
281  8 060  PROCD5  B     PUTSX                                4  1627  B Z78              32
282  8 070          C     SX,VSBSC                             7  1631  C T05 Y34          32
283  8 080          BU    PROCD4                               5  1638  B W99 /            32
284  8 090          MLC   @1@,SB2SW                           7  1643  M J36 Y24          32
285  8 100          B     GTPTIL                               4  1650  B Z93              33
286  8 110          DCW   VSD                                  3  1656  Y27                33
287  8 120          B     PUTSX                                4  1657  B Z78              33
288  8 130          B     PROCD                                4  1661  B T76              33
289  8 140  PROCD3  BCE   PRCD3A,SBSW,0                        8  1665  B W84 Y35 0        33
290  8 150          MLC   @0@,SBSW                            7  1673  M J43 Y35          33
291  8 160          B     PRCD3B                               4  1680  B W95              33
292  8 170  PRCD3A MLZS   SXSAVE,SX                           7  1684  Y Y28 T05          34
293  8 180          B     PUTSX                                4  1691  B Z78              34
294  8 190  PRCD3B B      PTTBL                                4  1695  B Z17              34
295  8 200  PROCD4 C      SX,VNOTE                             7  1699  C T05 Y38          34
296  8 210          BE    PROCD7                               5  1706  B X23 S            34
297  8 220          C     SX,VDC                               7  1711  C T05 Z59          34
298  8 230          BU    PROCD                                5  1718  B T76 /            34
299  8 240  PROCD7 MLC    SX,GT1                               7  1723  M T05 Y44          35
300  8 250          B     GTPTIL                               4  1730  B Z93              35
301  9 010          DCW   GT1                                  3  1736  Y44                35
302  9 020          B     PROCD5                               4  1737  B W27              35
303  9 030  PROCD6 BCE    PROCD8,SB2SW,1                       8  1741  B X60 Y24 1        35
304  9 040          MLC   @1@,SBSW                            7  1749  M J36 Y35          35
305  9 050          B     PROCD5                               4  1756  B W27              35
306  9 060  PROCD8 MLC    @0@,SB2SW                            7  1760  M J43 Y24          36
307  9 070          B     PROCD5                               4  1767  B W27              36
308  9 080  EOJ    B      PUTSX                                4  1771  B Z78              36
309  9 090          BCE   EOJ1,ITSW,1                         8  1775  B X90 T06 1        36
310  9 100          B     SUPER                                4  1783  B 351              36
311  9 110          DCW   @I01@                                3  1789                     36
312  9 120  EOJ1   BSP    1                                    5  1790  U %U1 B            36
313  9 130          BSP   1                                    5  1795  U %U1 B            37
314  9 140          BSP   1                                    5  1800  U %U1 B            37
315  9 150          BSP   1                                    5  1805  U %U1 B            37
316  9 160          BSP   1                                    5  1810  U %U1 B            37
317  9 170          BSP   1                                    5  1815  U %U1 B            37
318  9 180          B     GETPHS                               4  1820  B T23              37
319  9 190  SB2SW  DCW    @0@                                  1  1824                     37
320  9 200  VSD    DCW    @.SD@                                3  1827                     38
321  9 210  SXSAVE DCW    @0@                                  1  1828                     38
322  9 220  VNTFND DCW    @.NF@                                3  1831                     38
323  9 230  VSBSC  DCW    @.SB@                                3  1834                     38
324  9 240  SBSW   DCW    @0@                                  1  1835                     38
325  9 250  VNOTE  DCW    @*24@                                3  1838                     38
326 10 010  MACSP  DCW    @.MC@                                3  1841                     38
327 10 020  GT1    DCW    #3                                   3  1844                     39
328 10 030  GTADDR MLC    TBARG,X2                             7  1845  M T12 094          39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
329 10 040  GTA01  BCE   GTANFD,0&X2,$                             8  1852  B Z00 0!0 $         39
330 10 050         C     SX,0&X2                                   7  1860  C T05 0!0           39
331 10 060         BE    GTAFND                                    5  1867  B Y88 S             39
332 10 070         MLC   0&X2,0&X2                                7  1872  M 0!0 0!0           39
333 10 080         MLC                                             1  1879  M                   39
334 10 090         SBR   X2                                        4  1880  H 094               40
335 10 100         B     GTA01                                     4  1884  B Y52               40
336 10 110  GTAFND MLC   0&X2,RGTFD                               7  1888  M 0!0 Z16           40
337 10 120         MLC                                             1  1895  M                   40
338 10 130         B     PRC2A                                     4  1896  B V78               40
339 10 140  GTANFD MLC   @000@,ADDR                               7  1900  M J42 Z13           40
340 10 150         B     PRC2A                                     4  1907  B V78               40
341 10 160  ADDR   DCW   #3                                        3  1913                      41
342 10 170  RGTFD  DCW   #3                                        3  1916                      41
343 10 180  PTTBL  MLC   ADDR,X2                                   7  1917  M Z13 094           41
344 10 190  PTT01  BCE   PROCD,0&X2,|                             8  1924  B T76 0!0 |         41
345 10 200         MLC   0&X2,PTTPAR                             7  1932  M 0!0 Z56           41
346 10 210         SAR   X2                                        4  1939  Q 094               41
347 10 220         B     PUTX                                      4  1943  B 363               41
348 10 230         DCW   PTTPAR                                   3  1949  Z56                 42
349 10 240         B     PTT01                                     4  1950  B Z24               42
350 10 250  PTTPAR DCW   #3                                        3  1956                      42
351 11 010  VDC    DCW   @#DC@                                    3  1959                      42
352 11 020  GETSX  SBR   GTSEX&3             GETSX                 4  1960  H Z77               42
353 11 030         B     GETX                                      4  1964  B 335               42
354 11 040         DCW   &SX                                       3  1970  T05                 42
355 11 050               &EOJ                                      3  1973  X71                 43
356 11 060  GTSEX  B     *                                         4  1974  B Z77               43
357 11 070  PUTSX  SBR   PTSEX&3             PUTSX                 4  1978  H Z92               43
358 11 080         B     PUTX                                      4  1982  B 363               43
359 11 090         DCW   &SX                                       3  1988  T05                 43
360 11 100  PTSEX  B     *                                         4  1989  B Z92               43
361 11 110  GTPTIL SBR   X1                GTPTIL                 4  1993  H 089               43
362 11 120         MLC   @P@,GTPSW                               7  1997  M J44 !60           44
363 11 130         MLC   X1,GTLSV                                7  2004  M 089 !59           44
364 11 140         MLC   2&X1,GTL03&3                            7  2011  M 0|2 !25           44
365 11 150  GTL02  B     GETSX                                     4  2018  B Z60               44
366 11 160  GTL03  C     *,SX                                      7  2022  C !28 T05           44
367 11 170         BE    GTL04                                     5  2029  B !46 S             44
368 11 180         BCE   PUTSX,GTPSW,P                           8  2034  B Z78 !60 P         45
369 11 190         B     GTL02                                     4  2042  B !18               45
370 11 200  GTL04  MLC   GTLSV,X1                                7  2046  M !59 089           45
371 11 210         B     3&X1                                      4  2053  B 0|3               45
372 11 220  GTLSV  DCW   #3                                        3  2059                      45
373 11 230  GTPSW         #1                                      1  2060                      45
374 11 240         DCW   @|@                                      1  2061                      45
375 11 250         DCW   @.KK@                                    3  2064                      46
376 12 010         DCW   @  K@                                    3  2067                      46
377 12 020         DCW   @  E@                                    3  2070                      46
378 12 030         DCW   @001@                                    3  2073                      46
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

379 12 040          DCW   @  9@                                      3  2076                      46
380 12 050          DCW   @000@                                     3  2079                      46
381 12 060          DCW   @005@                                     3  2082                      46
382 12 070  TALLY    DCW   @000@                                     3  2085                      47
383 12 080          DCW   @|@                                       1  2086                      47
384 12 090          DCW   @.KK@                                     3  2089                      47
385 12 100          DCW   @  K@                                     3  2092                      47
386 12 110          DCW   @  E@                                     3  2095                      47
387 12 120          DCW   @001@                                     3  2098                      47
388 12 130          DCW   @  X@                                     3  2101                      47
389 12 140          DCW   @000@                                     3  2104                      48
390 12 150          DCW   @001@                                     3  2107                      48
391 12 160  FGCONA   DCW   @000@                                     3  2110                      48
392 12 170          DCW   @|@                                       1  2111                      48
393 12 180          DCW   @.KK@                                     3  2114                      48
394 12 190          DCW   @  K@                                     3  2117                      48
395 12 200          DCW   @  E@                                     3  2120                      48
396 12 210          DCW   @001@                                     3  2123                      49
397 12 220          DCW   @  9@                                     3  2126                      49
398 12 230          DCW   @000@                                     3  2129                      49
399 12 240          DCW   @001@                                     3  2132                      49
400 12 250  FGCONN   DCW   @000@                                     3  2135                      49
401 13 010          LTORG 2136                                                 2136
                    DCW   @1@                                       1  2136             LIT      49
                          @S@                                       1  2137             LIT      49
                          @Y@                                       1  2138             LIT      50
                          @ @                                       1  2139             LIT      50
                          @000@                                     3  2142             LIT      50
                          @0@                                       1  2143             LIT      50
                          @P@                                       1  2144             LIT      50
402 13 020          DCW   @}@                                       1  2145                      50
403 13 030          END   START                                              / T57 080           51
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - I01
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                              0089
 104  1 040  X2      EQU   94                                              0094
 105  1 050  X3      EQU   99                                              0099
 106  1 060  GETX    EQU   335                                             0335
 107  1 070  PUTX    EQU   363                                             0363
 108  1 080  SUPER   EQU   351                                             0351
 109  1 090          ORG   1300                                                   1300
 110  1 100  GETT    MRCM  BLANKS,INPUT1                                7  1300  P P61 P85            4
 111  1 110          MRCM  BLANKS                                       4  1307  P P61                4
 112  1 120          MRCM  BLANKS                                       4  1311  P P61                4
 113  1 130          MRCM  BLANKS&9                                     4  1315  P P70                4
 114  1 140          MLC   NULL,SW1                                     7  1319  M Q99 R00            4
 115  1 150  GETTA   B     GETX               GET AND PUT               4  1326  B 335                4
 116  1 160          DCW   &SY                UNTIL LOC                 3  1332  Q63                  4
 117  1 170                &EOJ                                         3  1335  X04                  5
 118  1 180          C     SY,@#DC@                                     7  1336  C Q63 C70            5
 119  1 190          BU    GET2                                         5  1343  B T88 /              5
 120  1 200  GET1    B     PUTX                                         4  1348  B 363                5
 121  1 210          DCW   &SY                                          3  1354  Q63                  5
 122  1 220          B     GETX                                         4  1355  B 335                5
 123  1 230          DCW   &SY                                          3  1361  Q63                  5
 124  1 240                &EOJ                                         3  1364  X04                  6
 125  1 250          C     SY,@#DC@                                     7  1365  C Q63 C70            6
 126  2 010          BU    GET1                                         5  1372  B T48 /              6
 127  2 020          B     PUTX                                         4  1377  B 363                6
 128  2 030          DCW   &SY                                          3  1383  Q63                  6
 129  2 040          B     GETTA                                        4  1384  B T26                6
 130  2 050  GET2    C     SY,VLOC                                      7  1388  C Q63 Q81            6
 131  2 060          BE    GETTA1                                       5  1395  B U11 S              7
 132  2 070          B     PUTX                                         4  1400  B 363                7
 133  2 080          DCW   &SY                                          3  1406  Q63                  7
 134  2 090          B     GETTA                                        4  1407  B T26                7
 135  2 100  GETTA1  B     GETX               GET OPERATOR              4  1411  B 335                7
 136  2 110          DCW   &OPR                                         3  1417  P84                  7
 137  2 120                &EOJ                                         3  1420  X04                  7
 138  2 130          MLC   &FIXTAB,X2                                   7  1421  M C73 094            8
 139  2 140  LKPA    C     5&X2,OPR           IS OPERATOR               7  1428  C 0!5 P84            8
 140  2 150          BE    LKP3                  IN FIXED EXPANSION TABLE  5  1435  B U59 S              8
 141  2 160          BCE   TABLKP,0&X2,%                                8  1440  B V68 0!0 %          8
 142  2 170          A     &6,X2                                        7  1448  A C74 094            8
 143  2 180          B     LKPA                                         4  1455  B U28                8
 144  2 190  LKP3    MLC   2&X2,LAB                                     7  1459  M 0!2 Q66            9
 145  2 200          B     GETX                                         4  1466  B 335                9
 146  2 210          DCW   &SY                                          3  1472  Q63                  9
 147  2 220                &EOJ                                         3  1475  X04                  9
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          B     READMC                                     4  1476  B Y24               9
149  2 240          B     OUTLOC                                     4  1480  B X73               9
150  2 250          C     OPR,@.PB@                                  7  1484  C P84 C77           9
151  3 010          BU    FIXRD2                                     5  1491  B V53 /            10
152  3 020          BCE   FIX,EDIT,K                                 8  1496  B V26 Q11 K        10
153  3 030          BCE   FIX,MASK,K                                 8  1504  B V26 Q17 K        10
154  3 040          B     PUTX                                       4  1512  B 363              10
155  3 050          DCW   &MESS19                                    3  1518  R35                10
156  3 060          MRCM  INPUT2,BLK-2                               7  1519  P Q30 Q12          10
157  3 070  FIX     B     ONEWM                                      4  1526  B Y97              10
158  3 080          B     OUTLST                                     4  1530  B Y02              11
159  3 090          BCE   FIX1,SW1,0                                8  1534  B V57 R00 0        11
160  3 100          B     PUTX                                       4  1542  B 363              11
161  3 110          DCW   &FF5                                      3  1548  R32                11
162  3 120          B     FIX1                                       4  1549  B V57              11
163  3 130  FIXRD2  B     OUTLST                                     4  1553  B Y02              11
164  3 140  FIX1    B     PUTT                                       4  1557  B X18              11
165  3 150          DCW   &INPUT1                                    3  1563  P85                12
166  3 160          B     OUT                                        4  1564  B Y86              12
167  3 170  TABLKP  MLC   &TABLE,X2                                 7  1568  M C80 094          12
168  3 180  LKPAA   C     5&X2,OPR                                   7  1575  C 0!5 P84          12
169  3 190          BE    LKP3A                                      5  1582  B W06 S            12
170  3 200          BCE   PASSOP,0&X2,%                            8  1587  B W27 0!0 %        12
171  3 210          A     &6,X2                                      7  1595  A C74 094          13
172  3 220          B     LKPAA                                      4  1602  B V75              13
173  3 230  LKP3A   MLC   2&X2,GETTB&3                             7  1606  M 0!2 W26          13
174  3 240          B     GETX                                       4  1613  B 335              13
175  3 250          DCW   &SY                                       3  1619  Q63                13
176  4 010                &EOJ                                       3  1622  X04                13
177  4 020  GETTB   B     *                                          4  1623  B W26              13
178  4 030  PASSOP  B     PUTX                                       4  1627  B 363              14
179  4 040          DCW   &VLOC                                     3  1633  Q81                14
180  4 050          B     PUTX                                       4  1634  B 363              14
181  4 060          DCW   &OPSYM                                    3  1640  Q93                14
182  4 070          BCE   *&5,OPR-2,,                              8  1641  B W53 P82 ,        14
183  4 080          B     *&12                                       4  1649  B W64              14
184  4 090          MLC   &PASSMC,LOCBB&3                          7  1653  M C83 Y01          14
185  4 100          B     OUTOP                                      4  1660  B X84              15
186  4 110          B     PUTX                                       4  1664  B 363              15
187  4 120          DCW   &OPR                                      3  1670  P84                15
188  4 130  PASSMC  B     GETX                                       4  1671  B 335              15
189  4 140          DCW   &SY                                       3  1677  Q63                15
190  4 150                &EOJ                                       3  1680  X04                15
191  4 160          B     PUTX                                       4  1681  B 363              15
192  4 170          DCW   &SY                                       3  1687  Q63                16
193  4 180          C     SY,MCSEP                                   7  1688  C Q63 Q90          16
194  4 190          BE    GETTA                                      5  1695  B T26 S            16
195  4 200          B     PASSMC                                     4  1700  B W71              16
196  4 210  EOJ     B     PUTX                                       4  1704  B 363              16
197  4 220          DCW   &VEOP                                     3  1710  Q87                16
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         B     SUPER                                               4  1711  B 351               16
199  4 240         DCW   @I02@                                              3  1717                      17
200  4 250  PUTT   SBR   X2                  PUT OUT A LIST                  4  1718  H 094               17
201  5 010         MLC   2&X2,X3                                            7  1722  M 0!2 099           17
202  5 020  PUTT1  BCE   PUTTBB,0&X3,%                                      8  1729  B X62 0?0 %         17
203  5 030         MLC   2&X3,SY                                            7  1737  M 0?2 Q63           17
204  5 040         B     PUTX                                              4  1744  B 363               17
205  5 050         DCW   &SY                                               3  1750  Q63                 17
206  5 060         A     @003@,X3                                          7  1751  A C86 099           18
207  5 070         B     PUTT1                                             4  1758  B X29               18
208  5 080  PUTTBB A     @003@,X2                                          7  1762  A C86 094           18
209  5 090         B     0&X2                                              4  1769  B 0!0               18
210  5 100  OUTLOC SBR   LOCBB&3            PUTOUT VOP, OPR, VLOC           4  1773  H Y01               18
211  5 110         B     PUTX                                              4  1777  B 363               18
212  5 120         DCW   &VLOC                                             3  1783  Q81                 18
213  5 130  OUTOP  B     PUTX                                              4  1784  B 363               19
214  5 140         DCW   &OPR                                              3  1790  P84                 19
215  5 150         B     PUTX                                              4  1791  B 363               19
216  5 160         DCW   &VOP                                              3  1797  Q84                 19
217  5 170  LOCBB  B     *                                                 4  1798  B Y01               19
218  5 180  OUTLST SBR   OUTLB1&3           PUTOUT LIBRARY LIST             4  1802  H Y23               19
219  5 190         MLC   LAB,LBADDR                                        7  1806  M Q66 Y19           19
220  5 200         B     PUTT                                              4  1813  B X18               20
221  5 210  LBADDR DCW   *                                                 3  1819  Y19                 20
222  5 220  OUTLB1 B     *                                                 4  1820  B Y23               20
223  5 230  READMC SBR   READBB&3           READ INTO INPUT AREA UNTIL MCSEP  4  1824  H Y85               20
224  5 240         MLC   &INPUT1,X2          AND                             7  1828  M C89 094           20
225  5 250  READ1  B     GETX                PUTOUT @%@                      4  1835  B 335               20
226  6 010         DCW   &SY                                               3  1841  Q63                 20
227  6 020               &EOJ                                              3  1844  X04                 21
228  6 030         C     SY,MCSEP                                          7  1845  C Q63 Q90           21
229  6 040         BE    READ2                                             5  1852  B Y75 S             21
230  6 050         MLC   SY,2&X2                                           7  1857  M Q63 0!2           21
231  6 060         A     @003@,X2                                          7  1864  A C86 094           21
232  6 070         B     READ1                                             4  1871  B Y35               21
233  6 080  READ2  MLC   PCT,0&X2                                          7  1875  M Q60 0!0           22
234  6 090  READBB B     *                                                 4  1882  B Y85               22
235  6 100  OUT    B     PUTX                                              4  1886  B 363               22
236  6 110         DCW   &MCSEP                                            3  1892  Q90                 22
237  6 120         B     GETT                                              4  1893  B T00               22
238  6 130  ONEWM  SBR   WMKBB&3                                           4  1897  H Z30               22
239  6 140         C     WM1,NULL                                          7  1901  C Q02 Q99           22
240  6 150         BU    WMKBB                                             5  1908  B Z27 /             23
241  6 160         MLC   @2@,SW1                                          7  1913  M C90 R00           23
242  6 170         B     PUTX                                              4  1920  B 363               23
243  6 180         DCW   &AA2                                              3  1926  R20                 23
244  6 190  WMKBB  B     *                                                 4  1927  B Z30               23
245  6 200  BFAFT  B     READMC                                            4  1931  B Y24               23
246  6 210         BWZ   INTG,NM1-2,2                                      8  1935  V !29 P85 2         23
247  6 220         BCE   BFAFT1,SIZE1-5,.                                  8  1943  B Z66 P88 .         24
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          B     OUTLOC                                     4  1951  B X73               24
249  6 240          B     PUTX                                       4  1955  B 363               24
250  6 250          DCW   &MESS7                                    3  1961  R26                 24
251  7 010          B     OUT                                        4  1962  B Y86               24
252  7 020  BFAFT1  BCE   ELMV,DEC1-1,E                             8  1966  B !00 P95 E         24
253  7 030          BCE   TWMV,DEC1-1,T                            8  1974  B !11 P95 T         24
254  7 040          MLN   DEC1,CHAR                                7  1982  D P96 C12           25
255  7 050          MLZS  DEC1,CHAR                                7  1989  Y P96 C12           25
256  7 060          B     CCPUT                                      4  1996  B !18               25
257  7 070  ELMV    MLC   @#@,CHAR                                 7  2000  M C91 C12           25
258  7 080          B     CCPUT                                      4  2007  B !18               25
259  7 090  TWMV    MLC   @@@,CHAR                                 7  2011  M C92 C12           25
260  7 100  CCPUT   B     PUTT                                       4  2018  B X18               26
261  7 110          DCW   &CCST                                    3  2024  B98                 26
262  7 120          B     GETT                                       4  2025  B T00               26
263  7 130  INTG    C     NM1,NULL                                   7  2029  C P87 Q99           26
264  7 140          BE    GETT                                       5  2036  B T00 S             26
265  7 150  INTG1   C     @003@,NM1                                  7  2041  C C86 P87           26
266  7 160          BH    ITATE                                      5  2048  B !71 U             26
267  7 170          MLN   NM1,CHAR                                 7  2053  D P87 C12           27
268  7 180          MLZS  @J@,CHAR                                 7  2060  Y C93 C12           27
269  7 190          B     CCPUT                                      4  2067  B !18               27
270  7 200  ITATE   MLC   @L@,CHAR                                 7  2071  M C94 C12           27
271  7 210          B     PUTT                                       4  2078  B X18               27
272  7 220          DCW   &CCST                                    3  2084  B98                 27
273  7 230          S     @3@,NM1                                    7  2085  S C95 P87           27
274  7 240          MLZS  @ @,NM1                                  7  2092  Y C96 P87           28
275  7 250          B     INTG1                                      4  2099  B !41               28
276  8 010  SWIT    B     READMC                                     4  2103  B Y24               28
277  8 020          MLC   BLKS-2,BSW                               7  2107  M P61 R17           28
278  8 030          BCE   FALS,OPR-2,%                            8  2114  B J34 P82 %         28
279  8 040          BCE   MOVT,DEC1-1,3                            8  2122  B J42 P95 3         28
280  8 050          B     MOVF                                       4  2130  B J53               29
281  8 060  FALS    BCE   MOVF,DEC1-1,3                            8  2134  B J53 P95 3         29
282  8 070  MOVT    MLC   @T@,BSW                                  7  2142  M C97 R17           29
283  8 080          B     *&8                                        4  2149  B J60               29
284  8 090  MOVF    MLC   @F@,BSW                                  7  2153  M C98 R17           29
285  8 100          BCE   MVBSS,SIZE1-1,                           8  2160  B J95 P92           29
286  8 110          BCE   MVBC9,SIZE1,5                            8  2168  B K06 P93 5         30
287  8 120          BCE   MVBPC,SIZE1,6                           8  2176  B K17 P93 6         30
288  8 130          MLC   BCV,SWST                                 7  2184  M R16 C28           30
289  8 140          B     SWIT1                                      4  2191  B K24               30
290  8 150  MVBSS   MLC   BSS,SWST                                 7  2195  M R06 C28           30
291  8 160          B     SWIT1                                      4  2202  B K24               30
292  8 170  MVBC9   MLC   BC9,SWST                                 7  2206  M R09 C28           31
293  8 180          B     SWIT1                                      4  2213  B K24               31
294  8 190  MVBPC   MLC   BPCB,SWST&1                             7  2217  M R13 C29           31
295  8 200  SWIT1   B     PUTT                                       4  2224  B X18               31
296  8 210          DCW   &SWISS                                   3  2230  C20                 31
297  8 220          MLC   @ @,SWST&1                              7  2231  M C96 C29           31
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230          BCE   SWIT2,BSW,T                                    8  2238  B K57 R17 T         32
299  8 240          B     PUTT                                           4  2246  B X18               32
300  8 250          DCW   &ASKST                                        3  2252  C58                 32
301  9 010          B     SWIT3                                          4  2253  B K64               32
302  9 020  SWIT2    B     PUTX                                           4  2257  B 363               32
303  9 030          DCW   &CL1                                          3  2263  P99                 32
304  9 040  SWIT3    BCE   *&5,SIZE1-1,                                  8  2264  B K76 P92           32
305  9 050          B     SWIT4                                          4  2272  B L05               33
306  9 060          SW    SIZE1-2                                        4  2276  , P91               33
307  9 070          MLC   SIZE1,SY                                       7  2280  M P93 Q63           33
308  9 080          B     PUTX                                           4  2287  B 363               33
309  9 090          DCW   &VCMA                                         3  2293  R03                 33
310  9 100          B     PUTX                                           4  2294  B 363               33
311  9 110          DCW   &SY                                           3  2300  Q63                 33
312  9 120          CW    SIZE1-2                                        4  2301  ) P91               34
313  9 130  SWIT4    B     PUTX                                           4  2305  B 363               34
314  9 140          DCW   &MCSEP                                        3  2311  Q90                 34
315  9 150          B     PUTX                                           4  2312  B 363               34
316  9 160          DCW   &SHDC                                         3  2318  R38                 34
317  9 170          BCE   GETT,BSW,T                                    8  2319  B T00 R17 T         34
318  9 180          MLC   CL1,BGL&14                                     7  2327  M P99 C50           34
319  9 190          B     PUTT                                           4  2334  B X18               35
320  9 200          DCW   &BGL                                          3  2340  C36                 35
321  9 210          B     GETT                                           4  2341  B T00               35
322  9 220  RELAT    MLC   @,@,OPR-2                                     7  2345  M C99 P82           35
323  9 230          B     PASSOP                                         4  2352  B W27               35
324  9 240  EXMIN    B     OUTLOC             PUTOUT LOC, OPR, OP         4  2356  B X73               35
325  9 250          MLC   @N@,EXRD4                                     7  2360  M D00 O68           35
326 10 010          B     EXRD               GET DN AND PARAMETERS       4  2367  B O28               36
327 10 020          MLC   @|@,CL1&1                                     7  2371  M D01 Q00           36
328 10 030          MRCM  INPUT1,INPUT2      STORE DATA NAME ETC.        7  2378  P P85 Q30           36
329 10 040          B     GETX               GET ALL, FIRST, ETC. SWITCH 4  2385  B 335               36
330 10 050          DCW   &ALLSW                                         3  2391  Q72                 36
331 10 060                &EOJ                                           3  2394  X04                 36
332 10 070          MLC   @B@,EXRD4                                     7  2395  M D02 O68           36
333 10 080          B     EXRD               GET LIT. 1 AND PARAMETERS   4  2402  B O28               37
334 10 090          MLC   NM1,TYPE2          STORE LIT. 1                7  2406  M P87 Q50           37
335 10 100          MLC   SIZE1,SIZE3                                    7  2413  M P93 Q59           37
336 10 110          B     READMC             GET LIT. 2 AND PARAMETERS   4  2420  B Y24               37
337 10 120          C     SIZE1,ONE          IS SIZE OF LIT2 GREAT. THAN 1 7  2424  C P93 Q78           37
338 10 130          BU    EXMIN1                                         5  2431  B M48 /             37
339 10 140          C     SIZE3,ONE          IS SIZE OF LIT1 GREAT. THAN 1 7  2436  C Q59 Q78           38
340 10 150          BE    *&8                                            5  2443  B M55 S             38
341 10 160  EXMIN1   B     PUTX                                           4  2448  B 363               38
342 10 170          DCW   &MESS20                                        3  2454  R29                 38
343 10 180          B     PUTX                                           4  2455  B 363               38
344 10 190          DCW   &EE1                                          3  2461  R23                 38
345 10 200          MLC   NM1,DEC2           STORE LIT2                  7  2462  M P87 Q41           38
346 10 210          MLC   NULL,CL2-1                                     7  2469  M Q99 Q43           39
347 10 220          MLC   NULL,SIZE2-3                                   7  2476  M Q99 Q35           39
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          BWZ   *&5,NM2,B          IS DATA NAME SUBSCRIPTED      8  2483  V M95 Q32 B         39
349 10 240          B     *&8                                         4  2491  B N02               39
350 10 250          A     ONE,SIZE2-3                                 7  2495  A Q78 Q35           39
351 11 010          BCE   EXMIN5,TALSW,9     IS IT TALLYING OPTION     8  2502  B N28 Q69 9         40
352 11 020          MLC   @R@,WM2-2          SET SUBR. SWITCH          7  2510  M D03 Q45           40
353 11 030          MLC   @R@,WM2            SET SUBR. SWITCH          7  2517  M D03 Q47           40
354 11 040          B     EXMIN6                                      4  2524  B N61               40
355 11 050  EXMIN5  MLC   @T@,WM2-2          SET SUBR. SWITCH          7  2528  M C97 Q45           40
356 11 060          BWZ   *&12,NM1-2,2       IS IT TALLY WITH NO REPLACING 8  2535  V N54 P85 2      41
357 11 070          MLC   @R@,WM2            SET SUBR. SWITCH          7  2543  M D03 Q47           41
358 11 080          B     EXMIN6                                      4  2550  B N61               41
359 11 090          MLC   @ @,WM2                                     7  2554  M C96 Q47           41
360 11 100  EXMIN6  MLC   &SWTAB,*&4                                  7  2561  M D06 N71           41
361 11 110  EXMIN3  C     SWTAB,ALLSW        LOOK UP TABLE FOR OPTION USED 7  2568  C R42 Q72           42
362 11 120          SAR   EXMIN4&3               SET RESPECTIVE SWITCH  4  2575  Q O06               42
363 11 130          BE    EXMIN4                                      5  2579  B O03 S             42
364 11 140          MA    @004@,EXMIN3&3                                                MACRO
365                 SW    EXMIN3&3-2                                  4  2584  , N69       GEN     42
366                 A     @004@,EXMIN3&3                              7  2588  A D09 N71   GEN     42
367                 CW    EXMIN3&3-2                                  4  2595  ) N69       GEN     42
368 11 150          B     EXMIN3                                      4  2599  B N68               42
369 11 160  EXMIN4  MLC   *,WM2-1            MOVE SWITCH FROM TABLE    7  2603  M O09 Q46           43
370 11 170          MLC   PCT,TYPE2&1                                 7  2610  M Q60 Q51           43
371 11 180          B     PUTT                                        4  2617  B X18               43
372 11 190          DCW   &INPUT2                                     3  2623  Q30                 43
373 11 200          B     OUT                                         4  2624  B Y86               43
374 11 210  EXRD    SBR   EXRDBB&3                                    4  2628  H P35               43
375 11 220          MLC   &INPUT1,X2                                  7  2632  M D12 094           43
376 11 230          MLC   NULL,EXCNT                                  7  2639  M Q99 Q75           44
377 11 240  EXRD1   C     EXCNT,@017@                                 7  2646  C Q75 D15           44
378 11 250          BE    EXRD5                                       5  2653  B O84 S             44
379 12 010          B     GETX                                        4  2658  B 335               44
380 12 020          DCW   &SY                                         3  2664  Q63                 44
381 12 030                &EOJ                                        3  2667  X04                 44
382 12 040  EXRD4   B     EXRD2                                       4  2668  B O95               44
383 12 050          BCE   *&5,SY-2,*                                  8  2672  B O84 Q61 *         45
384 12 060          B     EXRD3                                       4  2680  B P07               45
385 12 070  EXRD5   MLC   SY,TALSW                                    7  2684  M Q63 Q69           45
386 12 080          B     EXRDBB                                      4  2691  B P32               45
387 12 090  EXRD2   C     SY,VK                                       7  2695  C Q63 Q96           45
388 12 100          BE    EXRDBB                                      5  2702  B P32 S             45
389 12 110  EXRD3   A     @1@,EXCNT                                   7  2707  A D16 Q75           46
390 12 120          MLC   SY,2&X2                                    7  2714  M Q63 0!2           46
391 12 130          A     @003@,X2                                    7  2721  A C86 094           46
392 12 140          B     EXRD1                                       4  2728  B O46               46
393 12 150  EXRDBB  B     *                                           4  2732  B P35               46
394 12 160  XFF     B     PUTX                                        4  2736  B 363               46
395 12 170          DCW   &SHDC                                       3  2742  R38                 46
396 12 180          B     PUTX                                        4  2743  B 363               47
397 12 190          DCW   &OPR                                        3  2749  P84                 47
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 200          B     PUTX                                       4  2750  B 363              47
399 12 210          DCW   &SHDC                                      3  2756  R38                47
400 12 220          B     GETT                                       4  2757  B T00              47
401 12 230  BLANKS  EQU   *&1                                          2761
402 12 240          DCW   #20                                       20  2780                     47
403 12 250          DC    @|@                                        1  2781                     47
404 13 010  BLKS    EQU   BLANKS&2                                     2763
405 13 020  OPR     DCW   #3                                         3  2784                     48
406 13 030  INPUT1  DA    1X45                                       2785  2829               48
407 13 040  NM1           1,3                                        2787             FIELD   48
408 13 050  SIZE1         4,9                                        2793             FIELD   48
409 13 060  DEC1          10,12                                      2796             FIELD   48
410 13 070  CL1           13,15                                      2799             FIELD   48
411 13 080  WM1           16,18                                      2802             FIELD   48
412 13 090  TYPE1         19,21                                      2805             FIELD   49
413 13 100  JUST          22,24                                      2808             FIELD   49
414 13 110  EDIT          25,27                                      2811             FIELD   49
415 13 120  BLK           28,30                                      2814             FIELD   49
416 13 130  MASK          31,33                                      2817             FIELD   49
417 13 140  COBMSK        34,36                                      2820             FIELD   49
418 13 150  ED1           37,39                                      2823             FIELD   50
419 13 160  ED2           40,42                                      2826             FIELD   50
420 13 170  CHCNT         43,45                                      2829             FIELD   50
421 13 180  INPUT2  DA    1X21                                       2830  2850               50
422 13 190  NM2           1,3                                        2832             FIELD   50
423 13 200  SIZE2         4,9                                        2838             FIELD   50
424 13 210  DEC2          10,12                                      2841             FIELD   51
425 13 220  CL2           13,15                                      2844             FIELD   51
426 13 230  WM2           16,18                                      2847             FIELD   51
427 13 240  TYPE2         19,21                                      2850             FIELD   51
428 13 250  INPUT3  DA    1X9                                        2851  2859               51
429 14 010  NM3           1,3                                        2853             FIELD   51
430 14 020  SIZE3         4,9                                        2859             FIELD   52
431 14 030  PCT     DCW   @%@                                      1  2860                     52
432 14 040  SY      DCW   #3                                       3  2863                     52
433 14 050  LAB           #3                                       3  2866                     52
434 14 060  TALSW         #3                                       3  2869                     52
435 14 070  ALLSW         #3                                       3  2872                     52
436 14 080  EXCNT         #3                                       3  2875                     52
437 14 090  ONE           @001@                                    3  2878                     53
438 14 100  VLOC          @.LC@                                    3  2881                     53
439 14 110  VOP           @.OP@                                    3  2884                     53
440 14 120  VEOP          @.EP@                                    3  2887                     53
441 14 130  MCSEP         @.MC@                                    3  2890                     53
442 14 140  OPSYM         @*$*@                                    3  2893                     53
443 14 150  VK            @.KK@                                    3  2896                     53
444 14 160  NULL          000                                      3  2899                     54
445 14 170  SW1           0                                        1  2900                     54
446 14 180  VCMA          @  ,@                                    3  2903                     54
447 14 190  BSS           @BSS@                                    3  2906                     54
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 200  BC9          @BC9@                                        3  2909                      54
449 14 210  BPCB         @BPCB@                                       4  2913                      54
450 14 220  BCV          @BCV@                                        3  2916                      54
451 14 230  BSW          #1                                           1  2917                      55
452 14 240  AA2          @.A1@                                        3  2920                      55
453 14 250  EE1          @.E1@                                        3  2923                      55
454 15 010  MESS7        @.R0@                                        3  2926                      55
455 15 020  MESS20       @.Y6@             SIZE OF LIT1 IS GREATER THAN 1  3  2929                      55
456 15 030  FF5          @.F5@                                        3  2932                      55
457 15 040  MESS19       @.X9@                                        3  2935                      55
458 15 050  SHDC         @#DC@                                        3  2938                      56
459 15 060         DCW   1                                            1  2939                      56
460 15 070  SWTAB        @$40@             ALL OPERATOR               3  2942                      56
461 15 080               2                                            1  2943                      56
462 15 090               @*37@             LEADING OPERATOR           3  2946                      56
463 15 100               3                                            1  2947                      56
464 15 110               @/XT@             UNTIL FIRST OPERATOR       3  2950                      56
465 15 120               4                                            1  2951                      57
466 15 130               @*38@             FIRST OPERATOR             3  2954                      57
467 15 140  FIXTAB EQU   *&1                                             2955
468 15 150         DCW   &EXP1                                        3  2957  A37                 57
469 15 160               @.LB@                                        3  2960                      57
470 15 170         DCW   &EXP2                                        3  2963  A41                 57
471 15 180               @.IM@                                        3  2966                      57
472 15 190               &EXP3                                        3  2969  A48                 57
473 15 200               @)20@                                        3  2972                      58
474 15 210               &EXP3A                                       3  2975  A52                 58
475 15 220               @*40@                                        3  2978                      58
476 15 230               &EXP4                                        3  2981  A59                 58
477 15 240               @.RT@                                        3  2984                      58
478 15 250               &EXP5                                        3  2987  A63                 58
479 16 010               @)17@                                        3  2990                      58
480 16 020               &EXP6                                        3  2993  A67                 59
481 16 030               @)03@                                        3  2996                      59
482 16 040               &EXP7                                        3  2999  A71                 59
483 16 050               @.PA@                                        3  3002                      59
484 16 060               &EXP8                                        3  3005  A78                 59
485 16 070               @.EQ@                                        3  3008                      59
486 16 080               &EXP9                                        3  3011  A82                 59
487 16 090               @*11@                                        3  3014                      60
488 16 100               &EXP10                                       3  3017  A86                 60
489 16 110               @.PE@                                        3  3020                      60
490 16 120               &EXP11                                       3  3023  A99                 60
491 16 130               @.PF@                                        3  3026                      60
492 16 140               &EXP12                                       3  3029  B15                 60
493 16 150               @.P1@                                        3  3032                      60
494 16 160               &EXP12A                                      3  3035  B25                 61
495 16 170               @.P2@                                        3  3038                      61
496 16 180               &EXP13                                       3  3041  B35                 61
497 16 190               @.RK@                                        3  3044                      61
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 200                &EXP14                                       3  3047  B42                 61
499 16 210                @.P3@                                        3  3050                      61
500 16 220                &EXP15                                       3  3053  B55                 61
501 16 230                @.PB@                                        3  3056                      62
502 16 240                &EXP16                                       3  3059  B74                 62
503 16 250                @.PC@                                        3  3062                      62
504 17 010                &STPRUN                                      3  3065  B91                 62
505 17 020                @*30@                                        3  3068                      62
506 17 030                &GOALT                                       3  3071  B81                 62
507 17 040                @)99@                                        3  3074                      62
508 17 050                @%@                                          1  3075                      63
509 17 060  TABLE  EQU    *&1                                             3076
510 17 070         DCW    &SWIT                                        3  3078  J03                 63
511 17 080                @.SW@                                        3  3081                      63
512 17 090                &SWIT                                        3  3084  J03                 63
513 17 100                @%SW@                                        3  3087                      63
514 17 110                &BFAFT                                       3  3090  Z31                 63
515 17 120                @*17@                                        3  3093                      63
516 17 130                &BFAFT                                       3  3096  Z31                 64
517 17 140                @*22@                                        3  3099                      64
518 17 150                &RELAT                                       3  3102  L45                 64
519 17 160                @  #@                                        3  3105                      64
520 17 170                &RELAT                                       3  3108  L45                 64
521 17 180                @.NE@                                        3  3111                      64
522 17 190                &RELAT                                       3  3114  L45                 64
523 17 200                @$20@                                        3  3117                      65
524 17 210                &RELAT                                       3  3120  L45                 65
525 17 220                @$21@                                        3  3123                      65
526 17 230                &EXMIN                                       3  3126  L56                 65
527 17 240                @)30@                                        3  3129                      65
528 17 250                &XFF                                         3  3132  P36                 65
529 18 010                @.XF@                                        3  3135                      65
530 18 020                @%@                                          1  3136                      66
531 18 030  EXP1   EQU    *&1                                             3137
532 18 040         DC     @.S4%@                                       4  3140                      66
533 18 050  EXP2   EQU    *&1                                             3141
534 18 060         DC     @.S5.S4%@                                    7  3147                      66
535 18 070  EXP3   EQU    *&1                                             3148
536 18 080         DC     @.S6%@                                       4  3151                      66
537 18 090  EXP3A  EQU    *&1                                             3152
538 18 100         DCW    @.X6.X5%@                                    7  3158                      66
539 18 110  EXP4   EQU    *&1                                             3159
540 18 120         DC     @.S7%@                                       4  3162                      66
541 18 130  EXP5   EQU    *&1                                             3163
542 18 140         DC     @.S8%@                                       4  3166                      66
543 18 150  EXP6   EQU    *&1                                             3167
544 18 160         DC     @.S9%@                                       4  3170                      66
545 18 170  EXP7   EQU    *&1                                             3171
546 18 180         DC     @.S6.T1%@                                    7  3177                      67
547 18 190  EXP8   EQU    *&1                                             3178
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 200         DC    @.T2%@                                          4  3181                      67
549 18 210  EXP9   EQU   *&1                                                3182
550 18 220         DC    @.T0%@                                          4  3185                      67
551 18 230  EXP10  EQU   *&1                                                3186
552 18 240         DC    @.T3.T2.T4.T5%@                                13  3198                      67
553 18 250  EXP11  EQU   *&1                                                3199
554 19 010         DC    @.T6.T7.T2.T8.T9%@                             16  3214                      68
555 19 020  EXP12  EQU   *&1                                                3215
556 19 030         DC    @.S6.U0.U1%@                                   10  3224                      68
557 19 040  EXP12A EQU   *&1                                                3225
558 19 050         DCW   @.X7.U0.U1%@                                   10  3234                      68
559 19 060  EXP13  EQU   *&1                                                3235
560 19 070         DC    @.U2.U3%@                                       7  3241                      69
561 19 080  EXP14  EQU   *&1                                                3242
562 19 090         DC    @.U4.U5.U6.U7%@                                13  3254                      69
563 19 100  EXP15  EQU   *&1                                                3255
564 19 110         DC    @.U8.U9.V0.X8.V1.V2%@                          19  3273                      69
565 19 120  EXP16  EQU   *&1                                                3274
566 19 130         DC    @.V3.T2%@                                       7  3280                      70
567 19 140  GOALT  EQU   *&1                                                3281
568 19 150         DCW   @.E4.E5.E6%@                                   10  3290                      70
569 19 160  STPRUN EQU   *&1                                                3291
570 19 170         DCW   @.W6.W9%@                                       7  3297                      70
571 19 180  CCST   EQU   *&1                                                3298
572 19 190         DCW   @#DC.LCCC .OP   .MC#DC%@                       22  3319                      71
573 19 200  CHAR   EQU   CCST&14                                            3312
574 19 210  SWISS  EQU   *&1                                                3320
575 19 220  SWST   EQU   *&9                                                3328
576 19 230         DCW   @#DC.LC      .OP%@                             16  3335                      71
577 19 240  BGL    EQU   *&1                                                3336
578 19 250         DCW   @#DC.LCB  .OP   .MC#DC%@                       22  3357                      72
579 20 010  ASKST  EQU   *&1                                                3358
580 20 020         DCW   @  *  &  5%@                                   10  3367                      72
581 20 030         LTORG                                                          3368
                   DCW   @#DC@                                           3  3370             LIT     72
       138               &FIXTAB                                         3  3373  R55         ADCON   72
                         &6                                              1  3374             LIT     72
                         @.PB@                                           3  3377             LIT     73
       167               &TABLE                                          3  3380  ?76         ADCON   73
       184               &PASSMC                                         3  3383  W71         ADCON   73
                         @003@                                           3  3386             LIT     73
       224               &INPUT1                                         3  3389  P85         ADCON   73
                         @2@                                             1  3390             LIT     73
                         @#@                                             1  3391             LIT     73
                         @@@                                             1  3392             LIT     74
                         @J@                                             1  3393             LIT     74
                         @L@                                             1  3394             LIT     74
                         @3@                                             1  3395             LIT     74
                         @ @                                             1  3396             LIT     74
                         @T@                                             1  3397             LIT     74
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @F@                                         1  3398              LIT     74
                         @,@                                         1  3399              LIT     75
                         @N@                                         1  3400              LIT     75
                         @|@                                         1  3401              LIT     75
                         @B@                                         1  3402              LIT     75
                         @R@                                         1  3403              LIT     75
       360               &SWTAB                                      3  3406  R42         ADCON   75
                         @004@                                       3  3409              LIT     75
       375               &INPUT1                                     3  3412  P85         ADCON   76
                         @017@                                       3  3415              LIT     76
                         @1@                                         1  3416              LIT     76
582 20 040         ORG   3790                                             3790
583 20 050         DCW   @}@                                         1  3790                      77
584 20 060         END   GETT                                             / T00 080            78
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - I02 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I02						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89				0089		
104	1	040	X2	EQU	94				0094		
105	1	050	X3	EQU	99				0099		
106	1	060	GETX	EQU	335				0335		
107	1	070	PUTX	EQU	363				0363		
108	1	080	SUPER	EQU	351				0351		
109	1	090		ORG	1300					1300	
110	1	100	GETT	MRCM	BLANKS,INPUT1			7	1300	P P81 Q29	4
111	1	110		MRCM	BLANKS			4	1307	P P81	4
112	1	120		MRCM	BLANKS&12			4	1311	P P93	4
113	1	130		MLC	@B@,OUTP1			7	1315	M A97 M98	4
114	1	140	GETSY	B	GETX	GET UNTIL *$%		4	1322	B 335	4
115	1	150		DCW	&SY			3	1328	P71	4
116	1	160			&EOJ			3	1331	U49	4
117	1	170		C	SY,PASSSY			7	1332	C P71 U48	5
118	1	180		BE	GETSY2			5	1339	B T55 S	5
119	1	190		B	PUTX			4	1344	B 363	5
120	1	200		DCW	&SY			3	1350	P71	5
121	1	210		B	GETSY			4	1351	B T22	5
122	1	220	GETSY2	B	GETX			4	1355	B 335	5
123	1	230		DCW	&OPR			3	1361	Q28	5
124	1	240			&EOJ			3	1364	U49	6
125	1	250		MLC	&TABLE,X2	LOOK UP TABLE		7	1365	M B00 094	6
126	2	010	LKPA	C	5&X2,OPR			7	1372	C 0!5 Q28	6
127	2	020		BE	LKP3			5	1379	B U03 S	6
128	2	030		BCE	PASSMC,0&X2,%			8	1384	B U28 0!0 %	6
129	2	040		A	&6,X2			7	1392	A B01 094	6
130	2	050		B	LKPA			4	1399	B T72	7
131	2	060	LKP3	MLC	2&X2,GETTA&3			7	1403	M 0!2 U27	7
132	2	070		B	GETX			4	1410	B 335	7
133	2	080		DCW	&SY			3	1416	P71	7
134	2	090			&EOJ			3	1419	U49	7
135	2	100		B	OUTOP			4	1420	B L46	7
136	2	110	GETTA	B	*	PERFORM MATRIX		4	1424	B U27	7
137	2	120	PASSMC	B	PUTX	PASS THRU MACRO		4	1428	B 363	8
138	2	130		DCW	&PASSSY			3	1434	U48	8
139	2	140		B	PUTX			4	1435	B 363	8
140	2	150		DCW	&OPR			3	1441	Q28	8
141	2	160	PASS	B	GETSY			4	1442	B T22	8
142	2	170	PASSSY	DCW	@*$*@			3	1448		8
143	2	180	EOJ	B	PUTX			4	1449	B 363	8
144	2	190		DCW	&VEOP			3	1455	P68	9
145	2	200		B	SUPER			4	1456	B 351	9
146	2	210		DCW	@I03@			3	1462		9
147	2	220	RDPY	SBR	RDPYBB&3	READ UNTIL .VN		4	1463	H U94	9

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          MLC   &DPYCNT,X2                               7  1467  M B04 094            9
149  2 240  RDPY1   B     GETX                                     4  1474  B 335                9
150  2 250          DCW   &SY                                      3  1480  P71                  9
151  3 010          &EOJ                                           3  1483  U49                 10
152  3 020          C     SY,VN                                    7  1484  C P71 P41           10
153  3 030  RDPYBB  BE    *                                        5  1491  B U95 S             10
154  3 040          MLC   SY,2&X2                                  7  1496  M P71 0!2           10
155  3 050          A     @003@,X2                                 7  1503  A B07 094           10
156  3 060          B     RDPY1                                    4  1510  B U74               10
157  3 070  SBNM1   SBR   SBNM1B&3                                4  1514  H V47               10
158  3 080          BWZ   *&12,NM1,B                              8  1518  V V37 Q31 B         11
159  3 090          MLC   @0@,CL1                                 7  1526  M B08 Q43           11
160  3 100          B     SBNM1B                                   4  1533  B V44               11
161  3 110          MLC   @1@,CL1                                 7  1537  M B09 Q43           11
162  3 120  SBNM1B  B     *                                        4  1544  B V47               11
163  3 130  DEP     B     RDPY                                     4  1548  B U63               11
164  3 140          B     PUTX                                     4  1552  B 363               11
165  3 150          DCW   &QQ2                                     3  1558  P32                 12
166  3 160          B     SPOUT                                    4  1559  B N42               12
167  3 170          MLC   NM2,NM1                                  7  1563  M Q76 Q31           12
168  3 180          B     SBNM1                                    4  1570  B V14               12
169  3 190          MLC   CL1,SUBSW                                7  1574  M Q43 R81           12
170  3 200          B     PUTT                                     4  1581  B K91               12
171  3 210          DCW   &SBDCW                                   3  1587  R64                 12
172  3 220  DEPDG   B     GETX                                     4  1588  B 335               13
173  3 230          DCW   &SY                                      3  1594  P71                 13
174  3 240          &EOJ                                           3  1597  U49                 13
175  3 250          C     SY,MCSEP                                 7  1598  C P71 P77           13
176  4 010          BE    GETT                                     5  1605  B T00 S             13
177  4 020          MLC   SY,NMPAR&2                               7  1610  M P71 ?06           13
178  4 030          B     PUTT                                     4  1617  B K91               13
179  4 040          DCW   &NMDCW                                   3  1623  R92                 14
180  4 050          B     DEPDG                                    4  1624  B V88               14
181  4 060  ACCPT   B     RDPY                                     4  1628  B U63               14
182  4 070          C     NM2,NULL                                 7  1632  C Q76 P23           14
183  4 080          BU    AC1                                      5  1639  B W62 /             14
184  4 090          MLC   @001@,DEC2                              7  1644  M B12 Q85           14
185  4 100          MLC   VRDR,SIZE2                              7  1651  M P44 Q82           14
186  4 110          B     *&8                                      4  1658  B W69               15
187  4 120  AC1     MLC   NULL-1,DEC2-1                           7  1662  M P22 Q84           15
188  4 130          B     READMC                                   4  1669  B L68               15
189  4 140          B     SBNM1                                    4  1673  B V14               15
190  4 150          BCE   *&8,EDIT,K                              8  1677  B W92 Q55 K         15
191  4 160          B     PUTX                                     4  1685  B 363               15
192  4 170          DCW   &MESS19                                  3  1691  P59                 15
193  4 180          B     PUTX                                     4  1692  B 363               16
194  4 190          DCW   &DD0                                     3  1698  P35                 16
195  4 200          MLC   NM1,NM2                                  7  1699  M Q31 Q76           16
196  4 210          B     SPOUT                                    4  1706  B N42               16
197  4 220          MLC   CL1,SUBSW                               7  1710  M Q43 R81           16
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          MLC   SIZE1,NMPAR&2                       7  1717  M Q37 ?06           16
199  4 240          B     PUTT                                4  1724  B K91               16
200  4 250          DCW   &SBDCW                              3  1730  R64                 17
201  5 010          B     PUTT                                4  1731  B K91               17
202  5 020          DCW   &NMDCW                              3  1737  R92                 17
203  5 030          B     GETT                                4  1738  B T00               17
204  5 040  DISPY   B     RDPY                                4  1742  B U63               17
205  5 050          C     NM2,NULL                            7  1746  C Q76 P23           17
206  5 060          BU    DISPY2                              5  1753  B X76 /             17
207  5 070          MLC   @004@,DEC2                          7  1758  M B15 Q85           18
208  5 080          MLC   VPRT,SIZE2                          7  1765  M P47 Q82           18
209  5 090          B     *&8                                 4  1772  B X83               18
210  5 100  DISPY2  MLC   NULL-1,DEC2-1                      7  1776  M P22 Q84           18
211  5 110          C     SIZE2,VPCH                          7  1783  C Q82 P50           18
212  5 120          BU    *&12                                5  1790  B Y06 /             18
213  5 130          MLC   NULL,SIZE2                         7  1795  M P23 Q82           19
214  5 140          B     *&8                                 4  1802  B Y13               19
215  5 150          MLC   @001@,SIZE2                        7  1806  M B12 Q82           19
216  5 160          B     PUTX                                4  1813  B 363               19
217  5 170          DCW   &QQ1                               3  1819  P29                 19
218  5 180          B     SPOUT                               4  1820  B N42               19
219  5 190  BGDPY   MLC   NULL,TEMP                          7  1824  M P23 P65           19
220  5 200          MLC   &INPUT1,X2                         7  1831  M B18 094           20
221  5 210  GETSYM  B     GETX                                4  1838  B 335               20
222  5 220          DCW   &SY                                 3  1844  P71                 20
223  5 230                &EOJ                                3  1847  U49                 20
224  5 240          C     SY,MCSEP                            7  1848  C P71 P77           20
225  5 250          BE    TSTDPY                              5  1855  B Z75 S             20
226  6 010          MLC   SY,2&X2                            7  1860  M P71 0!2           20
227  6 020          A     @001@,TEMP                          7  1867  A B12 P65           21
228  6 030          A     @003@,X2                            7  1874  A B07 094           21
229  6 040          C     TEMP,@009@                          7  1881  C P65 B21           21
230  6 050          BE    DPY2                                5  1888  B Z09 S             21
231  6 060          C     TEMP,@015@                          7  1893  C P65 B24           21
232  6 070          BU    GETSYM                              5  1900  B Y38 /             21
233  6 080          B     DPY1                                4  1905  B Z21               22
234  6 090  DPY2    C     SY,VK                               7  1909  C P71 P38           22
235  6 100          BU    GETSYM                              5  1916  B Y38 /             22
236  6 110  DPY1    B     IOER                                4  1921  B O26               22
237  6 120          MLC   NM1,NMPAR&2                        7  1925  M Q31 ?06           22
238  6 130          B     PUTT                                4  1932  B K91               22
239  6 140          DCW   &NMDCW                              3  1938  R92                 22
240  6 150          B     SBNM1                               4  1939  B V14               23
241  6 160          MLC   CL1,SUBSW                           7  1943  M Q43 R81           23
242  6 170          MLC   SIZE1,NMPAR&2                       7  1950  M Q37 ?06           23
243  6 180          B     PUTT                                4  1957  B K91               23
244  6 190          DCW   &SBDCW                              3  1963  R64                 23
245  6 200          B     PUTT                                4  1964  B K91               23
246  6 210          DCW   &NMDCW                              3  1970  R92                 23
247  6 220          B     BGDPY                               4  1971  B Y24               24
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  TSTDPY C     TEMP,NULL                                    7  1975  C P65 P23           24
249  6 240         BE    GETT                                         5  1982  B T00 S             24
250  6 250         B     IOER                                         4  1987  B O26               24
251  7 010  NMRIC  B     READ                                         4  1991  B L83               24
252  7 020         MLC   NM2,GL                                       7  1995  M Q76 R51           24
253  7 030         MLC   @N@,OUTP1                                    7  2002  M B25 M98           24
254  7 040         MLC   PCT,TYPE2&1                                  7  2009  M R52 Q95           25
255  7 050         BCE   ALPHA,OPR,0         IS IT NUMERIC OR ALPHABETIC  8  2016  B !77 Q28 0       25
256  7 060         C     SIZE1,ONE                                    7  2024  C Q37 P26           25
257  7 070         BE    NMRIC1                                       5  2031  B !47 S             25
258  7 080         MLC   &L19B,LAB                                    7  2036  M B28 P74           25
259  7 090         B     SBTST                                        4  2043  B J30               25
260  7 100  NMRIC1 BCE   *&12,OPR-2,%                                 8  2047  B !66 Q26 %         26
261  7 110         MLC   &L19,LAB                                     7  2055  M B31 P74           26
262  7 120         B     SBTST                                        4  2062  B J30               26
263  7 130         MLC   &L19A,LAB                                    7  2066  M B34 P74           26
264  7 140         B     SBTST                                        4  2073  B J30               26
265  7 150  ALPHA  C     SIZE1,ONE                                    7  2077  C Q37 P26           26
266  7 160         BE    ALPHA1                                       5  2084  B J00 S             27
267  7 170         MLC   &L22,LAB                                     7  2089  M B37 P74           27
268  7 180         B     SBTST                                        4  2096  B J30               27
269  7 190  ALPHA1 BCE   *&12,OPR-2,%                                 8  2100  B J19 Q26 %         27
270  7 200         MLC   &L21,LAB                                     7  2108  M B40 P74           27
271  7 210         B     SBTST                                        4  2115  B J30               27
272  7 220         MLC   &L21A,LAB                                    7  2119  M B43 P74           28
273  7 230         B     SBTST                                        4  2126  B J30               28
274  7 240  SBTST  MLC   NULL,SIZE3                                   7  2130  M P23 R27           28
275  7 250         BWZ   *&5,NM1,B                                    8  2137  V J49 Q31 B         28
276  8 010         B     *&8                                          4  2145  B J56               28
277  8 020         A     @0001@,SIZE3                                 7  2149  A B12 R27           28
278  8 030         BWZ   *&5,NM2,B                                    8  2156  V J68 Q76 B         29
279  8 040         B     *&8                                          4  2164  B J75               29
280  8 050         A     @002@,SIZE3                                  7  2168  A B46 R27           29
281  8 060         MLC   BLKS-1,SIZE3-1                               7  2175  M P82 R26           29
282  8 070         C     WM1,@002@                                    7  2182  C Q46 B46           29
283  8 080         BH    STOP1A                                       5  2189  B K42 U             29
284  8 090         B     PUTX                                         4  2194  B 363               30
285  8 100         DCW   &MESS15                                      3  2200  P56                 30
286  8 110         B     STOP1A                                       4  2201  B K42               30
287  8 120  STOP   B     READMC                                       4  2205  B L68               30
288  8 130         BWZ   STOP1,NM1-2,2       IS IT A NUMERIC LITERAL  8  2209  V K28 Q29 2         30
289  8 140         MLC   &STPNM,LAB                                   7  2217  M B49 P74           30
290  8 150         B     *&8                                          4  2224  B K35               30
291  8 160  STOP1  MLC   &STPLIT,LAB                                  7  2228  M B52 P74           31
292  8 170         MLC   PCT,NM1&1                                    7  2235  M R52 Q32           31
293  8 180  STOP1A B     OUTLST                                       4  2242  B K69               31
294  8 190         B     OUTPAR                                       4  2246  B M87               31
295  8 200         B     GETT                                         4  2250  B T00               31
296  8 210  COMOUT B     OUTLST                                       4  2254  B K69               31
297  8 220         B     PUTX                                         4  2258  B 363               31
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         DCW   &MCSEP                                      3  2264  P77               32
299  8 240         B     GETT                                        4  2265  B T00             32
300  8 250  OUTLST SBR   OUTLB1&3          PUTOUT LIBRARY LIST       4  2269  H K90             32
301  9 010         MLC   LAB,LBADDR                                  7  2273  M P74 K86         32
302  9 020         B     PUTT                                        4  2280  B K91             32
303  9 030  LBADDR DCW   *                                           3  2286  K86               32
304  9 040  OUTLB1 B     *                                           4  2287  B K90             32
305  9 050  PUTT   SBR   X2                                          4  2291  H 094             33
306  9 060         MLC   2&X2,X3                                     7  2295  M 0!2 099         33
307  9 070  PUTT1  BCE   PUTTBB,0&X3,%                               8  2302  B L35 0?0 %       33
308  9 080         MLC   2&X3,SY                                     7  2310  M 0?2 P71         33
309  9 090         B     PUTX                                        4  2317  B 363             33
310  9 100         DCW   &SY                                         3  2323  P71               33
311  9 110         A     @003@,X3                                    7  2324  A B07 099         34
312  9 120         B     PUTT1                                       4  2331  B L02             34
313  9 130  PUTTBB A     @003@,X2                                    7  2335  A B07 094         34
314  9 140         B     0&X2                                        4  2342  B 0!0             34
315  9 150  OUTOP  SBR   OUTBB&3           PUTOUT OPR, VOP           4  2346  H L67             34
316  9 160         B     PUTX                                        4  2350  B 363             34
317  9 170         DCW   &OPR                                        3  2356  Q28               34
318  9 180         B     PUTX                                        4  2357  B 363             35
319  9 190         DCW   &VOP                                        3  2363  P80               35
320  9 200  OUTBB  B     *                                           4  2364  B L67             35
321  9 210  READMC SBR   READBB&3                                    4  2368  H M21             35
322  9 220         MLC   @B@,READ3                                   7  2372  M A97 M30         35
323  9 230         B     READ4                                       4  2379  B L94             35
324  9 240  READ   SBR   READBB&3                                    4  2383  H M21             35
325  9 250         MLC   @N@,READ3                                   7  2387  M B25 M30         36
326 10 010  READ4  MLC   &INPUT1,X2                                  7  2394  M B55 094         36
327 10 020  READ1  B     GETX                                        4  2401  B 335             36
328 10 030         DCW   &SY                                         3  2407  P71               36
329 10 040               &EOJ                                        3  2410  U49               36
330 10 050         C     SY,MCSEP                                    7  2411  C P71 P77         36
331 10 060  READBB BE    *                                           5  2418  B M22 S           36
332 10 070         MLC   SY,2&X2                                     7  2423  M P71 0!2         37
333 10 080  READ3  B     READ2                                       4  2430  B M76             37
334 10 090         C     SY,VK                                       7  2434  C P71 P38         37
335 10 100         BU    *&12                                        5  2441  B M57 /           37
336 10 110         A     @021@,X2                                    7  2446  A B58 094         37
337 10 120         B     READ1                                       4  2453  B M01             37
338 10 130         BWZ   *&12,SY-1,2                                 8  2457  V M76 P70 2       38
339 10 140         A     @045@,X2                                    7  2465  A B61 094         38
340 10 150         B     READ1                                       4  2472  B M01             38
341 10 160  READ2  A     @003@,X2                                    7  2476  A B07 094         38
342 10 170         B     READ1                                       4  2483  B M01             38
343 10 180  OUTPAR SBR   OUTPBB&3                                    4  2487  H N41             38
344 10 190         B     PUTT                                        4  2491  B K91             38
345 10 200         DCW   &INPUT1                                     3  2497  Q29               39
346 10 210  OUTP1  B     OUTP2                                       4  2498  B N31             39
347 10 220         BCE   *&8,OPR-2,$                                 8  2502  B N17 Q26 $       39
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          MLC   BLKS,OPR-2                                7  2510  M P83 Q26           39
349 10 240          MLC   OPR,SIZE3-3                               7  2517  M Q28 R24           39
350 10 250          B     PUTT                                      4  2524  B K91               39
351 11 010          DCW   &INPUT3                                   3  2530  R19                 39
352 11 020  OUTP2   B     PUTX                                      4  2531  B 363               40
353 11 030          DCW   &MCSEP                                   3  2537  P77                 40
354 11 040  OUTPBB  B     *                                         4  2538  B N41               40
355 11 050  SPOUT   SBR   SPBB&3                                    4  2542  H N70               40
356 11 060          MLC   PCT,TYPE2&1                               7  2546  M R52 Q95           40
357 11 070          B     PUTT                                      4  2553  B K91               40
358 11 080          DCW   &DPYCNT                                   3  2559  Q71                 40
359 11 090          B     PUTX                                      4  2560  B 363               41
360 11 100          DCW   &MCSEP                                   3  2566  P77                 41
361 11 110  SPBB    B     *                                         4  2567  B N70               41
362 11 120  GET     B     READ                                      4  2571  B L83               41
363 11 130          MLC   &GETLB,LAB                                7  2575  M B64 P74           41
364 11 140          MLC   NM2,SIZE1-3                               7  2582  M Q76 Q34           41
365 11 150          MLC   PCT,SIZE1-2                               7  2589  M R52 Q35           41
366 11 160          B     STOP1A                                    4  2596  B K42               42
367 11 170  MVGRP   MLC   &LGPMOV,LAB                              7  2600  M B67 P74           42
368 11 180          B     IOPUT&7                                   4  2607  B O18               42
369 11 190  IOPUT   MLC   &PUTLB,LAB                               7  2611  M B70 P74           42
370 11 200          B     READMC                                    4  2618  B L68               42
371 11 210          B     STOP1&7                                   4  2622  B K35               42
372 11 220  IOER    SBR   IOERBB&3                                  4  2626  H O90               42
373 11 230          BWZ   IOERPT,NM1-2,2                           8  2630  V O58 Q29 2         43
374 11 240          BCE   *&5,SIZE1-5,0                             8  2638  B O50 Q32 0         43
375 11 250          B     IOERPT                                    4  2646  B O58               43
376 12 010          BWZ   IOERBB,SIZE1-2,2                         8  2650  V O87 Q35 2         43
377 12 020  IOERPT  B     PUTX                                      4  2658  B 363               43
378 12 030          DCW   &MCSEP                                   3  2664  P77                 43
379 12 040          B     OUTOP                                     4  2665  B L46               43
380 12 050          B     PUTX                                      4  2669  B 363               44
381 12 060          DCW   &MESS10                                   3  2675  P53                 44
382 12 070          B     PUTX                                      4  2676  B 363               44
383 12 080          DCW   &MCSEP                                   3  2682  P77                 44
384 12 090          B     GETT                                      4  2683  B T00               44
385 12 100  IOERBB  B     *                                         4  2687  B O90               44
386 12 110  OPEN    B     READMC                                    4  2691  B L68               44
387 12 120          MLC   &OPNLAB,LAB                              7  2695  M B73 P74           45
388 12 130          B     STOP1&7                                   4  2702  B K35               45
389 12 140  CLOSE   B     READMC                                    4  2706  B L68               45
390 12 150          MLC   &CLSLAB,LAB                              7  2710  M B76 P74           45
391 12 160          B     STOP1&7                                   4  2717  B K35               45
392 12 170  NULL    EQU   *&3                                          2723
393 12 180  ONE     DCW   @000001@                                  6  2726                      45
394 12 190  QQ1           @.Q1@                                     3  2729                      45
395 12 200  QQ2           @.Q2@                                     3  2732                      46
396 12 210  DD0           @.D0@                                     3  2735                      46
397 12 220  VK            @.KK@                                     3  2738                      46
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
398	12	230	VN		@.VN@	3	2741			46
399	12	240	VRDR		@*80@	3	2744			46
400	12	250	VPRT		@*83@	3	2747			46
401	13	010	VPCH		@*88@	3	2750			46
402	13	020	MESS10		@.Y7@	3	2753			47
403	13	030	MESS15		@.R8@	3	2756			47
404	13	040	MESS19		@.X9@	3	2759			47
405	13	050	MESS21		@.Z4@	3	2762			47
406	13	060	TEMP		#3	3	2765			47
407	13	070	VEOP		@.EP@	3	2768			47
408	13	080	SY		#3	3	2771			47
409	13	090	LAB		#3	3	2774			48
410	13	100	MCSEP		@.MC@	3	2777			48
411	13	110	VOP		@.OP@	3	2780			48
412	13	120	BLKS	EQU	*&3		2783			
413	13	130	BLANKS	EQU	*&1		2781			
414	13	140		DCW	#44	44	2824			50
415	13	150		DC	@|@	1	2825			50
416	13	160	OPR	DCW	#3	3	2828			50
417	13	170	INPUT1	DA	1X45		2829	2873		50
418	13	180	NM1		1,3		2831		FIELD	50
419	13	190	SIZE1		4,9		2837		FIELD	50
420	13	200	DEC1		10,12		2840		FIELD	51
421	13	210	CL1		13,15		2843		FIELD	51
422	13	220	WM1		16,18		2846		FIELD	51
423	13	230	TYPE1		19,21		2849		FIELD	51
424	13	240	JUST		22,24		2852		FIELD	51
425	13	250	EDIT		25,27		2855		FIELD	51
426	14	010	BLK		28,30		2858		FIELD	52
427	14	020	MASK		31,33		2861		FIELD	52
428	14	030	COBMSK		34,36		2864		FIELD	52
429	14	040	ED1		37,39		2867		FIELD	52
430	14	050	ED2		40,42		2870		FIELD	52
431	14	060	CHCNT		43,45		2873		FIELD	52
432	14	070	INPUT2	DA	1X45		2874	2918		53
433	14	080	NM2		1,3		2876		FIELD	53
434	14	090	SIZE2		4,9		2882		FIELD	53
435	14	100	DEC2		10,12		2885		FIELD	53
436	14	110	CL2		13,15		2888		FIELD	53
437	14	120	WM2		16,18		2891		FIELD	53
438	14	130	TYPE2		19,21		2894		FIELD	54
439	14	140			22,45		2918		FIELD	54
440	14	150	INPUT3	DA	1X9		2919	2927		54
441	14	160	NM3		1,3		2921		FIELD	54
442	14	170	SIZE3		4,9		2927		FIELD	54
443	14	180	ILIST	DA	1X24		2928	2951		54
444	14	190	I		1,3		2930		FIELD	55
445	14	200	I1		4,6		2933		FIELD	55
446	14	210	I2		7,9		2936		FIELD	55
447	14	220	I3		10,12		2939		FIELD	55

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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  K1            13,15                                           2942              FIELD   55
449 14 240  K2            16,18                                           2945              FIELD   55
450 14 250  OP            19,21                                           2948              FIELD   56
451 15 010  GL            22,24                                           2951              FIELD   56
452 15 020  PCT     DCW   @%@                                        1   2952                      56
453 15 030  DPYCNT  EQU   CHCNT-2                                        2871
454 15 040  STPLIT  EQU   *&1                                           2953
455 15 050          DCW   @.W8%@                                     4   2956                      56
456 15 060  STPNM    EQU   *&1                                           2957
457 15 070          DCW   @.E2.W8%@                                  7   2963                      56
458 15 080  SBDCW    EQU   *&1                                           2964
459 15 090  SUBSW    EQU   SBDCW&17                                      2981
460 15 100          DCW   @#DC.LCDCW.OP  @     @.MC#DC%@            28   2991                      57
461 15 110  NMDCW    EQU   *&1                                           2992
462 15 120          DCW   @#DC.LCDCW.OP@                             12   3003                      58
463 15 130  NMPAR    EQU   *&1                                           3004
464 15 140          DCW   @   .MC#DC%@                              10   3013                      58
465 15 150  L19      EQU   *&1                                           3014
466 15 160          DCW   @.M2.M3.M4.F0%@                           13   3026                      58
467 15 170  L19A     EQU   *&1                                           3027
468 15 180          DCW   @.M6.M3.J9.I5.F0%@                        16   3042                      59
469 15 190  L19B     EQU   *&1                                           3043
470 15 200          DCW   @.M5%@                                     4   3046                      59
471 15 210  L21      EQU   *&1                                           3047
472 15 220          DCW   @.N1.N2.N3.K0.M9.S3.F0%@                   22   3068                      60
473 15 230  L21A     EQU   *&1                                           3069
474 15 240          DCW   @.M7.M8.N3.S3.M9.K0.I5.F0%@                25   3093                      61
475 15 250  L22      EQU   *&1                                           3094
476 16 010          DCW   @.G8%@                                     4   3097                      61
477 16 020  LGPMOV   EQU   *&1                                           3098
478 16 030          DCW   @.N8%@             READ MOVE               4   3101                      61
479 16 040  GETLB    EQU   *&1                                           3102
480 16 050          DCW   @.W3%@             READ                    4   3105                      61
481 16 060  PUTLB    EQU   *&1                                           3106
482 16 070          DCW   @.W2%@             WRITE                   4   3109                      62
483 16 080  OPNLAB   EQU   *&1                                           3110
484 16 090          DCW   @.Z1%@             OPEN                    4   3113                      62
485 16 100  CLSLAB   EQU   *&1                                           3114
486 16 110          DCW   @.Z2%@             CLOSE                   4   3117                      62
487 16 120  TABLE    EQU   *&1                                           3118
488 16 130          DCW   &STOP                                       3   3120  K05                 62
489 16 140                @)11@                                       3   3123                      62
490 16 150                &DISPY                                      3   3126  X42                 62
491 16 160                @)04@                                       3   3129                      62
492 16 170                &ACCPT                                      3   3132  W28                 63
493 16 180                @)07@                                       3   3135                      63
494 16 190                &DEP                                        3   3138  V48                 63
495 16 200                @*03@                                       3   3141                      63
496 16 210                &NMRIC                                      3   3144  Z91                 63
497 16 220                @$10@                                       3   3147                      63
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230               &NMRIC                                        3  3150  Z91                 63
499 16 240               @%10@                                         3  3153                      64
500 16 250               &NMRIC                                        3  3156  Z91                 64
501 17 010               @$16@                                         3  3159                      64
502 17 020               &NMRIC                                        3  3162  Z91                 64
503 17 030               @%16@                                         3  3165                      64
504 17 040               &GET                                          3  3168  N71                 64
505 17 050               @)13@             READ                        3  3171                      64
506 17 060               &MVGRP                                        3  3174  O00                 65
507 17 070               @*36@             READ MOVE                   3  3177                      65
508 17 080               &IOPUT                                        3  3180  O11                 65
509 17 090               @)08@             WRITE                       3  3183                      65
510 17 100               &OPEN                                         3  3186  O91                 65
511 17 110               @)14@                                         3  3189                      65
512 17 120               &CLOSE                                        3  3192  P06                 65
513 17 130               @)09@                                         3  3195                      66
514 17 140               @%@                                           1  3196                      66
515 17 150         LTORG                                                          3197
                   DCW   @B@                                           1  3197              LIT     66
       125               &TABLE                                        3  3200  A18         ADCON   66
                         &6                                            1  3201              LIT     66
       148               &DPYCNT                                       3  3204  Q71         ADCON   66
                         @003@                                         3  3207              LIT     66
                         @0@                                           1  3208              LIT     67
                         @1@                                           1  3209              LIT     67
                         @001@                                         3  3212              LIT     67
                         @004@                                         3  3215              LIT     67
       220               &INPUT1                                       3  3218  Q29         ADCON   67
                         @009@                                         3  3221              LIT     67
                         @015@                                         3  3224              LIT     67
                         @N@                                           1  3225              LIT     68
       258               &L19B                                         3  3228  ?43         ADCON   68
       261               &L19                                          3  3231  ?14         ADCON   68
       263               &L19A                                         3  3234  ?27         ADCON   68
       267               &L22                                          3  3237  ?94         ADCON   68
       270               &L21                                          3  3240  ?47         ADCON   68
       272               &L21A                                         3  3243  ?69         ADCON   68
                         @002@                                         3  3246              LIT     69
       289               &STPNM                                        3  3249  R57         ADCON   69
       291               &STPLIT                                       3  3252  R53         ADCON   69
       326               &INPUT1                                       3  3255  Q29         ADCON   69
                         @021@                                         3  3258              LIT     69
                         @045@                                         3  3261              LIT     69
       363               &GETLB                                        3  3264  A02         ADCON   69
       367               &LGPMOV                                       3  3267  ?98         ADCON   70
       369               &PUTLB                                        3  3270  A06         ADCON   70
       387               &OPNLAB                                       3  3273  A10         ADCON   70
       390               &CLSLAB                                       3  3276  A14         ADCON   70
516 17 160         ORG   3797                                                     3797
517 17 170         DCW   @}@                                           1  3797                      71
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
518 17 180         END   GETT                                                   / T00 080           72
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - I03 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I03						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89				0089		
104	1	040	X2	EQU	94				0094		
105	1	050	X3	EQU	99				0099		
106	1	060	GETX	EQU	335				0335		
107	1	070	PUTX	EQU	363				0363		
108	1	080	SUPER	EQU	351				0351		
109	1	090		ORG	1300					1300	
110	1	100	GETT	MRCM	BLANKS,INPUT1&1			7	1300	P C80 B38	4
111	1	110		MRCM	BLANKS,INPUT2			7	1307	P C80 B82	4
112	1	120		MRCM	BLANKS,INPUT3			7	1314	P C80 C27	4
113	1	130		MLC	NULL,SW6			7	1321	M D33 C78	4
114	1	140		MLC	NULL			4	1328	M D33	4
115	1	150	GETSY	B	GETX	GET UNTIL *$%		4	1332	B 335	4
116	1	160		DCW	&SY			3	1338	D30	4
117	1	170			&EOJ			3	1341	V38	5
118	1	180		C	SY,PASSSY			7	1342	C D30 D51	5
119	1	190		BE	GETSY2			5	1349	B T65 S	5
120	1	200		B	PUTX			4	1354	B 363	5
121	1	210		DCW	&SY			3	1360	D30	5
122	1	220		B	GETSY			4	1361	B T32	5
123	1	230	GETSY2	B	PUTX			4	1365	B 363	5
124	1	240		DCW	&PASSSY			3	1371	D51	6
125	1	250		B	GETX			4	1372	B 335	6
126	2	010		DCW	&OPR			3	1378	B36	6
127	2	020			&EOJ			3	1381	V38	6
128	2	030		MLC	&TABLE,X2	LOOK UP TABLE		7	1382	M E77 094	6
129	2	040	LKPA	C	5&X2,OPR			7	1389	C 0!5 B36	6
130	2	050		BE	LKP3			5	1396	B U20 S	6
131	2	060		BCE	LKP4,0&X2,%			8	1401	B U31 0!0 %	7
132	2	070		A	&6,X2			7	1409	A E78 094	7
133	2	080		B	LKPA			4	1416	B T89	7
134	2	090	LKP3	MLC	2&X2,GETTA&3			7	1420	M 0!2 V37	7
135	2	100		B	CONTIN			4	1427	B U74	7
136	2	110	LKP4	BCE	CONTIN,OPR-2,			8	1431	B U74 B34	7
137	2	120		BCE	CONTIN,OPR-1,9			8	1439	B U74 B35 9	8
138	2	130		BCE	CONTIN,OPR-2,,			8	1447	B U74 B34 ,	8
139	2	140		BCE	CONTIN,OPR,B			8	1455	B U74 B36 B	8
140	2	150		B	PUTX			4	1463	B 363	8
141	2	160		DCW	&OPR			3	1469	B36	8
142	2	170		B	GETSY			4	1470	B T32	8
143	2	180	CONTIN	B	GETX			4	1474	B 335	8
144	2	190		DCW	&SY			3	1480	D30	9
145	2	200			&EOJ			3	1483	V38	9
146	2	210		B	PUTX			4	1484	B 363	9
147	2	220		DCW	&OPR			3	1490	B36	9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         B     PUTX                                        4  1491  B 363               9
149  2 240         DCW   &VOP                                        3  1497  D42                 9
150  2 250         BCE   SUBSC,OPR,B                                8  1498  B R19 B36 B         9
151  3 010         B     READ                                        4  1506  B V52              10
152  3 020         BCE   ADD,OPR-2,                                 8  1510  B W45 B34          10
153  3 030         BCE   ADD,OPR-1,9                               8  1518  B W45 B35 9        10
154  3 040         BCE   RELAT,OPR-2,,                             8  1526  B X75 B34 ,        10
155  3 050  GETTA  B     *                 PERFORM MATRIX            4  1534  B V37              10
156  3 060  EOJ    B     PUTX                                        4  1538  B 363              10
157  3 070         DCW   &VEOP                                       3  1544  D45                10
158  3 080         B     SUPER                                       4  1545  B 351              11
159  3 090         DCW   @I04@                                      3  1551                     11
160  3 100  READ   SBR   READBB&3                                   4  1552  H V83              11
161  3 110         MLC   INP1,X2                                    7  1556  M D27 094          11
162  3 120  READ1  B     GETX                                        4  1563  B 335              11
163  3 130         DCW   &SY                                         3  1569  D30                11
164  3 140               &EOJ                                      3  1572  V38                11
165  3 150         C     SY,MCSEP                                    7  1573  C D30 D48          12
166  3 160  READBB BE    *                                           5  1580  B V84 S            12
167  3 170         MLC   SY,2&X2                                     7  1585  M D30 0!2          12
168  3 180         C     SY,VK                                       7  1592  C D30 D54          12
169  3 190         BU    *&12                                        5  1599  B W15 /            12
170  3 200         A     @021@,X2                                    7  1604  A E81 094          12
171  3 210         B     READ1                                       4  1611  B V63              13
172  3 220         BWZ   *&12,SY-1,2                                 8  1615  V W34 D29 2        13
173  3 230         A     @045@,X2                                    7  1623  A E84 094          13
174  3 240         B     READ1                                       4  1630  B V63              13
175  3 250         A     @003@,X2                                    7  1634  A E87 094          13
176  4 010         B     READ1                                       4  1641  B V63              13
177  4 020  ADD    B     BOTHCK                                      4  1645  B Q28              13
178  4 030         B     SIZE                                        4  1649  B J72              14
179  4 040         B     MNYWMK                                      4  1653  B J33              14
180  4 050         B     SBTST,OPR-1,*                               8  1657  B O49 B35 *        14
181  4 060         B     DEC                                         4  1665  B !08              14
182  4 070         BCE   ADD2,OPR-1,9      IS IT AUG OR SUB          8  1669  B W85 B35 9        14
183  4 080         B     NUMER                                       4  1677  B J02              14
184  4 090         B     ADD1                                        4  1681  B X08              14
185  4 100  ADD2   BCE   ADAUG,AUGSW,0                               8  1685  B X35 C79 0        15
186  4 110  ADD3   BCE   ADD1,CL1,X                                 8  1693  B X08 B51 X        15
187  4 120         MZ    AZONE,SW5                                   7  1701  Y M71 C77          15
188  4 130  ADD1   B     OUTSW                                       4  1708  B Z17              15
189  4 140         MLN   @5@,AUGSW                                  7  1712  D E88 C79          15
190  4 150         B     DIAG1                                       4  1719  B K50              15
191  4 160         BCE   REL1,OPR-1,9                               8  1723  B Y03 B35 9        16
192  4 170         B     OUTP                                        4  1731  B Z50              16
193  4 180  ADAUG  BCE   ADD3,CL2,9                                 8  1735  B W93 B96 9        16
194  4 190         B     ADD1                                        4  1743  B X08              16
195  4 200  MOVE   B     BOTHCK                                      4  1747  B Q28              16
196  4 210         B     DEC                                         4  1751  B !08              16
197  4 220         B     SIZE                                        4  1755  B J72              16
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          B     SBTST                                      4  1759  B O49               17
199  4 240          B     MNYWMK                                     4  1763  B J33               17
200  4 250          B     NUMER                                      4  1767  B J02               17
201  5 010          B     RELOUT                                     4  1771  B X99               17
202  5 020  RELAT    B     BOTHCK                                     4  1775  B Q28               17
203  5 030          B     NUMER                                      4  1779  B J02               17
204  5 040          B     SIZE                                       4  1783  B J72               17
205  5 050          B     MNYWMK                                     4  1787  B J33               18
206  5 060          B     SBTST                                      4  1791  B O49               18
207  5 070          B     FGSW                                       4  1795  B N96               18
208  5 080  RELOUT  B     OUTSW                                      4  1799  B Z17               18
209  5 090  REL1    MLC   PCT,SIZE3&1                                7  1803  M E74 C36           18
210  5 100          B     OUTP                                       4  1810  B Z50               18
211  5 110  POSNEG  B     ONECK                                      4  1814  B R04               18
212  5 120          B     MNYWMK                                     4  1818  B J33               19
213  5 130          B     OUTSW                                      4  1822  B Z17               19
214  5 140          MLC   PCT,NM2&1                                  7  1826  M E74 B85           19
215  5 150          B     OUTP                                       4  1833  B Z50               19
216  5 160  GIV     B     BOTHCK                                     4  1837  B Q28               19
217  5 170          B     SBTST                                      4  1841  B O49               19
218  5 180          B     MNYWMK                                     4  1845  B J33               19
219  5 190          B     OUTSW                                      4  1849  B Z17               20
220  5 200          MZ    AZONE,SW5          SET A ZONE FOR SW5      7  1853  Y M71 C77           20
221  5 210          B     DIAG4                                      4  1860  B K15               20
222  5 220          B     LSTMC1                                     4  1864  B Y80               20
223  5 230  LSTMC   B     ONECK                                      4  1868  B R04               20
224  5 240          B     MNYWMK                                     4  1872  B J33               20
225  5 250          B     OUTSW                                      4  1876  B Z17               20
226  6 010  LSTMC1  MLC   &LSTMC2,DGBB&3                            7  1880  M E91 N95           21
227  6 020          MLC   NULL,AUGSW                                 7  1887  M D33 C79           21
228  6 030          B     DIAG6                                      4  1894  B N46               21
229  6 040  LSTMC2  BCE   OUTPAR&4,OPR-2,.                          8  1898  B Z43 B34 .         21
230  6 050          MLC   PCT,NM3&1                                  7  1906  M E74 C30           21
231  6 060          B     OUTP                                       4  1913  B Z50               21
232  6 070  OUTSW   SBR   SWBB&3             PUTOUT SWITCHES        4  1917  H Z38               22
233  6 080          B     PUTX                                       4  1921  B 363               22
234  6 090          DCW   &SW3                                       3  1927  C75                 22
235  6 100          B     PUTX                                       4  1928  B 363               22
236  6 110          DCW   &SW6                                       3  1934  C78                 22
237  6 120  SWBB    B     *                                          4  1935  B Z38               22
238  6 130  OUTPAR  B     OUTSW                                      4  1939  B Z17               22
239  6 140          MLC   PCT,TYPE2&1                                7  1943  M E74 C03           23
240  6 150  OUTP    MLC   INP1,X3                                    7  1950  M D27 099           23
241  6 160  PUTT1   BCE   OUT,0&X3,%                                8  1957  B Z90 0?0 %         23
242  6 170          MLC   2&X3,SY                                    7  1965  M 0?2 D30           23
243  6 180          B     PUTX                                       4  1972  B 363               23
244  6 190          DCW   &SY                                       3  1978  D30                 23
245  6 200          A     @003@,X3                                   7  1979  A E87 099           24
246  6 210          B     PUTT1                                      4  1986  B Z57               24
247  6 220  OUT     B     PUTX                                       4  1990  B 363               24
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         DCW   &MCSEP                                     3  1996  D48                 24
249  6 240         MLC   BLKS,NM3&1                                 7  1997  M C82 C30           24
250  6 250         B     GETT                                       4  2004  B T00               24
251  7 010  DEC    SBR   DECBB&3                                    4  2008  H J01               24
252  7 020         BWZ   *&5,NM1-1,2                                8  2012  V !24 B38 2         25
253  7 030         B     DECBB                                      4  2020  B !98               25
254  7 040         BWZ   *&5,NM2-1,2                                8  2024  V !36 B83 2         25
255  7 050         B     DECBB                                      4  2032  B !98               25
256  7 060         MLC   @001@,TYPE1-2                             7  2036  M E94 B55           25
257  7 070         ZA    DEC1,TEMP                                  7  2043  ? B48 D63           25
258  7 080         S     DEC2,TEMP                                  7  2050  S B93 D63           26
259  7 090         MCS   TEMP,TEMP6                                 7  2057  Z D63 D69           26
260  7 100         BCE   DECBB,TEMP6,                               8  2064  B !98 D69           26
261  7 110         BM    DECB,TEMP                                  8  2072  V !91 D63 K         26
262  7 120         MZ    AZONE,SW2                                  7  2080  Y M71 C74           26
263  7 130         B     DECBB                                      4  2087  B !98               27
264  7 140  DECB   MZ    BZONE,SW2                                  7  2091  Y T00 C74           27
265  7 150  DECBB  B     *                                          4  2098  B J01               27
266  7 160  NUMER  SBR   NUMBB&3            IS IT NUMERIC TO NUMERIC   4  2102  H J32               27
267  7 170         BCE   NUMBB,CL1,X                                8  2106  B J29 B51 X         27
268  7 180         BCE   NUMBB,CL2,X                                8  2114  B J29 B96 X         27
269  7 190         MZ    AZONE,SW5                                  7  2122  Y M71 C77           28
270  7 200  NUMBB  B     *                                          4  2129  B J32               28
271  7 210  MNYWMK SBR   MNYBB&3                                    4  2133  H J71               28
272  7 220         C     @001@,WM1                                  7  2137  C E94 B54           28
273  7 230         BH    MNY1                                       5  2144  B J61 U             28
274  7 240         C     WM2,@002@                                  7  2149  C B99 E97           28
275  7 250         BH    MNYBB                                      5  2156  B J68 U             28
276  8 010  MNY1   MZ    AZONE,SW1                                  7  2161  Y M71 C73           29
277  8 020  MNYBB  B     *                                          4  2168  B J71               29
278  8 030  SIZE   SBR   SIZEBB&3           COMPARISON OF SIZES        4  2172  H K14               29
279  8 040         C     SIZE1,SIZE2                                7  2176  C B45 B90           29
280  8 050         BE    SIZEBB                                     5  2183  B K11 S             29
281  8 060         BH    SIZEB                                      5  2188  B K04 U             29
282  8 070         MZ    AZONE,SW3                                  7  2193  Y M71 C75           29
283  8 080         B     SIZEBB                                     4  2200  B K11               30
284  8 090  SIZEB  MZ    BZONE,SW3                                  7  2204  Y T00 C75           30
285  8 100  SIZEBB B     *                                          4  2211  B K14               30
286  8 110  DIAG4  SBR   DGBB4&3                                    4  2215  H K49               30
287  8 120         BWZ   *&5,NM2-1,2                                8  2219  V K31 B83 2         30
288  8 130         B     DGBB4                                      4  2227  B K46               30
289  8 140         BCE   DGBB4,CL2,9                               8  2231  B K46 B96 9         30
290  8 150         B     PUTX                                       4  2239  B 363               31
291  8 160         DCW   &MESS2                                    3  2245  D75                 31
292  8 170  DGBB4  B     *                                          4  2246  B K49               31
293  8 180  DIAG1  SBR   DGBB&3            ARITHMETIC DIAGNOSTICS     4  2250  H N95               31
294  8 190         BWZ   *&5,NM1-1,2                                8  2254  V K66 B38 2         31
295  8 200         B     DIAG1A                                     4  2262  B L59               31
296  8 210         ZA    SIZE1,TEMP6        IS FIELD1               7  2266  ? B45 D69           31
297  8 220         BM    *&5,DEC1                                   8  2273  V K85 B48 K         32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230          B     *&8                GREATER                4  2281  B K92               32
299  8 240          S     DEC1,TEMP6                                7  2285  S B48 D69           32
300  8 250          C     TEMP6,NINTN                               7  2292  C D69 D39           32
301  9 010          BH    DIAG1B                                    5  2299  B L11 U             32
302  9 020          B     PUTX                                      4  2304  B 363               32
303  9 030          DCW   &MESS4                                    3  2310  D78                 32
304  9 040  DIAG1B  ZA    SIZE1,TEMP6        DOES                   7  2311  ? B45 D69           33
305  9 050          A     DEC2,TEMP6                                7  2318  A B93 D69           33
306  9 060          S     DEC1,TEMP6         DECIMAL ALIGNMENT      7  2325  S B48 D69           33
307  9 070          BM    DIAG1A,TEMP6                              8  2332  V L59 D69 K         33
308  9 080          C     TEMP6,TWYONE                              7  2340  C D69 D35           33
309  9 090          BH    DIAG1A                                    5  2347  B L59 U             34
310  9 100          B     PUTX               20 DIGIT LIMIT         4  2352  B 363               34
311  9 110          DCW   &MESS8                                    3  2358  D90                 34
312  9 120  DIAG1A  BWZ   *&5,NM2-1,2                              8  2359  V L71 B83 2         34
313  9 130          B     DIAG1C                                    4  2367  B M64               34
314  9 140          ZA    SIZE2,TEMP6        IS FIELD2              7  2371  ? B90 D69           34
315  9 150          BM    *&5,DEC2                                  8  2378  V L90 B93 K         34
316  9 160          B     *&8                GREATER                4  2386  B L97               35
317  9 170          S     DEC2,TEMP6                                7  2390  S B93 D69           35
318  9 180          C     TEMP6,NINTN                               7  2397  C D69 D39           35
319  9 190          BH    DIAG1D                                    5  2404  B M16 U             35
320  9 200          B     PUTX                                      4  2409  B 363               35
321  9 210          DCW   &MESS5                                    3  2415  D81                 35
322  9 220  DIAG1D  ZA    SIZE2,TEMP6                               7  2416  ? B90 D69           35
323  9 230          A     DEC1,TEMP6                                7  2423  A B48 D69           36
324  9 240          S     DEC2,TEMP6                                7  2430  S B93 D69           36
325  9 250          BM    DIAG1C,TEMP6                              8  2437  V M64 D69 K         36
326 10 010          C     TEMP6,TWYONE                              7  2445  C D69 D35           36
327 10 020          BH    DIAG1C                                    5  2452  B M64 U             36
328 10 030          B     PUTX                                      4  2457  B 363               36
329 10 040          DCW   &MESS8                                    3  2463  D90                 37
330 10 050  DIAG1C  BWZ   DIAG2,SW5,S                              8  2464  V M79 C77 S         37
331 10 060          B     PUTX               FIELDS NUMERIC         4  2472  B 363               37
332 10 070          DCW   &MESS2                                    3  2478  D75                 37
333 10 080  DIAG2   BM    *&5,NM1                                   8  2479  V M91 B39 K         37
334 10 090          B     DG2                                       4  2487  B N03               37
335 10 100          C     NM1,VA0Q                                  7  2491  C B39 D72           37
336 10 110          BU    DG3                                       5  2498  B N39 /             38
337 10 120  DG2     BM    *&5,NM2            IS FGCON2 A ZERO       8  2503  V N15 B84 K         38
338 10 130          B     DIAG6                                     4  2511  B N46               38
339 10 140          C     NM2,@GNN@                                 7  2515  C B84 F00           38
340 10 150          BE    DIAG6                                     5  2522  B N46 S             38
341 10 160          C     NM2,VA0Q                                  7  2527  C B84 D72           38
342 10 170          BE    DIAG6                                     5  2534  B N46 S             39
343 10 180  DG3     B     PUTX                                      4  2539  B 363               39
344 10 190          DCW   &MESS6                                    3  2545  D84                 39
345 10 200  DIAG6   BWZ   DIAG6C,SW1,S                             8  2546  V N74 C73 S         39
346 10 210          BCE   DIAG6D,TYPE1,G                           8  2554  B N85 B57 G         39
347 10 220          BCE   DIAG6D,TYPE2,G                           8  2562  B N85 C02 G         39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230         B     DGBB                                       4  2570  B N92               40
349 10 240  DIAG6C B     PUTX                                       4  2574  B 363               40
350 10 250         DCW   &MESS13                                    3  2580  D93                 40
351 11 010         B     DGBB                                       4  2581  B N92               40
352 11 020  DIAG6D B     PUTX                                       4  2585  B 363               40
353 11 030         DCW   &MESS14                                    3  2591  D96                 40
354 11 040  DGBB   B     *                                          4  2592  B N95               40
355 11 050  FGSW   SBR   FGSWBB&3                                   4  2596  H O48               41
356 11 060         MLC   NULL,FGCON                                 7  2600  M D33 C32           41
357 11 070         BM    *&5,NM1                                    8  2607  V O19 B39 K         41
358 11 080         B     FGSW1                                      4  2615  B O26               41
359 11 090         A     @001@,FGCON                                7  2619  A E94 C32           41
360 11 100  FGSW1  BM    *&5,NM2                                    8  2626  V O38 B84 K         41
361 11 110         B     FGSWBB                                     4  2634  B O45               42
362 11 120         A     @002@,FGCON                                7  2638  A E97 C32           42
363 11 130  FGSWBB B     *                                          4  2645  B O48               42
364 11 140  SBTST  SBR   SBSBB&3                                    4  2649  H P08               42
365 11 150         MLC   NULL,SIZE3                                 7  2653  M D33 C35           42
366 11 160         BWZ   *&5,NM1,B                                  8  2660  V O72 B39 B         42
367 11 170         B     *&8                                        4  2668  B O79               42
368 11 180         A     @001@,SIZE3                                7  2672  A E94 C35           43
369 11 190         BWZ   *&5,NM2,B                                  8  2679  V O91 B84 B         43
370 11 200         B     *&8                                        4  2687  B O98               43
371 11 210         A     @002@,SIZE3                                7  2691  A E97 C35           43
372 11 220         MLC   BLKS-1,SIZE3-1                             7  2698  M C81 C34           43
373 11 230  SBSBB  B     *                                          4  2705  B P08               43
374 11 240  CKNAM  SBR   X1                CHECK VALIDITY OF PARAMETERS  4  2709  H 089           44
375 11 250         MLC   2&X1,X2                                    7  2713  M 0|2 094           44
376 12 010         BWZ   DUMST,0&X2,2      IS NM-2 ZONED              8  2720  V P95 0!0 2         44
377 12 020         BWZ   CKNAM1,1&X2,2     IS NM-1 ZONED              8  2728  V P48 0!1 2         44
378 12 030         BWZ   CKNAMB,2&X2,2     IS NM ZONED                8  2736  V P84 0!2 2         44
379 12 040         B     DUMST                                      4  2744  B P95               44
380 12 050  CKNAM1 BWZ   *&5,3&X2,2        CHECK SIZE                 8  2748  V P60 0!3 2         45
381 12 060         B     DUMST                                      4  2756  B P95               45
382 12 070         BWZ   *&5,9&X2,2        CHECK DEC                  8  2760  V P72 0!9 2         45
383 12 080         B     DUMST                                      4  2768  B P95               45
384 12 090         BCE   *&5,12&X2,        CHECK CLASS                8  2772  B P84 0J2           45
385 12 100         B     DUMST                                      4  2780  B P95               45
386 12 110  CKNAMB A     @003@,X1                                   7  2784  A E87 089           46
387 12 120         B     0&X1                                       4  2791  B 0|0               46
388 12 130  DUMST  B     PUTX                                       4  2795  B 363               46
389 12 140         DCW   &MESS7                                     3  2801  D87                 46
390 12 150         B     PUTX                                       4  2802  B 363               46
391 12 160         DCW   &WW6                                      3  2808  D57                 46
392 12 170         B     PUTX                                       4  2809  B 363               46
393 12 180         DCW   &WW9                                      3  2815  D60                 47
394 12 190         B     OUT                                        4  2816  B Z90               47
395 12 200  TWOCK  SBR   TWOBB&3                                   4  2820  H R03               47
396 12 210         B     TWONM                                      4  2824  B Q39               47
397 12 220  BOTHCK SBR   TWOBB&3                                   4  2828  H R03               47
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230         B     CKNAM                                         4  2832  B P09               47
399 12 240         DCW   &INPUT1                                      3  2838  B37                 47
400 12 250  TWONM  B     CKNAM                                         4  2839  B P09               48
401 13 010         DCW   &INPUT2                                      3  2845  B82                 48
402 13 020  GTSUB  BCE   *&5,NM1-2,Z                                  8  2846  B Q58 B37 Z         48
403 13 030         B     GTSUB1                                        4  2854  B Q73               48
404 13 040         BWZ   GTSUB1,NM1-1,2                              8  2858  V Q73 B38 2         48
405 13 050         MRCM  GTREC,NM1&1                                 7  2866  P E03 B40           48
406 13 060  GTSUB1 BCE   *&5,NM2-2,Z                                  8  2873  B Q85 B82 Z         49
407 13 070         B     TWOBB                                         4  2881  B R00               49
408 13 080         BWZ   TWOBB,NM2-1,2                              8  2885  V R00 B83 2         49
409 13 090         MRCM  GTREC,NM2&1                                 7  2893  P E03 B85           49
410 13 100  TWOBB  B     *                                             4  2900  B R03               49
411 13 110  ONECK  SBR   TWOBB&3                                      4  2904  H R03               49
412 13 120         B     CKNAM                                         4  2908  B P09               49
413 13 130         DCW   &INPUT1                                      3  2914  B37                 50
414 13 140         B     GTSUB                                         4  2915  B Q46               50
415 13 150  SUBSC  MLC   &INPUT2,X2                                   7  2919  M F03 094           50
416 13 160         ZA    @N@,TEMP                                      7  2926  ? F04 D63           50
417 13 170         B     SUBGTA            READ IN SUBSC. NAME AND SIZES  4  2933  B A30               50
418 13 180         MLN   TEMP-1,SBCALL      SAVE SUBSCRIPT LEVEL          7  2937  D D62 B81           50
419 13 190         B     GETX                                          4  2944  B 335               50
420 13 200         DCW   &SY                                           3  2950  D30                 51
421 13 210               &EOJ                                          3  2953  V38                 51
422 13 220         B     GETX                                          4  2954  B 335               51
423 13 230         DCW   &COBNM2           SAVE ELEMENTARY SIZE          3  2960  C17                 51
424 13 240               &EOJ                                          3  2963  V38                 51
425 13 250         MLC   @001@,NO                                      7  2964  M E94 A29           51
426 14 010         B     SUBGTB            GET SUBSCRIPT VARIABLE        4  2971  B A38               51
427 14 020         MLC   SIZE3,SIZE1       SAVE SIZE                     7  2975  M C35 B45           52
428 14 030         MLC                                                 1  2982  M                   52
429 14 040         MLC                          NAME                   1  2983  M                   52
430 14 050         MLC   WM3,DEC1               NO. OF WORDMARKS       7  2984  M C44 B48           52
431 14 060         MLC   NM3,TYPE2&3                                   7  2991  M C29 C05           52
432 14 070         B     SUBGTB            GET SUBSCRIPT VARIABLE        4  2998  B A38               52
433 14 080         A     @001@,NO                                      7  3002  A E94 A29           52
434 14 090         MLC   SIZE3,TYPE1       SAVE SIZE                     7  3009  M C35 B57           53
435 14 100         MLC                                                 1  3016  M                   53
436 14 110         MLC                          NAME                   1  3017  M                   53
437 14 120         MLC   WM3,JUST               NO. OF WORDMARKS       7  3018  M C44 B60           53
438 14 130         MLC   NM3,TYPE2&6                                   7  3025  M C29 C08           53
439 14 140         B     SUBGTB            GET SUBSCRIPT VARIABLE        4  3032  B A38               53
440 14 150         A     @001@,NO                                      7  3036  A E94 A29           53
441 14 160         MLC   SIZE3,MASK        SAVE SIZE                     7  3043  M C35 B69           54
442 14 170         MLC                                                 1  3050  M                   54
443 14 180         MLC                          NAME                   1  3051  M                   54
444 14 190         MLC   WM3,COBMSK             NO. OF WORDMARKS       7  3052  M C44 B72           54
445 14 200         MLC   NM3,TYPE2&9                                   7  3059  M C29 C11           54
446 14 210         B     SUBGTB                                        4  3066  B A38               54
447 14 220  MACLAB MLC   NM3,MASK2         SAVE LABEL BUCKET             7  3070  M C29 C14           54
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230          BCE   SUBS1,EDSW,?       ARE ANY VARIABLES EDITTED      8  3077  B ?92 C73 ?         55
449 14 240          B     PUTX                                            4  3085  B 363               55
450 14 250          DCW   &MESS19                                         3  3091  D99                 55
451 15 010  SUBS1   C     SBCALL,NO          DO NO. OF VARIABLES          7  3092  C B81 A29           55
452 15 020          BE    SUBS2                   AGREE WITH SUBSCRIPT LEVEL  5  3099  B A11 S           55
453 15 030          B     PUTX                                            4  3104  B 363               55
454 15 040          DCW   &MESS21                                        3  3110  E02                 55
455 15 050  SUBS2   B     PUTX                                            4  3111  B 363               56
456 15 060          DCW   &SUBDEL                                        3  3117  B33                 56
457 15 070          MLC   @%@,COBNM2&1                                   7  3118  M F05 C18           56
458 15 080          B     OUTP                                            4  3125  B Z50               56
459 15 090  SBCALL  EQU   CHCNT                                           3281
460 15 100  COBNM2  EQU   TYPE2&15                                        3317
461 15 110  WM3     EQU   NM3&15                                          3344
462 15 120  MASK2   EQU   TYPE2&12                                        3314
463 15 130  NO      DCW   #1                                             1  3129                        56
464 15 140  SUBGTA  SBR   SBEX&3                                         4  3130  H B30               56
465 15 150          B     SUB1                                            4  3134  B A49               56
466 15 160  SUBGTB  SBR   SBEX&3                                         4  3138  H B30               57
467 15 170          MLC   &INPUT3,X2                                    7  3142  M F08 094           57
468 15 180  SUB1    S     EDSW                                            4  3149  S C73               57
469 15 190  SUB2    B     GETX                                            4  3153  B 335               57
470 15 200          DCW   &SY                                           3  3159  D30                 57
471 15 210                &EOJ                                          3  3162  V38                 57
472 15 220          C     SY,SUBDEL                                       7  3163  C D30 B33           57
473 15 230          BE    SUB3                                            5  3170  B B12 S             58
474 15 240          C     SY,MCSEP                                        7  3175  C D30 D48           58
475 15 250          BE    MACLAB                                          5  3182  B ?70 S             58
476 16 010          A     @5@,TEMP                                        7  3187  A E88 D63           58
477 16 020          MLC   SY,2&X2                                        7  3194  M D30 0!2           58
478 16 030          A     @003@,X2                                        7  3201  A E87 094           58
479 16 040          B     SUB2                                            4  3208  B A53               59
480 16 050  SUB3    BCE   SBEX,EDIT3,K                                   8  3212  B B27 C53 K         59
481 16 060          A     @001@,EDSW                                      7  3220  A E94 C73           59
482 16 070  SBEX    B     *                                               4  3227  B B30               59
483 16 080  EDSW    EQU   SW1                                             3373
484 16 090  EDIT3   EQU   NM3&24                                          3353
485 16 100  SUBDEL  DCW   @.SD@                                          3  3233                        59
486 16 110  OPR     DCW   #3                                             3  3236                        59
487 16 120  INPUT1  DA    1X45                                             3237   3281                  59
488 16 130  NM1           1,3                                              3239              FIELD   60
489 16 140  SIZE1         4,9                                              3245              FIELD   60
490 16 150  DEC1          10,12                                            3248              FIELD   60
491 16 160  CL1           13,15                                            3251              FIELD   60
492 16 170  WM1           16,18                                            3254              FIELD   60
493 16 180  TYPE1         19,21                                            3257              FIELD   60
494 16 190  JUST          22,24                                            3260              FIELD   61
495 16 200  EDIT          25,27                                            3263              FIELD   61
496 16 210  BLK           28,30                                            3266              FIELD   61
497 16 220  MASK          31,33                                            3269              FIELD   61
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  COBMSK        34,36                                         3272              FIELD   61
499 16 240  ED1           37,39                                         3275              FIELD   61
500 16 250  ED2           40,42                                         3278              FIELD   62
501 17 010  CHCNT         43,45                                         3281              FIELD   62
502 17 020  INPUT2 DA     1X45                                          3282   3326               62
503 17 030  NM2           1,3                                           3284              FIELD   62
504 17 040  SIZE2         4,9                                           3290              FIELD   62
505 17 050  DEC2          10,12                                         3293              FIELD   62
506 17 060  CL2           13,15                                         3296              FIELD   63
507 17 070  WM2           16,18                                         3299              FIELD   63
508 17 080  TYPE2         19,21                                         3302              FIELD   63
509 17 090                22,45                                         3326              FIELD   63
510 17 100  INPUT3 DA     1X45                                          3327   3371               63
511 17 110  NM3           1,3                                           3329              FIELD   63
512 17 120                4,6                                           3332              FIELD   64
513 17 130  SIZE3         7,9                                           3335              FIELD   64
514 17 140                10,45                                         3371              FIELD   64
515 17 150          DC    @%@                                      1    3372                      65
516 17 160  SW1     DCW   0                                        1    3373                      65
517 17 170  SW2     DC    0                                        1    3374                      65
518 17 180  SW3     DC    0                                        1    3375                      65
519 17 190  SW4     DCW   0                                        1    3376                      65
520 17 200  SW5     DC    0                                        1    3377                      65
521 17 210  SW6     DC    0                                        1    3378                      65
522 17 220  AUGSW   DCW   0                                        1    3379                      65
523 17 230  BLANKS  EQU   *&1                                            3380
524 17 240          DCW   #44                                     44    3423                      67
525 17 250          DC    @|@                                      1    3424                      67
526 18 010  BLKS    EQU   BLANKS&2                                      3382
527 18 020  INP1    DCW   &INPUT1                                   3    3427   B37                67
528 18 030  FGCON   EQU   SIZE3-3                                       3332
529 18 040  AZONE   EQU   DIAG1C&7                                      2471
530 18 050  BZONE   EQU   GETT                                         1300
531 18 060  SY      DCW   #3                                         3    3430                      67
532 18 070  TWYONE        @0002A@                                   5    3435                      67
533 18 080  NINTN         @001I@                                    4    3439                      67
534 18 090  VOP           @.OP@                                     3    3442                      68
535 18 100  VEOP          @.EP@                                     3    3445                      68
536 18 110  MCSEP         @.MC@                                     3    3448                      68
537 18 120  PASSSY        @*$*@                                     3    3451                      68
538 18 130  VK            @.KK@                                     3    3454                      68
539 18 140  WW6           @.W6@                                     3    3457                      68
540 18 150  WW9           @.W9@                                     3    3460                      68
541 18 160  TEMP          #3                                        3    3463                      69
542 18 170  TEMP6         #6                                        6    3469                      69
543 18 180  VA0Q          @A0Q@                                     3    3472                      69
544 18 190  MESS2         @.Q5@                                     3    3475                      69
545 18 200  MESS4         @.Q7@                                     3    3478                      69
546 18 210  MESS5         @.Q8@                                     3    3481                      69
547 18 220  MESS6         @.Q9@                                     3    3484                      69
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230  MESS7         @.R0@                                     3  3487                      70
549 18 240  MESS8         @.R1@                                     3  3490                      70
550 18 250  MESS13        @.R6@                                     3  3493                      70
551 19 010  MESS14        @.R7@                                     3  3496                      70
552 19 020  MESS19        @.X9@                                     3  3499                      70
553 19 030  MESS21        @.Z4@                                     3  3502                      70
554 19 040  NULL   EQU    TWYONE-2                                     3433
555 19 050  GTREC  EQU    *&1                                          3503
556 19 060         DCW    @000020     9001 |@                      17  3519                      70
557 19 070  TABLE  EQU    *&1                                          3520
558 19 080         DCW    &MOVE                                     3  3522  X47                 71
559 19 090                @)15@                                     3  3525                      71
560 19 100                &GIV                                      3  3528  Y37                 71
561 19 110                @*16@                                     3  3531                      71
562 19 120                &GIV                                      3  3534  Y37                 71
563 19 130                @*10@                                     3  3537                      71
564 19 140                &LSTMC                                    3  3540  Y68                 71
565 19 150                @.ME@                                     3  3543                      72
566 19 160                &LSTMC                                    3  3546  Y68                 72
567 19 170                @/10@                                     3  3549                      72
568 19 180                &POSNEG                                   3  3552  Y14                 72
569 19 190                @$12@                                     3  3555                      72
570 19 200                &POSNEG                                   3  3558  Y14                 72
571 19 210                @%12@                                     3  3561                      72
572 19 220                &POSNEG                                   3  3564  Y14                 73
573 19 230                @$14@                                     3  3567                      73
574 19 240                &POSNEG                                   3  3570  Y14                 73
575 19 250                @%14@                                     3  3573                      73
576 20 010  PCT           @%@                                       1  3574                      73
577 20 020         LTORG                                                    3575
       128         DCW    &TABLE                                    3  3577  E20         ADCON   73
                          &6                                        1  3578              LIT     73
                          @021@                                     3  3581              LIT     74
                          @045@                                     3  3584              LIT     74
                          @003@                                     3  3587              LIT     74
                          @5@                                       1  3588              LIT     74
       226                &LSTMC2                                   3  3591  Y98         ADCON   74
                          @001@                                     3  3594              LIT     74
                          @002@                                     3  3597              LIT     74
                          @GNN@                                     3  3600              LIT     75
       415                &INPUT2                                   3  3603  B82         ADCON   75
                          @N@                                       1  3604              LIT     75
                          @%@                                       1  3605              LIT     75
       467                &INPUT3                                   3  3608  C27         ADCON   75
578 20 030         ORG    3790                                                3790
579 20 040         DCW    @}@                                       1  3790                      76
580 20 050         END    GETT                                                / T00 080           77
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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I04						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89				0089		
104	1	040	X2	EQU	94				0094		
105	1	050	X3	EQU	99				0099		
106	1	060	PUTX	EQU	363				0363		
107	1	070	GETX	EQU	335				0335		
108	1	080	SUPER	EQU	351				0351		
109	1	090		ORG	1300				1300		
110	1	100	GETT	MLC	NULL,CLEAR			7	1300	M A52 M11	4
111	1	110		MLC	NULL,SW88			7	1307	M A52 C35	4
112	1	120	GETSY	B	GETX	GET UNTIL *$%		4	1314	B 335	4
113	1	130		DCW	&SY			3	1320	B12	4
114	1	140			&EOJ			3	1323	W40	4
115	1	150		C	SY,PASSSY			7	1324	C B12 W39	4
116	1	160		BE	GETSY2			5	1331	B T47 S	4
117	1	170		B	PUTX			4	1336	B 363	5
118	1	180		DCW	&SY			3	1342	B12	5
119	1	190		B	GETSY			4	1343	B T14	5
120	1	200	GETSY2	B	GETX			4	1347	B 335	5
121	1	210		DCW	&OPR			3	1353	B22	5
122	1	220			&EOJ			3	1356	W40	5
123	1	230		C	OPR,@12@			7	1357	C B22 D66	5
124	1	240		BE	POSNEG			5	1364	B U45 S	6
125	1	250		C	OPR,@14@			7	1369	C B22 D68	6
126	2	010		BE	POSNEG			5	1376	B U45 S	6
127	2	020		C	OPR,@.SB@			7	1381	C B22 D71	6
128	2	030		BE	SUBSC			5	1388	B Q15 S	6
129	2	040		C	OPR,@)15@			7	1393	C B22 D74	6
130	2	050		BU	PASSMC			5	1400	B V90 /	7
131	2	060	MOVE	B	READMC			4	1405	B W54	7
132	2	070		B	CLASS			4	1409	B !92	7
133	2	080		B	ALLTST			4	1413	B M16	7
134	2	090		B	MVMAC			4	1417	B Y75	7
135	2	100		B	DIAG3			4	1421	B N61	7
136	2	110		B	WMK3			4	1425	B K31	7
137	2	120		B	WMK1			4	1429	B N92	8
138	2	130		B	WMK			4	1433	B Z98	8
139	2	140		B	FLR			4	1437	B Z45	8
140	2	150		B	OUTLAB			4	1441	B X60	8
141	2	160	POSNEG	B	READMC			4	1445	B W54	8
142	2	170		MLC	&TABLE,X1			7	1449	M D77 089	8
143	2	180	POS1	C	5&X1,OPR	IS OPERATOR IN TABLE		7	1456	C 0|5 B22	8
144	2	190		BE	*&12			5	1463	B U79 S	9
145	2	200		A	&6,X1			7	1468	A D78 089	9
146	2	210		B	POS1			4	1475	B U56	9
147	2	220	POS2	MLC	2&X1,LAB			7	1479	M 0|2 X82	9

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         MLC   @#@,OPR-2          USED IN P66            7  1486  M D79 B20            9
149  2 240         B     PUTX                                      4  1493  B 363                9
150  2 250         DCW   &PASSSY                                   3  1499  W39                  9
151  3 010         B     OUTOP                                     4  1500  B Y42               10
152  3 020         B     PUTX               PUTOUT SWITCHES        4  1504  B 363               10
153  3 030         DCW   &SW3                                      3  1510  C31                 10
154  3 040         B     PUTX                                      4  1511  B 363               10
155  3 050         DCW   &SW6                                      3  1517  C34                 10
156  3 060         BWZ   *&5,NM1-1,2        IS NAME1 A GT          8  1518  V V30 B24 2         10
157  3 070         B     POS3                                      4  1526  B V60               10
158  3 080  DIAG5  BCE   DIAG7,CL1,9        IS NM1 NUMERIC         8  1530  B V45 B37 9         11
159  3 090         B     PUTX                                      4  1538  B 363               11
160  3 100         DCW   &MESS2                                    3  1544  A97                 11
161  3 110  DIAG7  BWZ   POS3,SW1,2         IS NM1 MULTI WORDMARK  8  1545  V V60 C29 2         11
162  3 120         B     PUTX                                      4  1553  B 363               11
163  3 130         DCW   &MESS15                                   3  1559  B06                 11
164  3 140  POS3   B     ONEWM                                     4  1560  B N40               11
165  3 150         B     PUTX                                      4  1564  B 363               12
166  3 160         DCW   &FF7                                      3  1570  A91                 12
167  3 170         B     CWKSW                                     4  1571  B L89               12
168  3 180         B     OUTLST                                    4  1575  B X72               12
169  3 190         B     PUTT                                      4  1579  B X87               12
170  3 200         DCW   &INPUT1                                   3  1585  B23                 12
171  3 210         B     OUT                                       4  1586  B Y64               12
172  3 220  PASSMC B     PUTX               PASS THRU MACRO        4  1590  B 363               13
173  3 230         DCW   &PASSSY                                   3  1596  W39                 13
174  3 240         B     PUTX                                      4  1597  B 363               13
175  3 250         DCW   &OPR                                      3  1603  B22                 13
176  4 010  PASS   B     GETX                                      4  1604  B 335               13
177  4 020         DCW   &SY                                       3  1610  B12                 13
178  4 030               &EOJ                                      3  1613  W40                 13
179  4 040         B     PUTX                                      4  1614  B 363               14
180  4 050         DCW   &SY                                       3  1620  B12                 14
181  4 060         C     SY,MCSEP                                  7  1621  C B12 B15           14
182  4 070         BE    GETSY                                     5  1628  B T14 S             14
183  4 080         B     PASS                                      4  1633  B W04               14
184  4 090  PASSSY DCW   @*$*@                                    3  1639                      14
185  4 100  EOJ    B     PUTX                                      4  1640  B 363               14
186  4 110         DCW   &VEOP                                     3  1646  A70                 15
187  4 120         B     SUPER                                     4  1647  B 351               15
188  4 130         DCW   @I05@                                     3  1653                      15
189  4 140  READMC SBR   READBB&3           READ UNTIL MCSEP       4  1654  H X15               15
190  4 150         B     GETX                                      4  1658  B 335               15
191  4 160         DCW   &SY                                       3  1664  B12                 15
192  4 170               &EOJ                                      3  1667  W40                 15
193  4 180         B     GETX                                      4  1668  B 335               16
194  4 190         DCW   &SW3                                      3  1674  C31                 16
195  4 200               &EOJ                                      3  1677  W40                 16
196  4 210         B     GETX                                      4  1678  B 335               16
197  4 220         DCW   &SW6                                      3  1684  C34                 16
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230          &EOJ                                            3  1687  W40                 16
199  4 240  READBA MLC   &INPUT1,X2                                 7  1688  M D82 094           16
200  4 250  READ1  B     GETX                                       4  1695  B 335               17
201  5 010         DCW   &SY                                        3  1701  B12                 17
202  5 020         DCW   &EOJ                                       3  1704  W40                 17
203  5 030         C     SY,MCSEP                                   7  1705  C B12 B15           17
204  5 040  READBB BE    *                                          5  1712  B X16 S             17
205  5 050         MLC   SY,2&X2                                    7  1717  M B12 0!2           17
206  5 060         A     @003@,X2                                   7  1724  A D85 094           17
207  5 070         B     READ1                                      4  1731  B W95               18
208  5 080  OUTPAR MLC   PCT,TYPE2&1                                7  1735  M B16 B89           18
209  5 090         B     PUTT                                       4  1742  B X87               18
210  5 100         DCW   &INPUT1                                    3  1748  B23                 18
211  5 110         B     PUTT                                       4  1749  B X87               18
212  5 120         DCW   &INPUT3                                    3  1755  C13                 18
213  5 130         B     OUT                                        4  1756  B Y64               18
214  5 140  OUTLAB B     OUTLST                                     4  1760  B X72               19
215  5 150         B     CWKSW                                      4  1764  B L89               19
216  5 160         B     OUTPAR                                     4  1768  B X35               19
217  5 170  OUTLST SBR   OUTLB1&3           PUTOUT LIBRARY LIST     4  1772  H X86               19
218  5 180         B     PUTT                                       4  1776  B X87               19
219  5 190  LAB    DCW   *                                          3  1782  X82                 19
220  5 200  OUTLB1 B     *                                          4  1783  B X86               19
221  5 210  PUTT   SBR   X2                                         4  1787  H 094               20
222  5 220         MLC   2&X2,X3                                    7  1791  M 0!2 099           20
223  5 230  PUTT1  BCE   PUTTBB,0&X3,%                             8  1798  B Y31 0?0 %         20
224  5 240         MLC   2&X3,SY                                    7  1806  M 0?2 B12           20
225  5 250         B     PUTX                                       4  1813  B 363               20
226  6 010         DCW   &SY                                        3  1819  B12                 20
227  6 020         A     @003@,X3                                   7  1820  A D85 099           21
228  6 030         B     PUTT1                                      4  1827  B X98               21
229  6 040  PUTTBB A     @003@,X2                                   7  1831  A D85 094           21
230  6 050         B     0&X2                                       4  1838  B 0!0               21
231  6 060  OUTOP  SBR   OUTBB&3           PUTOUT OPR, VOP         4  1842  H Y63               21
232  6 070         B     PUTX                                       4  1846  B 363               21
233  6 080         DCW   &OPR                                      3  1852  B22                 21
234  6 090         B     PUTX                                       4  1853  B 363               22
235  6 100         DCW   &VOP                                      3  1859  B19                 22
236  6 110  OUTBB  B     *                                          4  1860  B Y63               22
237  6 120  OUT    B     PUTX                                       4  1864  B 363               22
238  6 130         DCW   &MCSEP                                    3  1870  B15                 22
239  6 140         B     GETT                                       4  1871  B T00               22
240  6 150  MVMAC  SBR   MVMAC3&3                                  4  1875  H Z32               22
241  6 160         BWZ   MVMAC2,SW3,K                             8  1879  V Z33 C31 K         23
242  6 170         BCE   MV1,JUST,R                               8  1887  B Z22 B46 R         23
243  6 180         BCE   MV2,JUST,L                               8  1895  B Z11 B46 L         23
244  6 190  MV3    BWZ   MV1,SW5,S                                8  1903  V Z22 C33 S         23
245  6 200  MV2    MLC   @00L@,NM3                                7  1911  M D88 C15           23
246  6 210         B     MVMAC3                                     4  1918  B Z29               24
247  6 220  MV1    MLC   @00R@,NM3                                7  1922  M D91 C15           24
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230  MVMAC3 B     *                                             4  1929  B Z32               24
249  6 240  MVMAC2 BWZ   MVMAC3,SW1,2                                  8  1933  V Z29 C29 2         24
250  6 250         B     MV3                                           4  1941  B Z03               24
251  7 010  FLR    SBR   FLRBB&3                                       4  1945  H Z97               24
252  7 020         C     NM3,@00R@                                     7  1949  C C15 D91           24
253  7 030         BU    FLR1                                          5  1956  B Z72 /             25
254  7 040         MLC   &L5,LAB                                       7  1961  M D94 X82           25
255  7 050         B     FLRBB                                         4  1968  B Z94               25
256  7 060  FLR1   BCE   *&8,SW88,0                                    8  1972  B Z87 C35 0         25
257  7 070         B     PUTX                                          4  1980  B 363               25
258  7 080         DCW   &MESS12                                       3  1986  B03                 25
259  7 090         MLC   &L6,LAB                                       7  1987  M D97 X82           25
260  7 100  FLRBB  B     *                                             4  1994  B Z97               26
261  7 110  WMK    SBR   WMKBB&3           CHECK WORDMARK TYPE         4  1998  H !91               26
262  7 120         C     WM1,NULL                                      7  2002  C B40 A52           26
263  7 130         BU    WMKA                    SET                   5  2009  B !62 /             26
264  7 140         C     WM2,NULL                                      7  2014  C B85 A52           26
265  7 150         BU    WMKB                                          5  2021  B !44 /             26
266  7 160         B     PUTX                                          4  2026  B 363               26
267  7 170         DCW   &AA1                                          3  2032  A73                 27
268  7 180         MLC   &FF4,CLEAR                                    7  2033  M E00 M11           27
269  7 190         B     WMKBB                                         4  2040  B !88               27
270  7 200  WMKB   B     PUTX                                          4  2044  B 363               27
271  7 210         DCW   &AA2                                          3  2050  A76                 27
272  7 220         MLC   &FF5,CLEAR                                    7  2051  M E03 M11           27
273  7 230         B     WMKBB                                         4  2058  B !88               27
274  7 240  WMKA   C     WM2,NULL                                      7  2062  C B85 A52           28
275  7 250         BU    WMKBB                                         5  2069  B !88 /             28
276  8 010         B     PUTX                                          4  2074  B 363               28
277  8 020         DCW   &AA3                                          3  2080  A79                 28
278  8 030         MLC   &FF6,CLEAR                                    7  2081  M E06 M11           28
279  8 040  WMKBB  B     *                                             4  2088  B !91               28
280  8 050  CLASS  SBR   CLASBB&3          WILL THERE BE DECIMAL ALIGN.  4  2092  H J39               28
281  8 060         BWZ   *&5,SW1,2                                     8  2096  V J08 C29 2         29
282  8 070         B     CLASBB                                        4  2104  B J36               29
283  8 080         BCE   *&5,CL2,9                                     8  2108  B J20 B82 9         29
284  8 090         B     CLASBB                                        4  2116  B J36               29
285  8 100         BCE   CLAS1,CL1,9                                  8  2120  B J40 B37 9         29
286  8 110         BCE   MGIV,EDIT,E                                   8  2128  B J59 B49 E         30
287  8 120  CLASBB B     *                                             4  2136  B J39               30
288  8 130  CLAS1  BCE   CLAS2,JUST,L                                  8  2140  B K20 B46 L         30
289  8 140         MLC   @N@,SW88                                      7  2148  M E07 C35           30
290  8 150         B     CLASBB                                        4  2155  B J36               30
291  8 160  MGIV   B     PUTX                                          4  2159  B 363               30
292  8 170         DCW   &PASSSY                                       3  2165  W39                 30
293  8 180         B     PUTX                                          4  2166  B 363               31
294  8 190         DCW   &GIVOP                                        3  2172  A49                 31
295  8 200         B     PUTX                                          4  2173  B 363               31
296  8 210         DCW   &VOP                                          3  2179  B19                 31
297  8 220         BCE   *&8,EDIT,E                                    8  2180  B J95 B49 E         31
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         MLC   @YYK@,EDIT                                   7  2188  M E10 B49           31
299  8 240         B     PUTX                                         4  2195  B 363               31
300  8 250         DCW   &SW3                                         3  2201  C31                 32
301  9 010         B     PUTX                                         4  2202  B 363               32
302  9 020         DCW   &SW6                                         3  2208  C34                 32
303  9 030         B     PUTT                                         4  2209  B X87               32
304  9 040         DCW   &INPUT1                                      3  2215  B23                 32
305  9 050         B     OUT                                          4  2216  B Y64               32
306  9 060  CLAS2  MLC   @E@,SW88                                     7  2220  M E11 C35           32
307  9 070         B     CLASBB                                       4  2227  B J36               33
308  9 080  WMK3   SBR   WMK3BB&3          IS THIS A RECORD MOVE      4  2231  H L42               33
309  9 090         BCE   WMK3C,EDIT,K                                 8  2235  B K58 B49 K         33
310  9 100         BCE   WMK3C,MASK,K                                 8  2243  B K58 B55 K         33
311  9 110         B     PUTX                                         4  2251  B 363               33
312  9 120         DCW   &MESS19                                      3  2257  B09                 33
313  9 130  WMK3C  BCE   *&5,TYPE1,R        IS NM1 A RECORD            8  2258  B K70 B43 R         33
314  9 140         B     WMK3D                                        4  2266  B K90               34
315  9 150         BCE   *&5,TYPE2,R        IS NM2 A RECORD            8  2270  B K82 B88 R         34
316  9 160         B     WMK3D              EXIT                       4  2278  B K90               34
317  9 170         BWZ   WMK3A,SW3,2                                   8  2282  V L28 C31 2         34
318  9 180  WMK3D  BWZ   WMK3BB,SW1,2                                  8  2290  V L39 C29 2         34
319  9 190         BWZ   *&5,SW3,K                                    8  2298  V L10 C31 K         35
320  9 200         B     WMK3B                                        4  2306  B L17               35
321  9 210         B     PUTX                                         4  2310  B 363               35
322  9 220         DCW   &MESS1                                       3  2316  A94                 35
323  9 230  WMK3B  B     PUTX               PUTOUT CALL ZMR            4  2317  B 363               35
324  9 240         DCW   &HH1                                         3  2323  A40                 35
325  9 250         B     OUTPAR                                       4  2324  B X35               35
326 10 010  WMK3A  B     PUTX               PUTOUT  MRCM INSTRUCTION   4  2328  B 363               36
327 10 020         DCW   &II9                                         3  2334  A43                 36
328 10 030         B     OUTPAR                                       4  2335  B X35               36
329 10 040  WMK3BB B     *                                            4  2339  B L42               36
330 10 050  EITWMK SBR   EITBB&3                                      4  2343  H L88               36
331 10 060         C     WM1,NULL                                     7  2347  C B40 A52           36
332 10 070         BU    EITBB                                        5  2354  B L85 /             36
333 10 080         C     WM2,NULL                                     7  2359  C B85 A52           37
334 10 090         BU    EITBB                                        5  2366  B L85 /             37
335 10 100         MLC   &FF5,CLEAR                                  7  2371  M E14 M11           37
336 10 110         B     PUTX                                         4  2378  B 363               37
337 10 120         DCW   &AA2                                         3  2384  A76                 37
338 10 130  EITBB  B     *                                            4  2385  B L88               37
339 10 140  CWKSW  SBR   CMSWBB&3          TEST FOR CLEAR WORDMARK    4  2389  H M15               37
340 10 150         C     CLEAR,NULL                                   7  2393  C M11 A52           38
341 10 160         BE    CMSWBB                                       5  2400  B M12 S             38
342 10 170         B     PUTX                                         4  2405  B 363               38
343 10 180  CLEAR  DCW   *                                            3  2411  M11                 38
344 10 190  CMSWBB B     *                                            4  2412  B M15               38
345 10 200  ALLTST SBR   ALLBB&3           TEST ZONE FOR MOVE ALL     4  2416  H M35               38
346 10 210         B     OUTOP                                        4  2420  B Y42               38
347 10 220         BM    *&5,NM2                                      8  2424  V M36 B70 K         39
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230  ALLBB  B     *                                           4  2432  B M35               39
349 10 240         BWZ   ALLWMK,SW1,S                                8  2436  V N29 C29 S         39
350 10 250         BWZ   ALL1,SW3,2                                  8  2444  V N14 C31 2         39
351 11 010         C     SIZE2,ONE                                   7  2452  C B76 A55           39
352 11 020         BU    ALL2A                                       5  2459  B M79 /             40
353 11 030  ALL2   MLC   &L25,LAB                                    7  2464  M E17 X82           40
354 11 040  ALL3   B     ONEWM                                       4  2471  B N40               40
355 11 050         B     OUTLAB                                      4  2475  B X60               40
356 11 060  ALL2A  BWZ   ALL4,SW5,S                                  8  2479  V N06 C33 S         40
357 11 070         BWZ   ALLWMK,SW3,S                               8  2487  V N29 C31 S         40
358 11 080         MLC   &L26,LAB                                    7  2495  M E20 X82           41
359 11 090         B     ALL1A                                       4  2502  B N21               41
360 11 100  ALL4   BWZ   ALL2,SW3,S                                  8  2506  V M64 C31 S         41
361 11 110  ALL1   MLC   &L13,LAB                                    7  2514  M E23 X82           41
362 11 120  ALL1A  B     OUTLST                                      4  2521  B X72               41
363 11 130         B     OUTPAR                                      4  2525  B X35               41
364 11 140  ALLWMK B     PUTX                                        4  2529  B 363               41
365 11 150         DCW   &HH0                                       3  2535  A46                 42
366 11 160         B     OUTPAR                                      4  2536  B X35               42
367 11 170  ONEWM  SBR   WMKBB&3                                    4  2540  H !91               42
368 11 180         C     WM1,NULL                                    7  2544  C B40 A52           42
369 11 190         BU    WMKBB                                       5  2551  B !88 /             42
370 11 200         BE    WMKB                                        5  2556  B !44 S             42
371 11 210  DIAG3  SBR   DG3BB&3           IS THERE                  4  2561  H N91               42
372 11 220         BCE   DG3BB,CL1,X                                 8  2565  B N88 B37 X         43
373 11 230         BCE   DG3BB,CL2,9                                 8  2573  B N88 B82 9         43
374 11 240         B     PUTX                                        4  2581  B 363               43
375 11 250         DCW   &MESS9                                     3  2587  B00                 43
376 12 010  DG3BB  B     *                                           4  2588  B N91               43
377 12 020  WMK1   SBR   WMK1BB&3                                   4  2592  H O19               43
378 12 030         BCE   MVNUM,SW88,N                               8  2596  B O65 C35 N         43
379 12 040         BWZ   WMK1BB,SW3,S                               8  2604  V O16 C31 S         44
380 12 050         B     WMK1C                                       4  2612  B O20               44
381 12 060  WMK1BB B     *                                           4  2616  B O19               44
382 12 070  WMK1C  BWZ   WMK1A,SW3,2                                8  2620  V O50 C31 2         44
383 12 080         B     PUTX                                        4  2628  B 363               44
384 12 090         DCW   &MESS1                                     3  2634  A94                 44
385 12 100         B     EITWMK                                      4  2635  B L43               44
386 12 110         MLC   &L26,LAB                                    7  2639  M E26 X82           45
387 12 120         B     OUTLAB                                      4  2646  B X60               45
388 12 130  WMK1A  B     EITWMK                                      4  2650  B L43               45
389 12 140  WMKLB  MLC   &L13,LAB                                    7  2654  M E29 X82           45
390 12 150         B     OUTLAB                                      4  2661  B X60               45
391 12 160  MVNUM  ZA    SIZE1,TEMP6                                 7  2665  ? B31 A61           45
392 12 170         S     DEC1,TEMP6                                  7  2672  S B34 A61           46
393 12 180         ZA    SIZE2,TEMP7                                 7  2679  ? B76 A67           46
394 12 190         S     DEC2,TEMP7                                  7  2686  S B79 A67           46
395 12 200         S     TEMP6,TEMP7                                 7  2693  S A61 A67           46
396 12 210         MCS   TEMP7,TEMP6                                 7  2700  Z A67 A61           46
397 12 220         SW    TEMP6-5                                     4  2707  , A56               46
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

398 12 230          BCE   MVNUM1,TEMP6,                                8  2711  B P34 A61           47
399 12 240          BM    MVNUM1,TEMP7                                 8  2719  V P34 A67 K         47
400 12 250          B     PUTX                                         4  2727  B 363               47
401 13 010          DCW   &MESS1                                      3  2733  A94                 47
402 13 020  MVNUM1  BWZ   MVNUM2,SW2,2                                 8  2734  V P76 C30 2         47
403 13 030          B     WMK                                          4  2742  B Z98               47
404 13 040          BWZ   *&12,SW2,S                                  8  2746  V P65 C30 S         48
405 13 050          MLC   &NUMLB2,LAB                                  7  2754  M E32 X82           48
406 13 060          B     OUTLAB                                       4  2761  B X60               48
407 13 070          MLC   &NUMLB1,LAB                                  7  2765  M E35 X82           48
408 13 080          B     OUTLAB                                       4  2772  B X60               48
409 13 090  MVNUM2  BWZ   MVNUM3,SW3,S                                 8  2776  V Q00 C31 S         48
410 13 100          BWZ   WMK1A,SW3,2                                  8  2784  V O50 C31 2         49
411 13 110          B     ONEWM                                        4  2792  B N40               49
412 13 120          B     WMKLB                                        4  2796  B O54               49
413 13 130  MVNUM3  B     WMK                                          4  2800  B Z98               49
414 13 140          MLC   &NUMLB,LAB                                   7  2804  M E38 X82           49
415 13 150          B     OUTLAB                                       4  2811  B X60               49
416 13 160  SUBSC   B     GETX                                         4  2815  B 335               49
417 13 170          DCW   &SY                                          3  2821  B12                 50
418 13 180                &EOJ                                         3  2824  W40                 50
419 13 190          B     OUTOP                                        4  2825  B Y42               50
420 13 200  SB1     B     GETX                                         4  2829  B 335               50
421 13 210          DCW   &SY                                          3  2835  B12                 50
422 13 220                &EOJ                                         3  2838  W40                 50
423 13 230          C     SY,@.SD@                                     7  2839  C B12 E41           50
424 13 240          BE    SB2                                          5  2846  B Q62 S             51
425 13 250          B     PUTX                                         4  2851  B 363               51
426 14 010          DCW   &SY                                          3  2857  B12                 51
427 14 020          B     SB1                                          4  2858  B Q29               51
428 14 030  SB2     SBR   READBB&3,SB3                                 7  2862  H X15 Q73           51
429 14 040          B     READBA                                       4  2869  B W88               51
430 14 050  SB3     MLC   NULL,CLEAR3                                  7  2873  M A52 A22           51
431 14 060          MLC   NULL                                         4  2880  M A52               52
432 14 070          MLC   @|@,COBMSK&1                                7  2884  M E42 B59           52
433 14 080          ZA    @003@,WMKCNT                                 7  2891  ? D85 C35           52
434 14 090          BCE   SB3A,COBMSK,                                 8  2898  B R18 B58           52
435 14 100          C     COBMSK,NULL                                  7  2906  C B58 A52           52
436 14 110          BE    *&8                                          5  2913  B R25 S             52
437 14 120  SB3A    S     ONE,WMKCNT                                   7  2918  S A55 C35           53
438 14 130          C     JUST,NULL                                    7  2925  C B46 A52           53
439 14 140          BE    SB3B&7                                       5  2932  B R51 S             53
440 14 150          MRCM  EDIT-2,CL1-2                                 7  2937  P B47 B35           53
441 14 160  SB3B    S     ONE,WMKCNT                                   7  2944  S A55 C35           53
442 14 170          C     DEC1,NULL                                    7  2951  C B34 A52           54
443 14 180          BE    SB4                                          5  2958  B R77 S             54
444 14 190          MRCM  CL1-2,INPUT1                                 7  2963  P B35 B23           54
445 14 200  SB3C    S     ONE,WMKCNT                                   7  2970  S A55 C35           54
446 14 210  SB4     BCE   SUBDON,WMKCNT,?    DO VARIABLES HAVE WORDMARKS 8  2977  B ?55 C35 ?         54
447 14 220          C     WMKCNT,SB5                                   7  2985  C C35 R92           55
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230  SB5    BH    SBWMK1                             5  2992  B ?41 U             55
449 14 240         B     PUTX                               4  2997  B 363               55
450 14 250         DCW   &ZZ5                              3  3003  A34                 55
451 15 010         MLC   ZZ6,CLEAR1                        7  3004  M A37 A19           55
452 15 020         BCE   *&5,WMKCNT,C                       8  3011  B ?23 C35 C         55
453 15 030         B     SUBDON                             4  3019  B ?55               55
454 15 040         B     PUTX                               4  3023  B 363               56
455 15 050         DCW   &YY0                              3  3029  A28                 56
456 15 060         MLC   YY1,CLEAR3                        7  3030  M A31 A22           56
457 15 070         B     SUBDON                             4  3037  B ?55               56
458 15 080  SBWMK1 B     PUTX                               4  3041  B 363               56
459 15 090         DCW   &AA2                              3  3047  A76                 56
460 15 100         MLC   FF5,CLEAR1                        7  3048  M A85 A19           56
461 15 110  SUBDON MLN   CHCNT,SBCALL                      7  3055  D B67 A25           57
462 15 120         B     PUTX                               4  3062  B 363               57
463 15 130         DCW   &SBCALL                           3  3068  A25                 57
464 15 140         BCE   SUBEXT,CLEAR1-2,0                 8  3069  B ?99 A17 0         57
465 15 150         B     PUTX                               4  3077  B 363               57
466 15 160         DCW   &CLEAR1                           3  3083  A19                 57
467 15 170         BCE   SUBEXT,CLEAR3-2,0                 8  3084  B ?99 A20 0         57
468 15 180         B     PUTX                               4  3092  B 363               58
469 15 190         DCW   &CLEAR3                           3  3098  A22                 58
470 15 200  SUBEXT MLC   @%@,TYPE2&16                      7  3099  M E43 C04           58
471 15 210         B     PUTT                               4  3106  B X87               58
472 15 220         DCW   &INPUT1                           3  3112  B23                 58
473 15 230         B     OUT                                4  3113  B Y64               58
474 15 240  WMKCNT EQU   SW88                                  3335
475 15 250  CLEAR1 DCW   #3                                 3  3119                      58
476 16 010  CLEAR3       #3                                 3  3122                      59
477 16 020  SBCALL       @.G0@                              3  3125                      59
478 16 030  YY0          @.Y0@                              3  3128                      59
479 16 040  YY1          @.Y1@                              3  3131                      59
480 16 050  ZZ5          @.Z5@                              3  3134                      59
481 16 060  ZZ6          @.Z6@                              3  3137                      59
482 16 070  HH1          @.H1@                              3  3140                      59
483 16 080  II9          @.I9@                              3  3143                      60
484 16 090  HH0          @.H0@                              3  3146                      60
485 16 100  GIVOP        @*16@                              3  3149                      60
486 16 110  ONE          @0000001@                          6  3155                      60
487 16 120  TEMP6        #6                                 6  3161                      60
488 16 130  TEMP7        #6                                 6  3167                      60
489 16 140  VEOP         @.EP@                              3  3170                      60
490 16 150  AA1          @.A0@                              3  3173                      61
491 16 160  AA2          @.A1@                              3  3176                      61
492 16 170  AA3          @.A2@                              3  3179                      61
493 16 180  FF4          @.F4@                              3  3182                      61
494 16 190  FF5          @.F5@                              3  3185                      61
495 16 200  FF6          @.F6@                              3  3188                      61
496 16 210  FF7          @.F7@                              3  3191                      61
497 16 220  MESS1        @.Q4@                              3  3194                      62
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  MESS2         @.Q5@                                    3  3197                      62
499 16 240  MESS9         @.R2@                                    3  3200                      62
500 16 250  MESS12        @.R5@                                    3  3203                      62
501 17 010  MESS15        @.R8@                                    3  3206                      62
502 17 020  MESS19        @.X9@                                    3  3209                      62
503 17 030  SY            #3                                       3  3212                      62
504 17 040  MCSEP         @.MC@                                    3  3215                      63
505 17 050  PCT           @%@                                      1  3216                      63
506 17 060  VOP           @.OP@                                    3  3219                      63
507 17 070  NULL   EQU    ONE-3                                       3152
508 17 080  OPR    DCW    #3                                       3  3222                      63
509 17 090  INPUT1 DA     1X45                                        3223  3267                63
510 17 100  NM1           1,3                                         3225        FIELD         63
511 17 110  SIZE1         4,9                                         3231        FIELD         63
512 17 120  DEC1          10,12                                       3234        FIELD         64
513 17 130  CL1           13,15                                       3237        FIELD         64
514 17 140  WM1           16,18                                       3240        FIELD         64
515 17 150  TYPE1         19,21                                       3243        FIELD         64
516 17 160  JUST          22,24                                       3246        FIELD         64
517 17 170  EDIT          25,27                                       3249        FIELD         64
518 17 180  BLK           28,30                                       3252        FIELD         65
519 17 190  MASK          31,33                                       3255        FIELD         65
520 17 200  COBMSK        34,36                                       3258        FIELD         65
521 17 210  ED1           37,39                                       3261        FIELD         65
522 17 220  ED2           40,42                                       3264        FIELD         65
523 17 230  CHCNT         43,45                                       3267        FIELD         65
524 17 240  INPUT2 DA     1X45                                        3268  3312                66
525 17 250  NM2           1,3                                         3270        FIELD         66
526 18 010  SIZE2         4,9                                         3276        FIELD         66
527 18 020  DEC2          10,12                                       3279        FIELD         66
528 18 030  CL2           13,15                                       3282        FIELD         66
529 18 040  WM2           16,18                                       3285        FIELD         66
530 18 050  TYPE2         19,21                                       3288        FIELD         67
531 18 060  INPUT3 DA     1X15                                        3313  3327                67
532 18 070  NM3           1,3                                         3315        FIELD         67
533 18 080                4,6                                         3318        FIELD         67
534 18 090  SIZE3         7,9                                         3321        FIELD         67
535 18 100         DC     @%@                                      1  3328                      68
536 18 110  SW1    DCW    0                                        1  3329                      68
537 18 120  SW2    DC     0                                        1  3330                      68
538 18 130  SW3    DC     0                                        1  3331                      68
539 18 140  SW4    DCW    0                                        1  3332                      68
540 18 150  SW5    DC     0                                        1  3333                      68
541 18 160  SW6           0                                        1  3334                      68
542 18 170  SW88   DCW    0                                        1  3335                      68
543 18 180  NUMLB  EQU    *&1                                         3336
544 18 190         DCW    @.X1.X2%@                                7  3342                      68
545 18 200  NUMLB1 EQU    *&1                                         3343
546 18 210         DCW    @.P1.X0.X2.Y2%@                         13  3355                      69
547 18 220  NUMLB2 EQU    *&1                                         3356
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230         DCW   @.Y3.X2%@                                     7  3362                      69
549 18 240  L5     EQU   *&1                                              3363
550 18 250         DCW   @.N9.O0.O1%@                                  10  3372                      69
551 19 010  L6     EQU   *&1                                              3373
552 19 020         DCW   @.N9.O0.Q3%@                                  10  3382                      70
553 19 030  L25    EQU   *&1                                              3383
554 19 040         DCW   @.O1.O0%@                                      7  3389                      70
555 19 050  L26    EQU   *&1                                              3390
556 19 060         DCW   @.O3%@                                         4  3393                      70
557 19 070  L13    EQU   *&1                                              3394
558 19 080         DCW   @.O1%@                                         4  3397                      70
559 19 090  L4     EQU   *&1                                              3398
560 19 100         DCW   @.H4.I0.F0%@       NEGATIVE                   10  3407                      70
561 19 110  L4A    EQU   *&1                                              3408
562 19 120         DCW   @.H3.H8.I5.F0%@                 NEGATIVE       13  3420                      71
563 19 130  L30    EQU   *&1                                              3421
564 19 140         DCW   @.H4.H8.I5.F0%@                    POSITIVE    13  3433                      71
565 19 150  L30A   EQU   *&1                                              3434
566 19 160         DCW   @.H3.I0%@          POSITIVE                     7  3440                      71
567 19 170  TABLE  EQU   *&1                                              3441
568 19 180         DCW   &L4                                            3  3443  C98                 71
569 19 190               @$14@                                          3  3446                      71
570 19 200               &L4A                                           3  3449  D08                 72
571 19 210               @%14@                                          3  3452                      72
572 19 220               &L30                                           3  3455  D21                 72
573 19 230               @$12@                                          3  3458                      72
574 19 240               &L30A                                          3  3461  D34                 72
575 19 250               @%12@                                          3  3464                      72
576 20 010         LTORG                                                        3465
                   DCW   @12@                                           2  3466            LIT     72
                         @14@                                           2  3468            LIT     73
                         @.SB@                                          3  3471            LIT     73
                         @)15@                                          3  3474            LIT     73
       142               &TABLE                                         3  3477  D41       ADCON   73
                         &6                                             1  3478            LIT     73
                         @#@                                            1  3479            LIT     73
       199               &INPUT1                                        3  3482  B23       ADCON   73
                         @003@                                          3  3485            LIT     74
                         @00L@                                          3  3488            LIT     74
                         @00R@                                          3  3491            LIT     74
       254               &L5                                            3  3494  C63       ADCON   74
       259               &L6                                            3  3497  C73       ADCON   74
       268               &FF4                                           3  3500  A82       ADCON   74
       272               &FF5                                           3  3503  A85       ADCON   74
       278               &FF6                                           3  3506  A88       ADCON   75
                         @N@                                            1  3507            LIT     75
                         @YYK@                                          3  3510            LIT     75
                         @E@                                            1  3511            LIT     75
       335               &FF5                                           3  3514  A85       ADCON   75
       353               &L25                                           3  3517  C83       ADCON   75
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
       358          &L26                                          3  3520  C90         ADCON   75
       361          &L13                                          3  3523  C94         ADCON   76
       386          &L26                                          3  3526  C90         ADCON   76
       389          &L13                                          3  3529  C94         ADCON   76
       405          &NUMLB2                                       3  3532  C56         ADCON   76
       407          &NUMLB1                                       3  3535  C43         ADCON   76
       414          &NUMLB                                        3  3538  C36         ADCON   76
                    @.SD@                                         3  3541              LIT     76
                    @|@                                          1  3542              LIT     77
                    @%@                                          1  3543              LIT     77
577 20 020         ORG   3790                                          3790
578 20 030         DCW   @}@                                     1  3790                        78
579 20 040         END   GETT                                          / T00 080             79
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                      3
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1401 COBOL - I05 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I05						
102	1	020		CTL	631 11						
103	1	030	X1	EQU	89				0089		
104	1	040	X2	EQU	94				0094		
105	1	050	X3	EQU	99				0099		
106	1	060	PUTX	EQU	363				0363		
107	1	070	GETX	EQU	335				0335		
108	1	080	SUPER	EQU	351				0351		
109	1	090		ORG	1300				1300		
110	1	100	GETT	MRCM	BLANKS,ILIST			7	1300	P B33 B08	4
111	1	110		MRCM	BLANKS			4	1307	P B33	4
112	1	120	GETSY	B	GETX	GET UNTIL *$%		4	1311	B 335	4
113	1	130		DCW	&SY			3	1317	B75	4
114	1	140			&EOJ			3	1320	W12	4
115	1	150		C	SY,PASSSY			7	1321	C B75 W11	4
116	1	160		BE	GETSY2			5	1328	B T44 S	4
117	1	170		B	PUTX			4	1333	B 363	5
118	1	180		DCW	&SY			3	1339	B75	5
119	1	190		B	GETSY			4	1340	B T11	5
120	1	200	GETSY2	B	GETX			4	1344	B 335	5
121	1	210		DCW	&OPR			3	1350	?72	5
122	1	220			&EOJ			3	1353	W12	5
123	1	230		MLC	&TABLE,X2	LOOK UP TABLE		7	1354	M C71 094	5
124	1	240	LKPA	C	5&X2,OPR			7	1361	C 0!5 ?72	6
125	1	250		BE	LKP3			5	1368	B T92 S	6
126	2	010		BCE	LKP4,0&X2,%			8	1373	B U03 0!0 %	6
127	2	020		A	&6,X2			7	1381	A C72 094	6
128	2	030		B	LKPA			4	1388	B T61	6
129	2	040	LKP3	MLC	2&X2,GETTA&3			7	1392	M 0!2 V90	6
130	2	050		B	CONTIN			4	1399	B U22	7
131	2	060	LKP4	C	@?@,OPR-2			7	1403	C C73 ?70	7
132	2	070		BH	PASSMC			5	1410	B V91 U	7
133	2	080		MLC	&FREE,GETTA&3			7	1415	M C76 V90	7
134	2	090	CONTIN	B	GETX			4	1422	B 335	7
135	2	100		DCW	&SY			3	1428	B75	7
136	2	110			&EOJ			3	1431	W12	7
137	2	120		B	PUTX			4	1432	B 363	8
138	2	130		DCW	&PASSSY			3	1438	W11	8
139	2	140		B	OUTOP			4	1439	B W26	8
140	2	150		B	GETX			4	1443	B 335	8
141	2	160		DCW	&SW3			3	1449	C13	8
142	2	170			&EOJ			3	1452	W12	8
143	2	180		B	GETX			4	1453	B 335	8
144	2	190		DCW	&SW6			3	1459	C16	9
145	2	200			&EOJ			3	1462	W12	9
146	2	210		MLC	&INPUT1,X2	READ UNTIL MCSEP		7	1463	M C79 094	9
147	2	220	READ1	B	GETX			4	1470	B 335	9

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          DCW   &SY                                        3  1476  B75                  9
149  2 240          DCW   &EOJ                                       3  1479  W12                  9
150  2 250          BCE   *&5,SY-2,.                                 8  1480  B U92 B73 .          9
151  3 010          B     READ2                                      4  1488  B V13               10
152  3 020          B     PUTX                                       4  1492  B 363               10
153  3 030          DCW   &SY                                        3  1498  B75                 10
154  3 040          B     READ1                                      4  1499  B U70               10
155  3 050  READ3   B     GETX                                       4  1503  B 335               10
156  3 060          DCW   &SY                                        3  1509  B75                 10
157  3 070          DCW   &EOJ                                       3  1512  W12                 10
158  3 080  READ2   C     SY,MCSEP                                   7  1513  C B75 B81           11
159  3 090          BE    GETSW                                      5  1520  B V43 S             11
160  3 100          MLC   SY,2&X2                                    7  1525  M B75 0!2           11
161  3 110          A     @003@,X2                                   7  1532  A C82 094           11
162  3 120          B     READ3                                      4  1539  B V03               11
163  3 130  GETSW   B     RPGT                                       4  1543  B P98               11
164  3 140          BCE   GETTA,TYPE1-2,1                           8  1547  B V87 ?91 1         12
165  3 150          MLC   DEC3,TEMP                                  7  1555  M A74 B91           12
166  3 160          MLC   DEC2,DEC3                                  7  1562  M A29 A74           12
167  3 170          B     DEC                                        4  1569  B O49               12
168  3 180          MZ    DECSW,SW2                                  7  1573  Y B88 C12           12
169  3 190          MLC   TEMP,DEC3                                  7  1580  M B91 A74           13
170  3 200  GETTA   B     *                 PERFORM MATRIX           4  1587  B V90               13
171  3 210  PASSMC  B     PUTX              PASS THRU MACRO          4  1591  B 363               13
172  3 220          DCW   &PASSSY                                    3  1597  W11                 13
173  3 230          B     PUTX                                       4  1598  B 363               13
174  3 240          DCW   &OPR                                       3  1604  ?72                 13
175  3 250          B     GETSY                                      4  1605  B T11               13
176  4 010  PASSSY  DCW   @*$*@                                     3  1611                      14
177  4 020  EOJ     B     PUTX                                       4  1612  B 363               14
178  4 030          DCW   &VEOP                                      3  1618  B84                 14
179  4 040          B     SUPER                                      4  1619  B 351               14
180  4 050          DCW   @I06@                                      3  1625                      14
181  4 060  OUTOP   SBR   OUTBB&3            PUTOUT OPR, VOP          4  1626  H W47               14
182  4 070          B     PUTX                                       4  1630  B 363               14
183  4 080          DCW   &OPR                                       3  1636  ?72                 15
184  4 090          B     PUTX                                       4  1637  B 363               15
185  4 100          DCW   &VOP                                       3  1643  B87                 15
186  4 110  OUTBB   B     *                                          4  1644  B W47               15
187  4 120  MNADD   BWZ   MN1,NM3-1,2                               8  1648  V W90 A64 2         15
188  4 130          BWZ   *&5,SW2,K                                 8  1656  V W68 C12 K         15
189  4 140          B     *&8                                        4  1664  B W75               15
190  4 150          MLC   DEC2,DECACC                                7  1668  M A29 C03           16
191  4 160          B     GTSTG                                      4  1675  B K74               16
192  4 170          MLC   ZERO-2,SW6                                7  1679  M B76 C16           16
193  4 180          B     *&5                                        4  1686  B W94               16
194  4 190  MN1     B     CKDEC3                                     4  1690  B M39               16
195  4 200          BCE   MNADD2,SW6,0                             8  1694  B X21 C16 0         16
196  4 210          BCE   MAINBB,SW6,3                             8  1702  B Z44 C16 3         17
197  4 220          MLC   @1@,GNASW                                7  1710  M C83 C07           17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          B     MAINBB                                     4  1717  B Z44               17
199  4 240  MNADD2  BWZ   SETSW,NM3-1,2                             8  1721  V K38 A64 2         17
200  4 250          B     MAINBB                                     4  1729  B Z44               17
201  5 010  AUG     MLC   GNASW,SW5                                 7  1733  M C07 C15           17
202  5 020          BWZ   *&5,SW2,2                                  8  1740  V X52 C12 2         18
203  5 030          B     AUG5                                       4  1748  B Y29               18
204  5 040          BWZ   AUG5,SW3,S                                8  1752  V Y29 C13 S         18
205  5 050          BCE   AUG4,ED2,K                                 8  1760  B X80 A44 K         18
206  5 060          BCE   AUG4,MASK2,K                               8  1768  B X80 A50 K         18
207  5 070          B     AUG1A                                      4  1776  B Y63               19
208  5 080  AUG4    BCE   AUG4B,ARITSW,E                            8  1780  B X92 C08 E         19
209  5 090          B     AUG4A                                      4  1788  B X99               19
210  5 100  AUG4B   MLC   @1@,ARITSW                               7  1792  M C83 C08           19
211  5 110  AUG4A   MLC   NM2,NM3                                   7  1799  M A20 A65           19
212  5 120          BWZ   *&5,NM2-1,2                              8  1806  V Y18 A19 2         19
213  5 130          B     MAINBB                                     4  1814  B Z44               20
214  5 140          MLC   @A@,MLTSW                                7  1818  M C84 C09           20
215  5 150          B     MAINBB                                     4  1825  B Z44               20
216  5 160  AUG5    BWZ   AUG1A,NM2-1,2                            8  1829  V Y63 A19 2         20
217  5 170          BWZ   *&5,SW2,S                                8  1837  V Y49 C12 S         20
218  5 180          B     AUG2                                       4  1845  B Z21               20
219  5 190          B     UPDAT                                      4  1849  B L21               20
220  5 200          DCW   &NM2                                       3  1855  A20                 21
221  5 210                &DEC1                                      3  1858  ?84                 21
222  5 220          B     AUG2                                       4  1859  B Z21               21
223  5 230  AUG1A   MRCM  GNSKEL,NM2-2                             7  1863  P B45 A18           21
224  5 240          MLC   RESDEC,K2                                 7  1870  M C06 B25           21
225  5 250          BCE   AUG1B,GNASW,1                            8  1877  B Z03 C07 1         21
226  6 010          A     @1@,CLGNSW                                 7  1885  A C83 C10           21
227  6 020          MLC   @1@,GNASW                                  7  1892  M C83 C07           22
228  6 030          B     AUG3                                       4  1899  B Z37               22
229  6 040  AUG1B   MLC   RESDEC,DEC3                              7  1903  M C06 A74           22
230  6 050          B     DEC                                        4  1910  B O49               22
231  6 060          MZ    DECSW,SW2                                  7  1914  Y B88 C12           22
232  6 070  AUG2    BWZ   AUG4A,SW2,2                              8  1921  V X99 C12 2         22
233  6 080          BWZ   MAINBB,SW2,K                             8  1929  V Z44 C12 K         23
234  6 090  AUG3    MLC   DEC1,RESDEC                              7  1937  M ?84 C06           23
235  6 100  MAINBB  B     OUTPAR                                     4  1944  B P19               23
236  6 110  MNMLT   BWZ   *&5,NM3-1,2                              8  1948  V Z60 A64 2         23
237  6 120          B     MNMLT1                                     4  1956  B !49               23
238  6 130          MLC   DEC1,TEMP                                7  1960  M ?84 B91           23
239  6 140          A     DEC2,TEMP                                  7  1967  A A29 B91           24
240  6 150          BCE   MLT1A,ED3,E                              8  1974  B !15 A89 E         24
241  6 160          MLC   DEC1,GNSKEL&11                           7  1982  M ?84 B56           24
242  6 170          MLC   TEMP,DEC1                                7  1989  M B91 ?84           24
243  6 180          B     DEC                                        4  1996  B O49               24
244  6 190          MLC   GNSKEL&11,DEC1                           7  2000  M B56 ?84           25
245  6 200          BWZ   OUTPAR,DECSW,2                           8  2007  V P19 B88 2         25
246  6 210  MLT1A   B     SETSW                                      4  2015  B K38               25
247  6 220          MLC   TEMP,RESDEC                              7  2019  M B91 C06           25
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          C     RESDEC,@021@                                7  2026  C C06 C87           25
249  6 240          BH    OUTPAR                                      5  2033  B P19 U             25
250  6 250          MLC   @020@,RESDEC                                7  2038  M C90 C06           26
251  7 010          B     OUTPAR                                      4  2045  B P19               26
252  7 020  MNMLT1  A     DEC2,DECACC                                 7  2049  A A29 C03           26
253  7 030          C     DECACC,@021@                                7  2056  C C03 C87           26
254  7 040          BH    *&8                                         5  2063  B !75 U             26
255  7 050          MLC   @020@,DECACC                                7  2068  M C90 C03           26
256  7 060          MZ    @Z@,SW2           FORCE ZONE ON SW2         7  2075  Y C91 C12           27
257  7 070          B     MNDIV1&7                                    4  2082  B K23               27
258  7 080  MNEXP   MLC   SIZE3,OP                                    7  2086  M A71 B28           27
259  7 090          MLC   @010@,RESDEC                                7  2093  M C94 C06           27
260  7 100          MLC   @010@                                       4  2100  M C94               27
261  7 110          BWZ   MLT1C,NM3-1,2                               8  2104  V J20 A64 2         27
262  7 120          B     GTSTG                                       4  2112  B K74               28
263  7 130          B     OUTPAR                                      4  2116  B P19               28
264  7 140  MLT1C   B     SETSW                                       4  2120  B K38               28
265  7 150          MLC   @1@,CLGNSW                                 7  2124  M C83 C10           28
266  7 160          B     OUTPAR                                      4  2131  B P19               28
267  7 170  MNDIV   BWZ   *&5,NM3-1,2                               8  2135  V J47 A64 2         28
268  7 180          B     MNDIV1                                      4  2143  B K16               28
269  7 190          BCE   DIV1A,ED3,E                                 8  2147  B J87 A89 E         29
270  7 200          B     DEC                                         4  2155  B O49               29
271  7 210          BWZ   *&5,SW2,2                                 8  2159  V J71 C12 2         29
272  7 220          B     DIV1A                                       4  2167  B J87               29
273  7 230          C     SIZE3,SIZE1                                 7  2171  C A71 ?81           29
274  7 240          BH    DIV1A                                       5  2178  B J87 U             29
275  7 250          B     OUTPAR                                      4  2183  B P19               30
276  8 010  DIV1A   MLC   @E@,ARITSW                                 7  2187  M C95 C08           30
277  8 020          B     SETSW                                       4  2194  B K38               30
278  8 030          MLC   DEC1,RESDEC                                7  2198  M ?84 C06           30
279  8 040          A     @1@,RESDEC                                  7  2205  A C83 C06           30
280  8 050          B     OUTPAR                                      4  2212  B P19               30
281  8 060  MNDIV1  A     @1@,DECACC                                  7  2216  A C83 C03           31
282  8 070          MZ    @Z@,SW2           FORCE ZONE ON SW2         7  2223  Y C91 C12           31
283  8 080          B     GTSTG                                       4  2230  B K74               31
284  8 090          B     OUTPAR                                      4  2234  B P19               31
285  8 100  SETSW   SBR   SETSWB&3                                    4  2238  H K73               31
286  8 110          MLC   @E@,ARITSW                                 7  2242  M C95 C08           31
287  8 120          MLC   @1@,GNASW                                   7  2249  M C83 C07           32
288  8 130          MLC   @1@,MLTSW                                   7  2256  M C83 C09           32
289  8 140          MRCM  GNSKEL,NM3-2                                7  2263  P B45 A63           32
290  8 150  SETSWB  B     *                                           4  2270  B K73               32
291  8 160  GTSTG   SBR   ADSLBB&3          ADD TO GT AREA            4  2274  H L20               32
292  8 170          MLC   RMLOC,X1                                    7  2278  M M38 089           32
293  8 180          MRCM  0&X1,6&X1                                   7  2285  P 0|0 0|6           33
294  8 190          MLC   DECACC,5&X1                                 7  2292  M C03 0|5           33
295  8 200          MLC   NM3                                         4  2299  M A65               33
296  8 210          MLC   X1,RMLOC                                    7  2303  M 089 M38           33
297  8 220          A     @006@,RMLOC                                 7  2310  A C98 M38           33
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  ADSLBB B     *                                             4  2317  B L20              33
299  8 240  UPDAT  SBR   X1              UPDATE DEC IN GT AREA         4  2321  H 089              34
300  8 250         MLC   @1@,RP11                                      7  2325  M C83 M35          34
301  9 010         B     *&5                                           4  2332  B L40              34
302  9 020  RPDEC  SBR   X1              GET DEC FROM GT AREA          4  2336  H 089              34
303  9 030         MLC   GTLIST,X3                                     7  2340  M C19 099          34
304  9 040         MLC   2&X1,X2                                       7  2347  M 0|2 094          34
305  9 050  RPDC2  C     2&X3,0&X2                                     7  2354  C 0?2 0!0          35
306  9 060         BE    RPDC1                                         5  2361  B L77 S            35
307  9 070         A     @006@,X3                                      7  2366  A C98 099          35
308  9 080         B     RPDC2                                         4  2373  B L54              35
309  9 090  RPDC1  BCE   RPUP,RP11,1                                   8  2377  B M03 M35 1        35
310  9 100         MLC   5&X1,*&7                                      7  2385  M 0|5 L98          35
311  9 110         MLC   5&X3,*                                        7  2392  M 0?5 L98          36
312  9 120         B     RPDC3                                         4  2399  B M17              36
313  9 130  RPUP   MLC   5&X1,*&4                                      7  2403  M 0|5 M13          36
314  9 140         MLC   *,5&X3                                       7  2410  M M16 0?5          36
315  9 150  RPDC3  A     @006@,X1                                      7  2417  A C98 089          36
316  9 160         MLC   ZERO,RP11                                     7  2424  M B78 M35          36
317  9 170         B     0&X1                                          4  2431  B 0|0              37
318  9 180  RP11   DCW   0                                             1  2435                     37
319  9 190  RMLOC        &GTORG                                        3  2438  F00                37
320  9 200  CKDEC3 SBR   CKDCBB&3         COMPARE DEC1 AND DEC2 WITH DEC3  4  2439  H O48          37
321  9 210         C     ED3,@K@                                       7  2443  C A89 C99          37
322  9 220         BU    CKDC3                                         5  2450  B N07 /            37
323  9 230         B     DEC                                           4  2455  B O49              37
324  9 240         MZ    DECSW,SW6                                     7  2459  Y B88 C16          38
325  9 250         MLC   DEC1,TEMP                                     7  2466  M ?84 B91          38
326 10 010         MLC   DEC2,DEC1                                     7  2473  M A29 ?84          38
327 10 020         B     DEC                                           4  2480  B O49              38
328 10 030         MLC   TEMP,DEC1                                     7  2484  M B91 ?84          38
329 10 040         BWZ   CKDC1,SW6,2                                   8  2491  V N81 C16 2        39
330 10 050  CKDC3A BWZ   CKDC4,DECSW,2                                 8  2499  V N51 B88 2        39
331 10 060  CKDC3  MLC   ZERO-2,SW6                                    7  2507  M B76 C16          39
332 10 070         MLC   @E@,ARITSW                                    7  2514  M C95 C08          39
333 10 080         MLC   DEC1,RESDEC                                   7  2521  M ?84 C06          39
334 10 090         BWZ   *&5,SW2,K                                     8  2528  V N40 C12 K        40
335 10 100         B     CKDCBB                                        4  2536  B O45              40
336 10 110         MLC   DEC2,RESDEC                                   7  2540  M A29 C06          40
337 10 120         B     CKDCBB                                        4  2547  B O45              40
338 10 130  CKDC4  C     SIZE3,SIZE2                                   7  2551  C A71 A26          40
339 10 140         BH    CKDC3                                         5  2558  B N07 U            40
340 10 150         MLC   @1@,SW6                                      7  2563  M C83 C16          41
341 10 160         MLC   DEC1,RESDEC                                   7  2570  M ?84 C06          41
342 10 170         B     CKDCBB                                        4  2577  B O45              41
343 10 180  CKDC1  C     SIZE3,SIZE1                                   7  2581  C A71 ?81          41
344 10 190         BH    CKDC3A                                        5  2588  B M99 U            41
345 10 200         BWZ   CKCDZ,DECSW,2                                 8  2593  V O19 B88 2        41
346 10 210  CKDC1A MLC   @2@,SW6                                      7  2601  M D00 C16          42
347 10 220         MLC   DEC2,RESDEC                                   7  2608  M A29 C06          42
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          B     CKDCBB                                       4  2615  B O45               42
349 10 240  CKCDZ   C     SIZE3,SIZE2                                  7  2619  C A71 A26           42
350 10 250          BH    CKDC1A                                       5  2626  B O01 U             42
351 11 010          MLC   @3@,SW6                                     7  2631  M D01 C16           42
352 11 020          MLC   DEC1,RESDEC                                  7  2638  M ?84 C06           43
353 11 030  CKDCBB B     *                                            4  2645  B O48               43
354 11 040  DEC    SBR   DECBB&3                                      4  2649  H P18               43
355 11 050          MZ    BLKS,DECSW                                   7  2653  Y B35 B88           43
356 11 060          ZA    DEC1,TEMP7                                   7  2660  ? ?84 C00           43
357 11 070          S     DEC3,TEMP7                                   7  2667  S A74 C00           43
358 11 080          MCS   TEMP7,TEMP6                                  7  2674  Z C00 B97           44
359 11 090          BCE   DECBB,TEMP6,                                8  2681  B P15 B97           44
360 11 100          BM    DECB,TEMP7                                   8  2689  V P08 C00 K         44
361 11 110          MZ    @Z@,DECSW                                    7  2697  Y C91 B88           44
362 11 120          B     DECBB                                        4  2704  B P15               44
363 11 130  DECB    MZ    @R@,DECSW                                    7  2708  Y D02 B88           45
364 11 140  DECBB  B     *                                            4  2715  B P18               45
365 11 150  OUTPAR B     PUTX                                         4  2719  B 363               45
366 11 160          DCW   &CLGNSW                                      3  2725  C10                 45
367 11 170          MLC   GNASW,SW1                                    7  2726  M C07 C11           45
368 11 180  OUTP2  B     PUTX                                         4  2733  B 363               45
369 11 190          DCW   &SW3                                        3  2739  C13                 45
370 11 200  OUTP1  B     PUTX                                         4  2740  B 363               46
371 11 210          DCW   &SW6                                        3  2746  C16                 46
372 11 220          MLC   &INPUT1,X3          PUTOUT PARAMETERS       7  2747  M D05 099           46
373 11 230  PUTT1  BCE   PUTMC,0&X3,%                                 8  2754  B P87 0?0 %         46
374 11 240          MLC   2&X3,SY                                      7  2762  M 0?2 B75           46
375 11 250          B     PUTX                                         4  2769  B 363               46
376 12 010          DCW   &SY                                         3  2775  B75                 46
377 12 020          A     @0003@,X3                                    7  2776  A C82 099           47
378 12 030          B     PUTT1                                        4  2783  B P54               47
379 12 040  PUTMC  B     PUTX                                         4  2787  B 363               47
380 12 050          DCW   &MCSEP                                       3  2793  B81                 47
381 12 060          B     GETT                                         4  2794  B T00               47
382 12 070  RPGT   SBR   RPGTBB&3           ARE NAMES INTERMEDIATE RESULTS  4  2798  H R11           47
383 12 080          MLC   ZERO,K2                                      7  2802  M B78 B25           47
384 12 090          MLC   ZERO                                         4  2809  M B78               48
385 12 100          C     NM1-2,@Z@                                    7  2813  C ?73 C91           48
386 12 110          BU    RPGT2               IF YES                   5  2820  B Q57 /             48
387 12 120          BWZ   RPGT2,NM1-1,2                                8  2825  V Q57 ?74 2         48
388 12 130          MRCM  GNSKEL&3,NM1&1                               7  2833  P B48 ?76           48
389 12 140          B     RPDEC                                        4  2840  B L36               48
390 12 150          DCW   &NM1                MODIFY DECIMALS          3  2846  ?75                 48
391 12 160                &DEC1                                        3  2849  ?84                 49
392 12 170          MLC   DEC1,K1                                     7  2850  M ?84 B22           49
393 12 180  RPGT2  C     NM2-2,@Z@                                    7  2857  C A18 C91           49
394 12 190          BU    RPGT3                                        5  2864  B R01 /             49
395 12 200          BWZ   RPGT3,NM2-1,2                                8  2869  V R01 A19 2         49
396 12 210          MRCM  GNSKEL&3,NM2&1                               7  2877  P B48 A21           49
397 12 220          B     RPDEC                                        4  2884  B L36               50
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          DCW   &NM2                                        3  2890  A20                 50
399 12 240                &DEC2                                       3  2893  A29                 50
400 12 250          MLC   DEC2,K2                                     7  2894  M A29 B25           50
401 13 010  RPGT3   MLC   DEC1,DECACC                                 7  2901  M ?84 C03           50
402 13 020  RPGTBB  B     *                                           4  2908  B R11               50
403 13 030  LSTMC   MLC   GNASW,SW4                                   7  2912  M C07 C14           50
404 13 040          B     PUTX                                        4  2919  B 363               51
405 13 050          DCW   &CLGNSW                                    3  2925  C10                 51
406 13 060          BCE   LSTMC1,GNASW,0                             8  2926  B R96 C07 0         51
407 13 070          MRCM  GNSKEL,NM2-2                              7  2934  P B45 A18           51
408 13 080          BM    *&8,RESDEC                                  8  2941  V R56 C06 K         51
409 13 090          MZ    @ @,RESDEC                                  7  2949  Y D06 C06           51
410 13 100          MLC   RESDEC,DEC2                                7  2956  M C06 A29           52
411 13 110          MLC   RESDEC,DEC3                                7  2963  M C06 A74           52
412 13 120          B     DEC                                         4  2970  B O49               52
413 13 130          MZ    DECSW,SW2                                   7  2974  Y B88 C12           52
414 13 140          BWZ   LSTMC1,DECSW,2                            8  2981  V R96 B88 2         52
415 13 150          MLC   RESDEC,K2                                  7  2989  M C06 B25           53
416 13 160  LSTMC1  MLC   GNASW,SW1                                   7  2996  M C07 C11           53
417 13 170          B     PUTX                                        4  3003  B 363               53
418 13 180          DCW   &SW3                                       3  3009  C13                 53
419 13 190  FREE    BCE   OUTPAR,OPR-2,/                            8  3010  B P19 ?70 /         53
420 13 200          MLC   GTLIST,X1          FREE GT AREA           7  3018  M C19 089           53
421 13 210          CS    99&X1                                       4  3025  / 0Z9               54
422 13 220          MLC   @|@,0&X1                                    7  3029  M D07 0|0           54
423 13 230          MLC   X1,RMLOC                                    7  3036  M 089 M38           54
424 13 240          MLC   ZERO,CLGNSW                                 7  3043  M B78 C10           54
425 13 250          MLC   ZERO                                        4  3050  M B78               54
426 14 010          MLC   ZERO                                        4  3054  M B78               54
427 14 020          BCE   OUTP1,OPR-1,M                              8  3058  B P40 ?71 M         55
428 14 030          B     OUTP2                                       4  3066  B P33               55
429 14 040  OPR     DCW   #3                                         3  3072                      55
430 14 050  INPUT1  EQU   *&1                                          3073
431 14 060  NM1     DCW   #3                                         3  3075                      55
432 14 070  SIZE1          #6                                        6  3081                      55
433 14 080  DEC1           #3                                        3  3084                      55
434 14 090  CL1            #3                                        3  3087                      55
435 14 100  WM1            #3                                        3  3090                      56
436 14 110  TYPE1          #3                                        3  3093                      56
437 14 120  JUST           #3                                        3  3096                      56
438 14 130  ED1            #3                                        3  3099                      56
439 14 140  BLK            #3                                        3  3102                      56
440 14 150  MASK           #3                                        3  3105                      56
441 14 160  COBMSK         #3                                        3  3108                      56
442 14 170  EDIT1A         #3                                        3  3111                      57
443 14 180  EDIT1B         #3                                        3  3114                      57
444 14 190  CHCNT          #3                                        3  3117                      57
445 14 200  INPUT2  EQU   *&1                                          3118
446 14 210  NM2     DCW   #3                                         3  3120                      57
447 14 220  SIZE2          #6                                        6  3126                      57
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230  DEC2         #3                                           3  3129                      57
449 14 240  CL2          #3                                           3  3132                      57
450 14 250  WM2          #3                                           3  3135                      58
451 15 010  TYPE2        #3                                           3  3138                      58
452 15 020  JUST2        #3                                           3  3141                      58
453 15 030  ED2          #3                                           3  3144                      58
454 15 040  BLK2         #3                                           3  3147                      58
455 15 050  MASK2        #3                                           3  3150                      58
456 15 060  COB22        #3                                           3  3153                      58
457 15 070  EDIT2A       #3                                           3  3156                      59
458 15 080  EDIT2B       #3                                           3  3159                      59
459 15 090  CHCNT2       #3                                           3  3162                      59
460 15 100  INPUT3 EQU   *&1                                             3163
461 15 110  NM3    DCW   #3                                           3  3165                      59
462 15 120  SIZE3        #6                                           6  3171                      59
463 15 130  DEC3         #3                                           3  3174                      59
464 15 140  CL3          #3                                           3  3177                      59
465 15 150  WM3          #3                                           3  3180                      60
466 15 160  TYPE3        #3                                           3  3183                      60
467 15 170  JUST3        #3                                           3  3186                      60
468 15 180  ED3          #3                                           3  3189                      60
469 15 190  BLK3         #3                                           3  3192                      60
470 15 200  MASK3        #3                                           3  3195                      60
471 15 210  COB3         #3                                           3  3198                      60
472 15 220  EDIT3A       #3                                           3  3201                      61
473 15 230  EDIT3B       #3                                           3  3204                      61
474 15 240  CHCNT3       #3                                           3  3207                      61
475 15 250  I            #3                                           3  3210                      61
476 16 010  I1           #3                                           3  3213                      61
477 16 020  I2           #3                                           3  3216                      61
478 16 030  I3           #3                                           3  3219                      61
479 16 040  K1           #3                                           3  3222                      62
480 16 050  K2           #3                                           3  3225                      62
481 16 060  OP           #3                                           3  3228                      62
482 16 070  GL           #3                                           3  3231                      62
483 16 080  PCT          @%@                                          1  3232                      62
484 16 090  BLANKS EQU   *&1                                             3233
485 16 100           DCW #11                                         11  3243                      62
486 16 110               @|@                                          1  3244                      62
487 16 120  BLKS   EQU   BLANKS&2                                        3235
488 16 130  ILIST  EQU   I-2                                             3208
489 16 140  GNSKEL EQU   *&1                                             3245
490 16 150           DCW @GNN000020     9001  E  K  K|@                28  3272                      63
491 16 160  SY     DCW   #3                                           3  3275                      63
492 16 170  ZERO         000                                          3  3278                      63
493 16 180  MCSEP        @.MC@                                        3  3281                      63
494 16 190  VEOP         @.EP@                                        3  3284                      64
495 16 200  VOP          @.OP@                                        3  3287                      64
496 16 210  DECSW        0                                            1  3288                      64
497 16 220  TEMP         #3                                           3  3291                      64
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  TEMP6         #6                                        6  3297                      64
499 16 240  TEMP7         #3                                        3  3300                      64
500 16 250  DECACC DCW    000                                       3  3303                      64
501 17 010  RESDEC        000                                       3  3306                      65
502 17 020  GNASW         0                                         1  3307                      65
503 17 030  ARITSW        0                                         1  3308                      65
504 17 040  MLTSW  DC     0                                         1  3309                      65
505 17 050  CLGNSW DC     0                                         1  3310                      65
506 17 060  SW1    DCW    0                                         1  3311                      65
507 17 070  SW2    DC     0                                         1  3312                      65
508 17 080  SW3    DC     0                                         1  3313                      65
509 17 090  SW4    DCW    0                                         1  3314                      65
510 17 100  SW5    DC     0                                         1  3315                      65
511 17 110  SW6           0                                         1  3316                      65
512 17 120  GTLIST DCW    &GTORG                                    3  3319  F00                 65
513 17 130  TABLE  EQU    *&1                                          3320
514 17 140         DCW    &MNADD                                    3  3322  W48                 65
515 17 150                @  &@                                     3  3325                      66
516 17 160                &MNADD                                    3  3328  W48                 66
517 17 170                @  -@                                     3  3331                      66
518 17 180                &AUG                                      3  3334  X33                 66
519 17 190                @)98@                                     3  3337                      66
520 17 200                &AUG                                      3  3340  X33                 66
521 17 210                @)97@                                     3  3343                      66
522 17 220                &MNEXP                                    3  3346  !86                 67
523 17 230                @ **@                                     3  3349                      67
524 17 240                &MNMLT                                    3  3352  Z48                 67
525 17 250                @  *@                                     3  3355                      67
526 18 010                &MNDIV                                    3  3358  J35                 67
527 18 020                @  /@                                     3  3361                      67
528 18 030                &LSTMC                                    3  3364  R12                 67
529 18 040                @.ME@                                     3  3367                      68
530 18 050                @%@                                       1  3368                      68
531 18 060         LTORG                                                   3369
       123         DCW    &TABLE                                    3  3371  C20         ADCON   68
                          &6                                        1  3372              LIT     68
                          @?@                                       1  3373              LIT     68
       133                &FREE                                     3  3376  ?10         ADCON   68
       146                &INPUT1                                   3  3379  ?73         ADCON   68
                          @003@                                     3  3382              LIT     69
                          @1@                                       1  3383              LIT     69
                          @A@                                       1  3384              LIT     69
                          @021@                                     3  3387              LIT     69
                          @020@                                     3  3390              LIT     69
                          @Z@                                       1  3391              LIT     69
                          @010@                                     3  3394              LIT     69
                          @E@                                       1  3395              LIT     70
                          @006@                                     3  3398              LIT     70
                          @K@                                       1  3399              LIT     70
                          @2@                                       1  3400              LIT     70
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @3@                                       1  3401              LIT     70
                         @R@                                       1  3402              LIT     70
       372               &INPUT1                                   3  3405  ?73         ADCON   70
                         @ @                                       1  3406              LIT     71
                         @|@                                       1  3407              LIT     71
532 18 070         ORG   3600                                          3600
533 18 080  GTORG  EQU   *&1                                        3600
534 18 090         DC    @|@                                       1  3600                      72
535 18 100         LTORG                                             3601
536 18 110         ORG   3790                                          3790
537 18 120         DCW   @}@                                       1  3790                      73
538 18 130         END   GETT                                          / T00 080               74
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                                1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0                      2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039              ,0010011040                     3
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000     JOB   1401 COBOL - I06
 102  1 020          CTL   631 11
 103  1 030  X1      EQU   89                                              0089
 104  1 040  X2      EQU   94                                              0094
 105  1 050  X3      EQU   99                                              0099
 106  1 060  GETX    EQU   335                                             0335
 107  1 070  PUTX    EQU   363                                             0363
 108  1 080  SUPER   EQU   351                                             0351
 109  1 090  L40     EQU   1300                                            1300
 110  1 100  L41     EQU   L40&7                                           1307
 111  1 110  L42     EQU   L41&13                                          1320
 112  1 120  L43     EQU   L42&16                                          1336
 113  1 130          ORG   1300                                                  1300
 114  1 140  GETT    EQU   *&1                                             1300
 115  1 150  GETSY   B     GETX              GET UNTIL *$%             4   1300  B 335               4
 116  1 160          DCW   &SY                                       3   1306  B20                 4
 117  1 170                &EOJ                                      3   1309  U35                 4
 118  1 180          C     SY,PASSSY                                 7   1310  C B20 U34           4
 119  1 190          BE    GETSY2                                    5   1317  B T33 S             4
 120  1 200          B     PUTX                                      4   1322  B 363               4
 121  1 210          DCW   &SY                                       3   1328  B20                 4
 122  1 220          B     GETSY                                     4   1329  B T00               5
 123  1 230  GETSY2  B     GETX                                      4   1333  B 335               5
 124  1 240          DCW   &OPR                                      3   1339  ?48                 5
 125  1 250                &EOJ                                      3   1342  U35                 5
 126  2 010          B     GETX                                      4   1343  B 335               5
 127  2 020          DCW   &SY                                       3   1349  B20                 5
 128  2 030                &EOJ                                      3   1352  U35                 5
 129  2 040          BCE   ADD,OPR,&                                 8   1353  B V44 ?48 &         6
 130  2 050          BCE   MINUS,OPR,-                               8   1361  B W58 ?48 -         6
 131  2 060          BCE   AUG,OPR-1,9                               8   1369  B X91 ?47 9         6
 132  2 070          BCE   MLT,OPR,*                                 8   1377  B !01 ?48 *         6
 133  2 080          BCE   DIV,OPR,/                                 8   1385  B K25 ?48 /         7
 134  2 090          BCE   LSTMC,OPR-1,M                             8   1393  B N92 ?47 M         7
 135  2 100          BCE   SZERR,OPR-2,/                             8   1401  B M88 ?46 /         7
 136  2 110          BCE   RELAT,OPR-2,,                             8   1409  B P48 ?46 ,         7
 137  2 120  PASSMC  B     PUTX              PASS THRU MACRO           4   1417  B 363               7
 138  2 130          DCW   &PASSSY                                    3   1423  U34                 7
 139  2 140          B     OUTOP                                     4   1424  B Q64               8
 140  2 150          B     GETSY                                     4   1428  B T00               8
 141  2 160  PASSSY  DCW   @*$*@                                     3   1434                      8
 142  2 170  EOJ     B     PUTX                                      4   1435  B 363               8
 143  2 180          DCW   &VEOP                                     3   1441  B29                 8
 144  2 190          B     SUPER                                     4   1442  B 351               8
 145  2 200          DCW   @I07@                                     3   1448                      8
 146  2 210  READ    SBR   READBB&3                                  4   1449  H V24               9
 147  2 220          B     PUTX                                      4   1453  B 363               9
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          DCW   &PASSSY                                     3  1459  U34                 9
149  2 240  GETSY3  B     OUTOP                                       4  1460  B Q64               9
150  2 250          B     GETX                                        4  1464  B 335               9
151  3 010          DCW   &CLGNSW                                     3  1470  ?51                 9
152  3 020                &EOJ                                       3  1473  U35                 9
153  3 030          BCE   *&5,CLGNSW-2,.                             8  1474  B U86 ?49 .        10
154  3 040          B     ADD1                                        4  1482  B U97              10
155  3 050          B     PUTX                                        4  1486  B 363              10
156  3 060          DCW   &CLGNSW                                     3  1492  ?51                10
157  3 070          B     GETSY3&4                                    4  1493  B U64              10
158  3 080  ADD1    MLC   GNA,X2                                      7  1497  M Q59 094          10
159  3 090  READ1   B     GETX                                        4  1504  B 335              10
160  3 100          DCW   &SY                                         3  1510  B20                11
161  3 110                &EOJ                                       3  1513  U35                11
162  3 120          C     SY,MCSEP                                    7  1514  C B20 B32          11
163  3 130  READBB  BE    *                                           5  1521  B V25 S            11
164  3 140          MLC   SY,2&X2                                     7  1526  M B20 0!2          11
165  3 150          A     @003@,X2                                    7  1533  A C57 094          11
166  3 160          B     READ1                                       4  1540  B V04              11
167  3 170  ADD     B     READ                                        4  1544  B U49              12
168  3 180          C     SW6,ZERO                                    7  1548  C ?57 B43          12
169  3 190          BU    MNADD1                                      5  1555  B W09 /            12
170  3 200          BWZ   MN1,SW2,2                                   8  1560  V V87 ?53 2        12
171  3 210          BWZ   MN2,SW2,S                                   8  1568  V V98 ?53 S        12
172  3 220          MLC   &LBAD3,LAB                                  7  1576  M C60 B23          12
173  3 230          B     OUTLAB                                      4  1583  B ?21              13
174  3 240  MN1     MLC   &LBAD1,LAB                                  7  1587  M C63 B23          13
175  3 250          B     OUTLAB                                      4  1594  B ?21              13
176  4 010  MN2     MLC   &LBAD2,LAB                                  7  1598  M C66 B23          13
177  4 020          B     OUTLAB                                      4  1605  B ?21              13
178  4 030  MNADD1  BCE   MN4,SW6,1                                  8  1609  B W36 ?57 1        13
179  4 040          BCE   MN5,SW6,2                                  8  1617  B W47 ?57 2        14
180  4 050          MLC   &LBAD6,LAB                                  7  1625  M C69 B23          14
181  4 060          B     OUTLAB                                      4  1632  B ?21              14
182  4 070  MN4     MLC   &LBAD4,LAB                                  7  1636  M C72 B23          14
183  4 080          B     OUTLAB                                      4  1643  B ?21              14
184  4 090  MN5     MLC   &LBAD5,LAB                                  7  1647  M C75 B23          14
185  4 100          B     OUTLAB                                      4  1654  B ?21              15
186  4 110  MINUS   B     READ                                        4  1658  B U49              15
187  4 120          C     SW6,NULL-2                                  7  1662  C ?57 B43          15
188  4 130          BU    MIN                                         5  1669  B X42 /            15
189  4 140          BWZ   MIN1,SW2,2                                  8  1674  V X20 ?53 2        15
190  4 150          BWZ   MIN2,SW2,K                                  8  1682  V X31 ?53 K        15
191  4 160          BWZ   *&12,NM2-1,2                              8  1690  V X09 A04 2        16
192  4 170          MLC   &LBSB3,LAB                                  7  1698  M C78 B23          16
193  4 180          B     OUTLAB                                      4  1705  B ?21              16
194  4 190          MLC   &LBSB4,LAB                                  7  1709  M C81 B23          16
195  4 200          B     OUTLAB                                      4  1716  B ?21              16
196  4 210  MIN1    MLC   &LBSB1,LAB                                  7  1720  M C84 B23          16
197  4 220          B     OUTLAB                                      4  1727  B ?21              17
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  MIN2   MLC   &LBSB2,LAB                               7  1731  M C87 B23           17
199  4 240         B     OUTLAB                                   4  1738  B ?21               17
200  4 250  MIN    BCE   MIN5,SW6,1                               8  1742  B X69 ?57 1         17
201  5 010         BCE   MIN6,SW6,2                               8  1750  B X80 ?57 2         17
202  5 020         MLC   &LBSB7,LAB                               7  1758  M C90 B23           17
203  5 030         B     OUTLAB                                   4  1765  B ?21               18
204  5 040  MIN5   MLC   &LBSB5,LAB                               7  1769  M C93 B23           18
205  5 050         B     OUTLAB                                   4  1776  B ?21               18
206  5 060  MIN6   MLC   &LBSB6,LAB                               7  1780  M C96 B23           18
207  5 070         B     OUTLAB                                   4  1787  B ?21               18
208  5 080  AUG    B     READ                                     4  1791  B U49               18
209  5 090         BCE   SUB,OPR,7                                8  1795  B Z02 ?48 7         18
210  5 100         C     NM2,GNN                                  7  1803  C A05 B42           19
211  5 110         BU    AUGA                                     5  1810  B Y34 /             19
212  5 120         BCE   AUGA,SW5,1                               8  1815  B Y34 ?56 1         19
213  5 130         MLC   &LBAG4,LAB                               7  1823  M C99 B23           19
214  5 140         B     OUTLAB                                   4  1830  B ?21               19
215  5 150  AUGA   BWZ   AUG5,SW2,2                              8  1834  V Y91 ?53 2         19
216  5 160         BWZ   AUG1,SW2,S                              8  1842  V Y69 ?53 S         20
217  5 170         BWZ   AUG3,NM1-1,2                            8  1850  V Y80 ?59 2         20
218  5 180         MLC   &LBAG2,LAB                               7  1858  M D02 B23           20
219  5 190         B     OUTLAB                                   4  1865  B ?21               20
220  5 200  AUG1   MLC   &LBAG1,LAB                               7  1869  M D05 B23           20
221  5 210         B     OUTLAB                                   4  1876  B ?21               20
222  5 220  AUG3   MLC   &LBAG3,LAB                               7  1880  M D08 B23           21
223  5 230         B     OUTLAB                                   4  1887  B ?21               21
224  5 240  AUG5   MLC   &LBAG5,LAB                               7  1891  M D11 B23           21
225  5 250         B     OUTLAB                                   4  1898  B ?21               21
226  6 010  SUB    C     NM2,GNN                                  7  1902  C A05 B42           21
227  6 020         BU    SUBA                                     5  1909  B Z33 /             21
228  6 030         BCE   SUBA,SW5,1                               8  1914  B Z33 ?56 1         22
229  6 040         MLC   &LBSUB5,LAB                              7  1922  M D14 B23           22
230  6 050         B     OUTLAB                                   4  1929  B ?21               22
231  6 060  SUBA   BWZ   SUB1,SW2,2                              8  1933  V Z68 ?53 2         22
232  6 070         BWZ   SUB2,SW2,S                              8  1941  V Z79 ?53 S         22
233  6 080         BWZ   SUB4,NM1-1,2                            8  1949  V Z90 ?59 2         23
234  6 090         MLC   &LBSUB3,LAB                              7  1957  M D17 B23           23
235  6 100         B     OUTLAB                                   4  1964  B ?21               23
236  6 110  SUB1   MLC   &LBSUB1,LAB                              7  1968  M D20 B23           23
237  6 120         B     OUTLAB                                   4  1975  B ?21               23
238  6 130  SUB2   MLC   &LBSUB2,LAB                              7  1979  M D23 B23           23
239  6 140         B     OUTLAB                                   4  1986  B ?21               24
240  6 150  SUB4   MLC   &LBSUB4,LAB                              7  1990  M D26 B23           24
241  6 160         B     OUTLAB                                   4  1997  B ?21               24
242  6 170  MLT    B     READ                                     4  2001  B U49               24
243  6 180         BCE   EXP,OPR-1,*                             8  2005  B J91 ?47 *         24
244  6 190         BWZ   MLT33,NM2-1,2                           8  2013  V !35 A04 2         24
245  6 200         A     DEC2,SIZE2                               7  2021  A A14 A11           25
246  6 210         MZ    NULL,SIZE2                               7  2028  Y B45 A11           25
247  6 220  MLT33  MLC   @065@,I1                                7  2035  M D29 A98           25
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230         S     SIZE1,I1              MULTIPLY              7  2042  S ?66 A98           25
249  6 240         MLZS  @ @,I1                                      7  2049  Y D30 A98           25
250  6 250         MLC   @064@,I2                                    7  2056  M D33 B01           26
251  7 010         S     SIZE1,I2                  PARAMETERS        7  2063  S ?66 B01           26
252  7 020         BCE   *&12,OPR-1,*                                8  2070  B !89 ?47 *         26
253  7 030         S     SIZE2,I2                                    7  2078  S A11 B01           26
254  7 040         B     *&8                                         4  2085  B !96               26
255  7 050         S     SIZE1,I2                                    7  2089  S ?66 B01           27
256  7 060         MLZS  @ @,I2                                      7  2096  Y D30 B01           27
257  7 070         BWZ   MLT22&11,NM3-1,2                            8  2103  V J80 A49 2         27
258  7 080         MLC   DEC1,I3                                     7  2111  M ?69 B04           27
259  7 090         A     DEC2,I3                                     7  2118  A A14 B04           27
260  7 100         C     I3,@021@                                    7  2125  C B04 D36           28
261  7 110         BH    MLT22                                       5  2132  B J69 U             28
262  7 120         MLC   &LBMLT3,LAB                                 7  2137  M D39 B23           28
263  7 130         A     I2,I3                                       7  2144  A B01 B04           28
264  7 140         S     @020@,I3                                    7  2151  S D42 B04           28
265  7 150         MZ    @020@,I3                                    7  2158  Y D42 B04           29
266  7 160         B     OUTLAB                                      4  2165  B ?21               29
267  7 170  MLT22  MLC   &LBMLT2,LAB                                 7  2169  M D45 B23           29
268  7 180         B     OUTLAB                                      4  2176  B ?21               29
269  7 190         MLC   &LBMLT1,LAB                                 7  2180  M D48 B23           29
270  7 200         B     OUTLAB                                      4  2187  B ?21               29
271  7 210  EXP    C     DEC2,NULL          DOES EXP. HAVE DECIMAL   7  2191  C A14 B45           30
272  7 220         BE    *&12                                        5  2198  B K14 S             30
273  7 230         MLC   &CLLEXZ,LAB        DECIMAL EXP. SUBR. %.Q6) 7  2203  M D51 B23           30
274  7 240         B     OUTLAB                                      4  2210  B ?21               30
275  7 250         MLC   &CLLEFZ,LAB        INTEGER EXP. SUBR. %.G9) 7  2214  M D54 B23           30
276  8 010         B     OUTLAB                                      4  2221  B ?21               30
277  8 020  DIV    MLC   NULL,TEMP                                   7  2225  M B45 B39           31
278  8 030         B     READ                                        4  2232  B U49               31
279  8 040         BM    *&5,DEC2                DIVIDE              8  2236  V K48 A14 K         31
280  8 050         B     IDIV2                                       4  2244  B K76               31
281  8 060         S     DEC2,TEMP                 PARAMETERS        7  2248  S A14 B39           31
282  8 070         MLZS  @ @,TEMP                                    7  2255  Y D30 B39           31
283  8 080         A     TEMP,SIZE2                                  7  2262  A B39 A11           32
284  8 090         MLC   NULL,DEC2                                   7  2269  M B45 A14           32
285  8 100  IDIV2  C     SIZE2,DEC2                                  7  2276  C A11 A14           32
286  8 110         BL    *&8                                         5  2283  B K95 T             32
287  8 120         MLC   DEC2,SIZE2                                  7  2288  M A14 A11           32
288  8 130         C     SIZE1,DEC1                                  7  2295  C ?66 ?69           33
289  8 140         BL    *&8                                         5  2302  B L14 T             33
290  8 150         MLC   DEC1,SIZE1                                  7  2307  M ?69 ?66           33
291  8 160         MLC   SIZE1,I                                     7  2314  M ?66 A95           33
292  8 170         A     SIZE2,I                                     7  2321  A A11 A95           33
293  8 180         A     DEC2,I                                      7  2328  A A14 A95           34
294  8 190         A     @1@,I                                       7  2335  A D55 A95           34
295  8 200         MLC   DEC2,I1                                     7  2342  M A14 A98           34
296  8 210         A     @1@,I1                                      7  2349  A D55 A98           34
297  8 220         MLC   SIZE1,I2                                    7  2356  M ?66 B01           34
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230         A     DEC2,I2                                    7  2363  A A14 B01           35
299  8 240         A     TEMP,I2                                    7  2370  A B39 B01           35
300  8 250         MLC   SIZE2,I3                                   7  2377  M A11 B04           35
301  9 010         A     @1@,I3                                     7  2384  A D55 B04           35
302  9 020         A     K2,I3                                      7  2391  A B10 B04           35
303  9 030         BWZ   IDIVZ,NM3-1,2                            8  2398  V M40 A49 2         36
304  9 040         C     I1,NULL                                    7  2406  C A98 B45           36
305  9 050         BE    IDIV4                                      5  2413  B M29 S             36
306  9 060         MLC   &LBDV2,LAB                                7  2418  M D58 B23           36
307  9 070         B     OUTLAB                                     4  2425  B ?21               36
308  9 080  IDIV4  MLC   &LBDV4,LAB                                7  2429  M D61 B23           36
309  9 090         B     OUTLAB                                     4  2436  B ?21               37
310  9 100  IDIVZ  S     @1@,I1                                     7  2440  S D55 A98           37
311  9 110         MZ    @ @,I1                                     7  2447  Y D30 A98           37
312  9 120         C     I1,NULL                                    7  2454  C A98 B45           37
313  9 130         BE    IDIV3                                      5  2461  B M77 S             37
314  9 140         MLC   &LBDV1,LAB                                7  2466  M D64 B23           37
315  9 150         B     OUTLAB                                     4  2473  B ?21               38
316  9 160  IDIV3  MLC   &LBDV3,LAB                                7  2477  M D67 B23           38
317  9 170         B     OUTLAB                                     4  2484  B ?21               38
318  9 180  SZERR  B     READ                                       4  2488  B U49               38
319  9 190         MLC   NM3,GL                                     7  2492  M A50 B16           38
320  9 200         MLC   SIZE1,I                                    7  2499  M ?66 A95           38
321  9 210         S     DEC1,I                                     7  2506  S ?69 A95           39
322  9 220         BM    *&5,I                                      8  2513  V N25 A95 K         39
323  9 230         B     *&8                                        4  2521  B N32               39
324  9 240         MLC   NULL,I                                     7  2525  M B45 A95           39
325  9 250         MZ    @ @,I                                      7  2532  Y D30 A95           39
326 10 010  SZERR1 MLC   &L28,LABADR                               7  2539  M D70 N52           40
327 10 020         B     PUTT                                       4  2546  B R48               40
328 10 030  LABADR DCW   *                                          3  2552  N52                 40
329 10 040         MLC   PCT,TYPE2&1                              7  2553  M B17 A24           40
330 10 050         MLC   PCT,SIZE3&1                              7  2560  M B17 A57           40
331 10 060         B     PUTT                                       4  2567  B R48               40
332 10 070         DCW   &INPUT1                                   3  2573  ?58                 40
333 10 080         B     PUTT                                       4  2574  B R48               41
334 10 090         DCW   &INPUT3                                   3  2580  A48                 41
335 10 100         B     PUTT                                       4  2581  B R48               41
336 10 110         DCW   &ILIST                                    3  2587  A93                 41
337 10 120         B     OUT                                        4  2588  B ?10               41
338 10 130  LSTMC  B     READ                                       4  2592  B U49               41
339 10 140         BCE   LSTMC1,SW4,1                             8  2596  B O08 ?55 1         41
340 10 150         B     OUTA                                       4  2604  B ?03               42
341 10 160  LSTMC1 BCE   LST1,ED1,K                               8  2608  B O80 ?84 K         42
342 10 170         MLC   @*16@,OPR                                7  2616  M D73 ?48           42
343 10 180         B     PUTX                                       4  2623  B 363               42
344 10 190         DCW   &NULL                                     3  2629  B45                 42
345 10 200         B     PUTX                                       4  2630  B 363               42
346 10 210         DCW   &MCSEP                                    3  2636  B32                 42
347 10 220         B     PUTX                                       4  2637  B 363               43
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          DCW   &@.LC@                                        3  2643  D76                 43
349 10 240          B     PUTX                                          4  2644  B 363               43
350 10 250          DCW   &PASSSY                                       3  2650  U34                 43
351 11 010          B     OUTOP                                         4  2651  B Q64               43
352 11 020          B     PUTX                                          4  2655  B 363               43
353 11 030          DCW   &SW3                                          3  2661  ?54                 43
354 11 040          B     PUTX                                          4  2662  B 363               44
355 11 050          DCW   &SW6                                          3  2668  ?57                 44
356 11 060          B     PUTT                                          4  2669  B R48               44
357 11 070          DCW   &INPUT1                                       3  2675  ?58                 44
358 11 080          B     OUT                                           4  2676  B ?10               44
359 11 090  LST1    BWZ   LST2,SW2,2                                    8  2680  V P18 ?53 2         44
360 11 100          BCE   *&12,MLTSW,1                                  8  2688  B P07 ?50 1         44
361 11 110          MLC   &ENDLB,LAB                                    7  2696  M D79 B23           45
362 11 120          B     OUTLAB                                        4  2703  B ?21               45
363 11 130          MLC   &ENDLB2,LAB                                   7  2707  M D82 B23           45
364 11 140          B     OUTLAB                                        4  2714  B ?21               45
365 11 150  LST2    BCE   *&12,MLTSW,1                                  8  2718  B P37 ?50 1         45
366 11 160          MLC   &ENDLB1,LAB                                   7  2726  M D85 B23           45
367 11 170          B     OUTLAB                                        4  2733  B ?21               46
368 11 180          MLC   &ENDLB3,LAB                                   7  2737  M D88 B23           46
369 11 190          B     OUTLAB                                        4  2744  B ?21               46
370 11 200  RELAT   MLC   &RELAT1,READBB&3                             7  2748  M D91 V24           46
371 11 210          B     ADD1                                          4  2755  B U97               46
372 11 220  RELAT1 C     TWEN,SIZE1                                    7  2759  C B48 ?66           46
373 11 230          BH    RELS1                                         5  2766  B P87 U             46
374 11 240          C     TWEN,SIZE2                                    7  2771  C B48 A11           47
375 11 250          BH    RELS1                                         5  2778  B P87 U             47
376 12 010          B     *&8                                           4  2783  B P94               47
377 12 020  RELS1   MLC   @1@,SW6                                      7  2787  M D55 ?57           47
378 12 030          B     LKP                                           4  2794  B Q86               47
379 12 040          DCW   &RELTAB                                      3  2800  B59                 47
380 12 050                &OP                                           3  2803  B13                 47
381 12 060          B     LKP                                           4  2804  B Q86               48
382 12 070          DCW   &JOLTAB                                      3  2810  C31                 48
383 12 080                &I1                                           3  2813  A98                 48
384 12 090          BWZ   RELS2,SW5,2                                   8  2814  V Q42 ?56 2         48
385 12 100          B     LKP                                           4  2822  B Q86               48
386 12 110          DCW   &SWOPTB                                      3  2828  C07                 48
387 12 120                &I2                                           3  2831  B01                 48
388 12 130          B     LKP                                           4  2832  B Q86               49
389 12 140          DCW   &BRTAB                                       3  2838  B83                 49
390 12 150                &I3                                           3  2841  B04                 49
391 12 160  RELS2   B     PUTX                                          4  2842  B 363               49
392 12 170          DCW   &PASSSY                                       3  2848  U34                 49
393 12 180          B     OUTOP                                         4  2849  B Q64               49
394 12 190          B     PUTT                                          4  2853  B R48               49
395 12 200  GNA     DCW   &GNASW                                       3  2859  ?52                 50
396 12 210          B     OUT                                           4  2860  B ?10               50
397 12 220  OUTOP   SBR   OUTBB&3           PUTOUT OPR, VOP             4  2864  H Q85               50
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          B     PUTX                                       4  2868  B 363               50
399 12 240          DCW   &OPR                                       3  2874  ?48                 50
400 12 250          B     PUTX                                       4  2875  B 363               50
401 13 010          DCW   &VOP                                       3  2881  B35                 50
402 13 020  OUTBB   B     *                                          4  2882  B Q85               51
403 13 030  LKP     SBR   X1                                         4  2886  H 089               51
404 13 040          MLC   2&X1,X2                                    7  2890  M 0|2 094           51
405 13 050          MLC   5&X1,LKP3&6                               7  2897  M 0|5 R40           51
406 13 060          A     @0006@,X1                                  7  2904  A D94 089           51
407 13 070  LKPA    C     5&X2,OPR                                   7  2911  C 0!5 ?48           51
408 13 080          BE    LKP3                                       5  2918  B R34 S             52
409 13 090          A     &6,X2                                      7  2923  A D95 094           52
410 13 100          B     LKPA                                       4  2930  B R11               52
411 13 110  LKP3    MLC   2&X2,*                                    7  2934  M 0!2 R40           52
412 13 120          B     0&X1                                       4  2941  B 0|0               52
413 13 130  BLKS    DCW   #3                                        3  2947                      52
414 13 140  PUTT    SBR   X2                                         4  2948  H 094               52
415 13 150          MLC   2&X2,X3                                    7  2952  M 0!2 099           53
416 13 160  PUTT1   BCE   PUTTBB,0&X3,%                             8  2959  B R92 0?0 %         53
417 13 170          MLC   2&X3,SY                                    7  2967  M 0?2 B20           53
418 13 180          B     PUTX                                       4  2974  B 363               53
419 13 190          DCW   &SY                                       3  2980  B20                 53
420 13 200          A     @003@,X3                                   7  2981  A C57 099           53
421 13 210          B     PUTT1                                      4  2988  B R59               54
422 13 220  PUTTBB  A     @003@,X2                                   7  2992  A C57 094           54
423 13 230          B     0&X2                                       4  2999  B 0!0               54
424 13 240  OUTA    B     PUTX                                       4  3003  B 363               54
425 13 250          DCW   &NULL                                     3  3009  B45                 54
426 14 010  OUT     B     PUTX                                       4  3010  B 363               54
427 14 020          DCW   &MCSEP                                    3  3016  B32                 54
428 14 030          B     GETT                                       4  3017  B T00               55
429 14 040  OUTLAB  B     PUTX                                       4  3021  B 363               55
430 14 050          DCW   &CLGNSW                                   3  3027  ?51                 55
431 14 060  OTLB    B     PUTX                                       4  3028  B 363               55
432 14 070          DCW   &LAB                                      3  3034  B23                 55
433 14 080          B     PUTT                                       4  3035  B R48               55
434 14 090          DCW   &INPUT1                                   3  3041  ?58                 55
435 14 100          B     OUT                                        4  3042  B ?10               56
436 14 110  OPR     DCW   #3                                        3  3048                      56
437 14 120  ARITSW  DCW   0                                         1  3049                      56
438 14 130  MLTSW   DC    0                                         1  3050                      56
439 14 140  CLGNSW        0                                         1  3051                      56
440 14 150  GNASW   DCW   0                                         1  3052                      56
441 14 160  SW2     DC    0                                         1  3053                      56
442 14 170  SW3           0                                         1  3054                      56
443 14 180  SW4     DCW   0                                         1  3055                      56
444 14 190  SW5     DC    0                                         1  3056                      56
445 14 200  SW6           0                                         1  3057                      56
446 14 210  INPUT1  EQU   *&1                                          3058
447 14 220  NM1     DCW   #3                                        3  3060                      56
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230  SIZE1         #6                                         6  3066                      56
449 14 240  DEC1          #3                                         3  3069                      57
450 14 250  CL1           #3                                         3  3072                      57
451 15 010  WM1           #3                                         3  3075                      57
452 15 020  TYPE1         #3                                         3  3078                      57
453 15 030  JUST          #3                                         3  3081                      57
454 15 040  ED1           #3                                         3  3084                      57
455 15 050  BLK           #3                                         3  3087                      57
456 15 060  MASK          #3                                         3  3090                      58
457 15 070  COBMSK        #3                                         3  3093                      58
458 15 080  EDIT1A        #3                                         3  3096                      58
459 15 090  EDIT1B        #3                                         3  3099                      58
460 15 100  CHCNT         #3                                         3  3102                      58
461 15 110  INPUT2 EQU    *&1                                           3103
462 15 120  NM2    DCW    #3                                         3  3105                      58
463 15 130  SIZE2         #6                                         6  3111                      58
464 15 140  DEC2          #3                                         3  3114                      59
465 15 150  CL2           #3                                         3  3117                      59
466 15 160  WM2           #3                                         3  3120                      59
467 15 170  TYPE2         #3                                         3  3123                      59
468 15 180  JUST2         #3                                         3  3126                      59
469 15 190  ED2           #3                                         3  3129                      59
470 15 200  BLK2          #3                                         3  3132                      59
471 15 210  MASK2         #3                                         3  3135                      60
472 15 220  COB22         #3                                         3  3138                      60
473 15 230  EDIT2A        #3                                         3  3141                      60
474 15 240  EDIT2B        #3                                         3  3144                      60
475 15 250  CHCNT2        #3                                         3  3147                      60
476 16 010  INPUT3 EQU    *&1                                           3148
477 16 020  NM3    DCW    #3                                         3  3150                      60
478 16 030  SIZE3         #6                                         6  3156                      60
479 16 040  DEC3          #3                                         3  3159                      61
480 16 050  CL3           #3                                         3  3162                      61
481 16 060  WM3           #3                                         3  3165                      61
482 16 070  TYPE3         #3                                         3  3168                      61
483 16 080  JUST3         #3                                         3  3171                      61
484 16 090  ED3           #3                                         3  3174                      61
485 16 100  BLK3          #3                                         3  3177                      61
486 16 110  MASK3         #3                                         3  3180                      62
487 16 120  COB3          #3                                         3  3183                      62
488 16 130  EDIT3A        #3                                         3  3186                      62
489 16 140  EDIT3B        #3                                         3  3189                      62
490 16 150  CHCNT3        #3                                         3  3192                      62
491 16 160  ILIST  EQU    *&1                                           3193
492 16 170  I      DCW    #3                                         3  3195                      62
493 16 180  I1            #3                                         3  3198                      62
494 16 190  I2            #3                                         3  3201                      63
495 16 200  I3            #3                                         3  3204                      63
496 16 210  K1            #3                                         3  3207                      63
497 16 220  K2            #3                                         3  3210                      63
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230  OP           #3                                         3  3213                      63
499 16 240  GL           #3                                         3  3216                      63
500 16 250  PCT          @%@                                        1  3217                      63
501 17 010  SY     DCW   #3                                         3  3220                      64
502 17 020  LAB          #3                                         3  3223                      64
503 17 030  MESS4        @.Q7@                                      3  3226                      64
504 17 040  VEOP         @.EP@                                      3  3229                      64
505 17 050  MCSEP        @.MC@                                      3  3232                      64
506 17 060  VOP          @.OP@                                      3  3235                      64
507 17 070               0                                          1  3236                      64
508 17 080  TEMP         #3                                         3  3239                      65
509 17 090  GNN          @GNN@                                      3  3242                      65
510 17 100  NULL         000                                        3  3245                      65
511 17 110  TWEN   DC    020                                        3  3248                      65
512 17 120  ZERO   EQU   NULL-2                                        3243
513 17 130  L28    EQU   *&1                                           3249
514 17 140         DCW   @.N5.N6.I4%@                  SIZE ERROR    10  3258                      65
515 17 150  EXPCLL EQU   1300                                           1300
516 17 160  LBMLT1 EQU   EXPCLL&4                                       1304
517 17 170  LBMLT2 EQU   LBMLT1&10                                      1314
518 17 180  LBDV1  EQU   LBMLT2&13                                      1327
519 17 190  LBDV2  EQU   LBDV1&25                                       1352
520 17 200  LBSB1  EQU   LBDV2&28                                       1380
521 17 210  LBSB2  EQU   LBSB1&10                                       1390
522 17 220  LBSB3  EQU   LBSB2&13                                       1403
523 17 230  LBSB4  EQU   LBSB3&13                                       1416
524 17 240  LBSB5  EQU   LBSB4&16                                       1432
525 17 250  LBSB6  EQU   LBSB5&10                                       1442
526 18 010  LBSB7  EQU   LBSB6&10                                       1452
527 18 020  LBAD1  EQU   LBSB7&7                                        1459
528 18 030  LBAD2  EQU   LBAD1&10                                       1469
529 18 040  LBAD3  EQU   LBAD2&13                                       1482
530 18 050  LBAD4  EQU   LBAD3&13                                       1495
531 18 060  LBAD5  EQU   LBAD4&10                                       1505
532 18 070  LBAD6  EQU   LBAD5&10                                       1515
533 18 080  LBAG1  EQU   LBAD6&7                                        1522
534 18 090  LBAG2  EQU   LBAG1&7                                        1529
535 18 100  LBAG3  EQU   LBAG2&7                                        1536
536 18 110  LBAG4  EQU   LBAG3&13                                       1549
537 18 120  LBAG5  EQU   LBAG4&4                                        1553
538 18 130  LBSUB1 EQU   LBAG5&4                                        1557
539 18 140  LBSUB2 EQU   LBSUB1&4                                       1561
540 18 150  LBSUB3 EQU   LBSUB2&7                                       1568
541 18 160  LBSUB4 EQU   LBSUB3&7                                       1575
542 18 170  LBSUB5 EQU   LBSUB4&13                                      1588
543 18 180  ENDLB  EQU   LBSUB5&4                                       1592
544 18 190  ENDLB1 EQU   ENDLB&7                                        1599
545 18 200  ENDLB2 EQU   ENDLB1&4                                       1603
546 18 210  ENDLB3 EQU   ENDLB2&7                                       1610
547 18 220  CLLEXZ EQU   ENDLB3&4                                       1614
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230  CLLEFZ EQU   CLLEXZ&4                                       1618
549 18 240  LBMLT3 EQU   CLLEFZ&4                                       1622
550 18 250  LBDV3  EQU   LBMLT3&13                                      1635
551 19 010  LBDV4  EQU   LBDV3&19                                       1654
552 19 020         ORG                                                      3259
553 19 030  RELTAB EQU   *&1                                            3259
554 19 040         DCW   @BE @                                      3   3261                    65
555 19 050         DCW   @, #@                                      3   3264                    65
556 19 060               @BU @                                      3   3267                    65
557 19 070               @,NE@                                      3   3270                    66
558 19 080               @BL @                                      3   3273                    66
559 19 090               @,20@                                      3   3276                    66
560 19 100               @BH @                                      3   3279                    66
561 19 110               @,21@                                      3   3282                    66
562 19 120  BRTAB  EQU   *&1                                            3283
563 19 130         DCW   &L40                                       3   3285  T00               66
564 19 140         DCW   @, #@                                      3   3288                    66
565 19 150               &L41                                       3   3291  T07               67
566 19 160               @,NE@                                      3   3294                    67
567 19 170               &L42                                       3   3297  T20               67
568 19 180               @,20@                                      3   3300                    67
569 19 190               &L43                                       3   3303  T36               67
570 19 200               @,21@                                      3   3306                    67
571 19 210  SWOPTB EQU   *&1                                            3307
572 19 220         DCW   &L40                                       3   3309  T00               67
573 19 230         DCW   @, #@                                      3   3312                    68
574 19 240               &L41                                       3   3315  T07               68
575 19 250               @,NE@                                      3   3318                    68
576 20 010               &L43                                       3   3321  T36               68
577 20 020               @,20@                                      3   3324                    68
578 20 030               &L42                                       3   3327  T20               68
579 20 040               @,21@                                      3   3330                    68
580 20 050  JOLTAB EQU   *&1                                            3331
581 20 060         DCW   @ //@                                      3   3333                    69
582 20 070               @, #@                                      3   3336                    69
583 20 080               @ SS@                                      3   3339                    69
584 20 090               @,NE@                                      3   3342                    69
585 20 100               @ TS@                                      3   3345                    69
586 20 110               @,20@                                      3   3348                    69
587 20 120               @ US@                                      3   3351                    69
588 20 130               @,21@                                      3   3354                    70
589 20 140         LTORG                                                    3355
                   DCW   @003@                                      3   3357            LIT     70
       172               &LBAD3                                     3   3360  U82       ADCON   70
       174               &LBAD1                                     3   3363  U59       ADCON   70
       176               &LBAD2                                     3   3366  U69       ADCON   70
       180               &LBAD6                                     3   3369  V15       ADCON   70
       182               &LBAD4                                     3   3372  U95       ADCON   70
       184               &LBAD5                                     3   3375  V05       ADCON   71
       192               &LBSB3                                     3   3378  U03       ADCON   71
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

       194          &LBSB4                                          3  3381  U16         ADCON   71
       196          &LBSB1                                          3  3384  T80         ADCON   71
       198          &LBSB2                                          3  3387  T90         ADCON   71
       202          &LBSB7                                          3  3390  U52         ADCON   71
       204          &LBSB5                                          3  3393  U32         ADCON   71
       206          &LBSB6                                          3  3396  U42         ADCON   72
       213          &LBAG4                                          3  3399  V49         ADCON   72
       218          &LBAG2                                          3  3402  V29         ADCON   72
       220          &LBAG1                                          3  3405  V22         ADCON   72
       222          &LBAG3                                          3  3408  V36         ADCON   72
       224          &LBAG5                                          3  3411  V53         ADCON   72
       229          &LBSUB5                                         3  3414  V88         ADCON   72
       234          &LBSUB3                                         3  3417  V68         ADCON   73
       236          &LBSUB1                                         3  3420  V57         ADCON   73
       238          &LBSUB2                                         3  3423  V61         ADCON   73
       240          &LBSUB4                                         3  3426  V75         ADCON   73
                    @065@                                           3  3429              LIT     73
                    @ @                                             1  3430              LIT     73
                    @064@                                           3  3433              LIT     73
                    @021@                                           3  3436              LIT     74
       262          &LBMLT3                                         3  3439  W22         ADCON   74
                    @020@                                           3  3442              LIT     74
       267          &LBMLT2                                         3  3445  T14         ADCON   74
       269          &LBMLT1                                         3  3448  T04         ADCON   74
       273          &CLLEXZ                                         3  3451  W14         ADCON   74
       275          &CLLEFZ                                         3  3454  W18         ADCON   74
                    @1@                                             1  3455              LIT     75
       306          &LBDV2                                          3  3458  T52         ADCON   75
       308          &LBDV4                                          3  3461  W54         ADCON   75
       314          &LBDV1                                          3  3464  T27         ADCON   75
       316          &LBDV3                                          3  3467  W35         ADCON   75
       326          &L28                                            3  3470  B49         ADCON   75
                    @*16@                                           3  3473              LIT     75
                    @.LC@                                           3  3476              LIT     76
       361          &ENDLB                                          3  3479  V92         ADCON   76
       363          &ENDLB2                                         3  3482  W03         ADCON   76
       366          &ENDLB1                                         3  3485  V99         ADCON   76
       368          &ENDLB3                                         3  3488  W10         ADCON   76
       370          &RELAT1                                         3  3491  P59         ADCON   76
                    @006@                                           3  3494              LIT     76
                    &6                                              1  3495              LIT     77
590 20 150          ORG   3790                                                  3790
591 20 160          DCW   @}@                                       1  3790                        78
592 20 170          END   GETT                                                 / T00 080           79
```

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - I07 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I07				
102	1	020		CTL	631 11				
103	1	030	X1	EQU	89		0089		
104	1	040	X2	EQU	94		0094		
105	1	050	X3	EQU	99		0099		
106	1	060	PUTX	EQU	363		0363		
107	1	070	GETX	EQU	335		0335		
108	1	080	SUPER	EQU	351		0351		
109	1	090		ORG	1300			1300	
110	1	100	EXPCLL	EQU	*&1		1300		
111	1	110		DCW	@.Q6%@	4	1303		4
112	1	120	LBMLT1	EQU	*&1		1304		
113	1	130		DCW	@.D6.D1.D2%@	10	1313		4
114	1	140	LBMLT2	EQU	*&1		1314		
115	1	150		DCW	@.D6.D1.D4.D3%@	13	1326		4
116	1	160	LBDV1	EQU	*&1		1327		
117	1	170		DCW	@.Y8.D5.D6.Y9.Z0.D7.D8.D9%@	25	1351		5
118	1	180	LBDV2	EQU	*&1		1352		
119	1	190		DCW	@.Y8.D5.D6.Y9.Z0.D7.D4.E0.D9%@	28	1379		6
120	1	200	LBSB1	EQU	*&1		1380		
121	1	210		DCW	@.D4.A4.B3%@	10	1389		6
122	1	220	LBSB2	EQU	*&1		1390		
123	1	230		DCW	@.D4.A4.A7.B3%@	13	1402		7
124	1	240	LBSB3	EQU	*&1		1403		
125	1	250		DCW	@.D4.A4.B4.B5%@	13	1415		7
126	2	010	LBSB4	EQU	*&1		1416		
127	2	020		DCW	@.D4.A4.A7.B3.A6%@	16	1431		8
128	2	030	LBSB5	EQU	*&1		1432		
129	2	040		DCW	@.A3.A8.S0%@	10	1441		8
130	2	050	LBSB6	EQU	*&1		1442		
131	2	060		DCW	@.A3.R3.B1%@	10	1451		8
132	2	070	LBSB7	EQU	*&1		1452		
133	2	080		DCW	@.B1.B6%@	7	1458		9
134	2	090	LBAD1	EQU	*&1		1459		
135	2	100		DCW	@.D4.A4.A5%@	10	1468		9
136	2	110	LBAD2	EQU	*&1		1469		
137	2	120		DCW	@.D4.A5.A6.A4%@	13	1481		9
138	2	130	LBAD3	EQU	*&1		1482		
139	2	140		DCW	@.D4.A4.A7.A5%@	13	1494		10
140	2	150	LBAD4	EQU	*&1		1495		
141	2	160		DCW	@.A3.A8.A9%@	10	1504		10
142	2	170	LBAD5	EQU	*&1		1505		
143	2	180		DCW	@.A3.B0.B1%@	10	1514		10
144	2	190	LBAD6	EQU	*&1		1515		
145	2	200		DCW	@.B1.B2%@	7	1521		11
146	2	210	LBAG1	EQU	*&1		1522		
147	2	220		DCW	@.B4.B9%@	7	1528		11

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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  LBAG2   EQU   *&1                                             1529
149  2 240         DCW   @.C0.C1%@                                    7  1535                      11
150  2 250  LBAG3   EQU   *&1                                             1536
151  3 010         DCW   @.N5.C9.Y4.Z3%@                             13  1548                      11
152  3 020  LBAG4   EQU   *&1                                             1549
153  3 030         DCW   @.A8%@                                       4  1552                      11
154  3 040  LBAG5   EQU   *&1                                             1553
155  3 050         DCW   @.B8%@                                       4  1556                      12
156  3 060  LBSUB1  EQU   *&1                                             1557
157  3 070         DCW   @.C4%@                                       4  1560                      12
158  3 080  LBSUB2  EQU   *&1                                             1561
159  3 090         DCW   @.C5.C6%@                                    7  1567                      12
160  3 100  LBSUB3  EQU   *&1                                              1568
161  3 110         DCW   @.C7.C8%@                                    7  1574                      12
162  3 120  LBSUB4  EQU   *&1                                             1575
163  3 130         DCW   @.N5.C9.Y4.Y5%@                             13  1587                      12
164  3 140  LBSUB5  EQU   *&1                                             1588
165  3 150         DCW   @.S1%@                                       4  1591                      12
166  3 160  ENDLB   EQU   *&1                                             1592
167  3 170         DCW   @.B4.F1 %@                                    7  1598                      13
168  3 180  ENDLB1  EQU   *&1                                             1599
169  3 190         DCW   @.F1%@                                       4  1602                      13
170  3 200  ENDLB2  EQU   *&1                                             1603
171  3 210         DCW   @.B4.P6%@                                    7  1609                      13
172  3 220  ENDLB3  EQU   *&1                                             1610
173  3 230         DCW   @.P6%@                                       4  1613                      13
174  3 240  CLLEXZ  EQU   *&1                                             1614
175  3 250         DCW   @.Q6%@                                       4  1617                      13
176  4 010  CLLEFZ  EQU   *&1                                             1618
177  4 020         DCW   @.G9%@                                       4  1621                      13
178  4 030  LBMLT3  EQU   *&1                                             1622
179  4 040         DCW   @.D6.D1.W7.X3%@                             13  1634                      14
180  4 050  LBDV3   EQU   *&1                                             1635
181  4 060         DCW   @.Y8.D5.D6.D7.D8.D9%@                       19  1653                      14
182  4 070  LBDV4   EQU   *&1                                             1654
183  4 080         DCW   @.Y8.D5.D6.D7.D4.E0.D9%@                    22  1675                      15
184  4 090  EDITLB  EQU   *&1                                             1676
185  4 100         DCW   @.H2%@                                       4  1679                      15
186  4 110  GETT    MLC   NULL,CLEAR                                   7  1680  M C28 J39           15
187  4 120         MLC   NULL,SW4                                     7  1687  M C28 B93           16
188  4 130  GETSY   B     GETX               GET UNTIL *$%           4  1694  B 335               16
189  4 140         DCW   &SY                                          3  1700  B80                 16
190  4 150               &EOJ                                        3  1703  Y05                 16
191  4 160         C     SY,PASSSY                                    7  1704  C B80 Y04           16
192  4 170         BE    GETSY2                                       5  1711  B X27 S             16
193  4 180         B     PUTX                                         4  1716  B 363               16
194  4 190         DCW   &SY                                          3  1722  B80                 17
195  4 200         B     GETSY                                        4  1723  B W94               17
196  4 210  GETSY2  B     GETX                                        4  1727  B 335               17
197  4 220         DCW   &OPR                                         3  1733  A17                 17
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          &EOJ                                            3  1736  Y05                 17
199  4 240         B     GETX                                       4  1737  B 335               17
200  4 250         DCW   &LAB                                       3  1743  C31                 17
201  5 010          &EOJ                                           3  1746  Y05                 18
202  5 020         BCE   ARITH,OPR-2,                               8  1747  B Y19 A15           18
203  5 030         BCE   ARITH,OPR-1,9                             8  1755  B Y19 A16 9         18
204  5 040         BCE   ARITH,OPR-1,M                             8  1763  B Y19 A16 M         18
205  5 050         BCE   GIV,OPR-2,*                               8  1771  B K36 A15 *         18
206  5 060         BCE   POSNEG,OPR-2,#                            8  1779  B Y64 A15 #         19
207  5 070         B     PUTX              PASS THRU MACRO         4  1787  B 363               19
208  5 080         DCW   &PASSSY                                   3  1793  Y04                 19
209  5 090         B     OUTOP                                     4  1794  B ?41               19
210  5 100         B     GETSY                                     4  1798  B W94               19
211  5 110  PASSSY DCW   @*$*@                                    3  1804                      19
212  5 120  EOJ    B     PUTX                                      4  1805  B 363               19
213  5 130         DCW   &VEOP                                     3  1811  B86                 20
214  5 140         B     SUPER                                     4  1812  B 351               20
215  5 150         DCW   @I08@                                     3  1818                      20
216  5 160  ARITH  B     READ                                      4  1819  B Y79               20
217  5 170         BCE   *&8,CHGSW,0                              8  1823  B Y38 B96 0         20
218  5 180         MLC   @J@,ARITSW                                7  1831  M E39 B90           20
219  5 190         BCE   *&8,CLSW,0                                8  1838  B Y53 B97 0         20
220  5 200         MZ    @E@,CLGNSW                                7  1846  Y E40 B92           21
221  5 210         MLC   SW6,LAB                                   7  1853  M B95 C31           21
222  5 220         B     ARDIG                                     4  1860  B Z85               21
223  5 230  POSNEG B     READ                                      4  1 864  B Y79               21
224  5 240         MLC   NM2,GL                                    7  1 868  M A65 B76           21
225  5 250         B     OUTLB1                                    4  1875  B J55               21
226  6 010  READ   SBR   READBB&3                                  4  1879  H Z65               21
227  6 020         B     OUTOP                                     4  1883  B ?41               22
228  6 030  GETSY3 B     GETX                                      4  1887  B 335               22
229  6 040         DCW   &CLGNSW                                   3  1893  B92                 22
230  6 050          &EOJ                                           3  1896  Y05                 22
231  6 060         BCE   *&5,CLGNSW-2,.                           8  1897  B Z09 B90 .         22
232  6 070         B     ADD1                                      4  1905  B Z20               22
233  6 080         B     PUTX                                      4  1909  B 363               22
234  6 090         DCW   &CLGNSW                                   3  1915  B92                 23
235  6 100         B     GETSY3                                    4  1916  B Y87               23
236  6 110  ADD1   B     GETX                                      4  1920  B 335               23
237  6 120         DCW   &SW6                                      3  1926  B95                 23
238  6 130          &EOJ                                           3  1929  Y05                 23
239  6 140         BCE   OUTA,SW4,.                               8  1930  B ?63 B93 .         23
240  6 150         MLC   &INPUT1,X2                                7  1938  M E43 094           23
241  6 160  READ1  B     GETX                                      4  1945  B 335               24
242  6 170         DCW   &SY                                       3  1951  B80                 24
243  6 180          &EOJ                                           3  1954  Y05                 24
244  6 190         C     SY,MCSEP                                  7  1955  C B80 B83           24
245  6 200  READBB BE    *                                         5  1962  B Z66 S             24
246  6 210         MLC   SY,2&X2                                   7  1967  M B80 0!2           24
247  6 220         A     @003@,X2                                  7  1974  A E46 094           24
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          B     READ1                               4  1981  B Z45               25
249  6 240  ARDIG   B     WMK                                 4  1985  B ?81               25
250  6 250          BCE   *&5,OPR-2,                          8  1989  B !01 A15           25
251  7 010          B     ARDIG1                              4  1997  B !39               25
252  7 020          BWZ   *&5,NM3-1,2                        8  2001  V !13 B09 2         25
253  7 030          B     ARDIG1                              4  2009  B !39               25
254  7 040          C     WM3,NULL                            7  2013  C B25 C28           25
255  7 050          BU    ARDIG1                              5  2020  B !39 /             26
256  7 060          B     PUTX                                4  2025  B 363               26
257  7 070          DCW   &SWMK3                              3  2031  C25                 26
258  7 080          MLC   @1@,NM3SW                           7  2032  M E47 B98           26
259  7 090  ARDIG1  BCE   *&5,ARITSW,1                       8  2039  B !51 B90 1         26
260  7 100          B     ADDLB1                              4  2047  B !65               26
261  7 110          B     PUTX                                4  2051  B 363               26
262  7 120          DCW   &SS2                                3  2057  C01                 27
263  7 130          MLC   @1@,CHGSW                           7  2058  M E47 B96           27
264  7 140  ADDLB1  BCE   *&5,CLGNSW,1                       8  2065  B !77 B92 1         27
265  7 150          B     ADDLB2                              4  2073  B !91               27
266  7 160          B     PUTX                                4  2077  B 363               27
267  7 170          DCW   &AB3                                3  2083  C34                 27
268  7 180          MLC   @1@,CLSW                            7  2084  M E47 B97           27
269  7 190  ADDLB2  B     OUTLAB                              4  2091  B J17               28
270  7 200  COMMON  SBR   COMBB&3                            4  2095  H J16               28
271  7 210          MLC   LAB,LABADR                         7  2099  M C31 J12           28
272  7 220          B     PUTT                                4  2106  B R86               28
273  7 230  LABADR  DCW   *                                   3  2112  J12                 28
274  7 240  COMBB   B     *                                   4  2113  B J16               28
275  7 250  OUTLAB  B     COMMON                              4  2117  B !95               28
276  8 010  CWKSW   C     NULL,CLEAR                          7  2121  C C28 J39           29
277  8 020          BE    CLEAR1                              5  2128  B J40 S             29
278  8 030          B     PUTX                                4  2133  B 363               29
279  8 040  CLEAR   DCW   *                                   3  2139  J39                 29
280  8 050  CLEAR1  BCE   OUTLB1,NM3SW,0                     8  2140  B J55 B98 0         29
281  8 060          B     PUTX                                4  2148  B 363               29
282  8 070          DCW   &CW3                                3  2154  C22                 29
283  8 080  OUTLB1  MLC   PCT,TYPE2&1                        7  2155  M B77 A84           30
284  8 090          B     PUTT                                4  2162  B R86               30
285  8 100          DCW   &INPUT1                            3  2168  A18                 30
286  8 110          MLC   PCT,SIZE3&1                         7  2169  M B77 B17           30
287  8 120          B     PUTT                                4  2176  B R86               30
288  8 130          DCW   &INPUT3                            3  2182  B08                 30
289  8 140          B     PUTT                                4  2183  B R86               30
290  8 150          DCW   &ILIST                              3  2189  B53                 31
291  8 160          B     PUTX                                4  2190  B 363               31
292  8 170          DCW   &MCSEP                              3  2196  B83                 31
293  8 180          MLC   NULL,NM3SW                          7  2197  M C28 B98           31
294  8 190          BCE   FREE,OPR-1,M                       8  2204  B K24 A16 M         31
295  8 200          BCE   FREE,OPR-2,*                       8  2212  B K24 A15 *         31
296  8 210          B     GETT                                4  2220  B W80               31
297  8 220  FREE    MLC   NULL,CLSW                           7  2224  M C28 B97           32
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         MLC                                                1  2231  M                   32
299  8 240         B     GETT                                         4  2232  B W80               32
300  8 250  GIV    B     READ                                         4  2236  B Y79               32
301  9 010         ZA    DEC1,TEMP7                                   7  2240  ? A29 C67           32
302  9 020         S     DEC2,TEMP7                                   7  2247  S A74 C67           32
303  9 030         MCS   TEMP7,TEMP6                                  7  2254  Z C67 C64           32
304  9 040         BCE   DECBB,TEMP6,                                 8  2261  B K95 C64           33
305  9 050         BM    DECB,TEMP7                                   8  2269  V K88 C67 K         33
306  9 060         MZ    @Z@,SW2                                      7  2277  Y E48 B91           33
307  9 070         B     DECBB                                        4  2284  B K95               33
308  9 080  DECB   MZ    @R@,SW2                                      7  2288  Y E49 B91           33
309  9 090  DECBB  MLC   NM2,NM3                                      7  2295  M A65 B10           34
310  9 100         BCE   NOED,ED1,K                                   8  2302  B L22 A44 K         34
311  9 110         BCE   NOED,MASK,K                                  8  2310  B L22 A50 K         34
312  9 120         B     ED                                           4  2318  B M91               34
313  9 130  NOED   BWZ   *&5,NM2-1,2                                  8  2322  V L34 A64 2         34
314  9 140         B     DG8BB                                        4  2330  B L85               34
315  9 150         ZA    SIZE1,BUCK                                   7  2334  ? A26 C73           35
316  9 160         S     DEC1,BUCK                                    7  2341  S A29 C73           35
317  9 170         ZA    SIZE2,TEMP6                                  7  2348  ? A71 C64           35
318  9 180         S     DEC2,TEMP6                                   7  2355  S A74 C64           35
319  9 190         C     BUCK,TEMP6                                   7  2362  C C73 C64           35
320  9 200         BH    *&5                                          5  2369  B L78 U             36
321  9 210         B     DG8BB                                        4  2374  B L85               36
322  9 220         B     PUTX                                         4  2378  B 363               36
323  9 230         DCW   &MESS1                                       3  2384  C40                 36
324  9 240  DG8BB  C     WM1,NULL                                     7  2385  C A35 C28           36
325  9 250         BU    NOED3                                        5  2392  B M11 /             36
326 10 010         B     PUTX                                         4  2397  B 363               36
327 10 020         DCW   &AA2                                         3  2403  C10                 37
328 10 030         MLC   &FF5,CLEAR                                   7  2404  M E52 J39           37
329 10 040  NOED3  BCE   RNDTST,OPR,0       IS OPERATOR A GIVR       8  2411  B Q38 A17 0         37
330 10 050         BWZ   NOED1,SW2,S                                  8  2419  V M57 B91 S         37
331 10 060         BWZ   *&12,SW2,2                                   8  2427  V M46 B91 2         37
332 10 070         MLC   &L14,LAB                                     7  2435  M E55 C31           38
333 10 080         B     NOED2                                        4  2442  B M83               38
334 10 090         MLC   &L13A,LAB                                    7  2446  M E58 C31           38
335 10 100         B     NOED2                                        4  2453  B M83               38
336 10 110  NOED1  BWZ   *&12,NM2-1,2                                 8  2457  V M76 A64 2         38
337 10 120         MLC   &L12,LAB                                     7  2465  M E61 C31           38
338 10 130         B     NOED2                                        4  2472  B M83               39
339 10 140         MLC   &L12A,LAB                                    7  2476  M E64 C31           39
340 10 150  NOED2  B     COMMON                                       4  2483  B !95               39
341 10 160         B     BKZER                                        4  2487  B Q11               39
342 10 170  ED     B     WMK                                          4  2491  B ?81               39
343 10 180         MLC   NULL,K2                                      7  2495  M C28 B70           39
344 10 190         BWZ   *&8,NM2-1,2                                  8  2502  V N17 A64 2         39
345 10 200         MLC   DEC2,K2                                      7  2510  M A74 B70           40
346 10 210         BCE   RNDTST,OPR,0       IS OPERATOR A GIVR       8  2517  B Q38 A17 0         40
347 10 220         C     NM2,VA0Q                                     7  2525  C A65 C37           40
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230         BU    INSD                                 5  2532  B N48 /            40
349 10 240         MLC   &L17A,LAB                            7  2537  M E67 C31          40
350 10 250         B     INSA                                 4  2544  B P45              40
351 11 010  INSD   C     CHCNT,@001@                          7  2548  C A62 E70          41
352 11 020         BU    INSD1                                5  2555  B N71 /            41
353 11 030         B     PUTX                                 4  2560  B 363              41
354 11 040         DCW   &MESS19                              3  2566  C49                41
355 11 050         B     INSE1                                4  2567  B P27              41
356 11 060  INSD1  BWZ   INSG,SW2,2                          8  2571  V O73 B91 2        41
357 11 070         BWZ   *&5,NM2-1,2                         8  2579  V N91 A64 2        41
358 11 080         B     INSD11                               4  2587  B O43              42
359 11 090         ZA    SIZE2,TEMP6                          7  2591  ? A71 C64          42
360 11 100         S     DEC2,TEMP6                           7  2598  S A74 C64          42
361 11 110         ZA    CHCNT,BUCK                           7  2605  ? A62 C73          42
362 11 120         S     DEC1,BUCK                            7  2612  S A29 C73          42
363 11 130         C     TEMP6,BUCK                           7  2619  C C64 C73          42
364 11 140         BH    INSD11                               5  2626  B O43 U            43
365 11 150         BE    INSD11                               5  2631  B O43 S            43
366 11 160         B     PUTX                                 4  2636  B 363              43
367 11 170         DCW   MESS1                                3  2642  C40                43
368 11 180  INSD11 BWZ   *&12,SW2,S                           8  2643  V O62 B91 S        43
369 11 190         MLC   &L17,LAB                            7  2651  M E73 C31          43
370 11 200         B     INSA                                 4  2658  B P45              43
371 11 210         MLC   &L16,LAB                            7  2662  M E76 C31          44
372 11 220         B     INSA                                 4  2669  B P45              44
373 11 230  INSG   BWZ   INSE,NM2-1,2                        8  2673  V O92 A64 2        44
374 11 240         MLC   &L15A,LAB                           7  2681  M E79 C31          44
375 11 250         B     INSA                                 4  2688  B P45              44
376 12 010  INSE   C     SIZE2,CHCNT                          7  2692  C A71 A62          44
377 12 020         BL    INSC1                                5  2699  B P20 T            45
378 12 030         BE    INSC                                 5  2704  B P38 S            45
379 12 040         MLC   &L15B,LAB                           7  2709  M E82 C31          45
380 12 050         B     INSA                                 4  2716  B P45              45
381 12 060  INSC1  B     PUTX                                 4  2720  B 363              45
382 12 070         DCW   &MESS3                               3  2726  C43                45
383 12 080  INSE1  MLC   &STPRUN,LAB                         7  2727  M E85 C31          45
384 12 090         B     COMMON                               4  2734  B !95              46
385 12 100  INSC   MLC   &L15,LAB                            7  2738  M E88 C31          46
386 12 110  INSA   B     COMMON                               4  2745  B !95              46
387 12 120         C     WM1,@001@                            7  2749  C A35 E70          46
388 12 130         BU    EDITR                                5  2756  B P68 /            46
389 12 140         B     PUTX                                 4  2761  B 363              46
390 12 150         DCW   &AA2                                 3  2767  C10                46
391 12 160  EDITR  BCE   EKKK2,EDIT1A,K                      8  2768  B P80 A56 K        47
392 12 170         B     EKKK1                                4  2776  B Q00              47
393 12 180  EKKK2  BCE   EKKK3,EDIT1B,K                      8  2780  B P92 A59 K        47
394 12 190         B     EKKK1                                4  2788  B Q00              47
395 12 200  EKKK3  BWZ   BKZER,COBMSK-2,2                    8  2792  V Q11 A51 2        47
396 12 210  EKKK1  MLC   &EDITLB,LAB                         7  2800  M E91 C31          47
397 12 220         B     COMMON                               4  2807  B !95              48
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230  BKZER   BCE   CWKSW,ED1,K                                  8  2811  B J21 A44 K         48
399 12 240          BCE   CWKSW,BLK,K                                  8  2819  B J21 A47 K         48
400 12 250          MLC   &L18,LAB                                     7  2827  M E94 C31           48
401 13 010          B     OUTLAB                                       4  2834  B J17               48
402 13 020  RNDTST  SBR   RNDBB&3                                      4  2838  H R85               48
403 13 030          BWZ   *&5,SW2,K                                    8  2842  V Q54 B91 K         49
404 13 040          B     RNDBB                                        4  2850  B R82               49
405 13 050          C     JUST,@L@                                     7  2854  C A41 E95           49
406 13 060          BU    *&8                                          5  2861  B Q73 /             49
407 13 070          B     PUTX                                         4  2866  B 363               49
408 13 080          DCW   &MESS11                                      3  2872  C46                 49
409 13 090          BWZ   *&5,NM2-1,2                                  8  2873  V Q85 A64 2         49
410 13 100          B     PUTI8                                        4  2881  B R75               50
411 13 110          BCE   RND1,WM1,1                                   8  2885  B R18 A35 1         50
412 13 120          MLC   PCT,DEC1&1                                   7  2893  M B77 A30           50
413 13 130          B     PUTT                                         4  2900  B R86               50
414 13 140          DCW   &INPUT1                                      3  2906  A18                 50
415 13 150          MLC   @ @,DEC1&1                                   7  2907  M E96 A30           50
416 13 160          B     RND2                                         4  2914  B R25               50
417 13 170  RND1    B     PUTX                                         4  2918  B 363               51
418 13 180          DCW   &NULL                                        3  2924  C28                 51
419 13 190  RND2    B     PUTX                                         4  2925  B 363               51
420 13 200          DCW   &MCSEP                                       3  2931  B83                 51
421 13 210          B     PUTX                                         4  2932  B 363               51
422 13 220          DCW   &@.LC@                                       3  2938  E99                 51
423 13 230          B     OUTOP                                        4  2939  B ?41               51
424 13 240          B     PUTX                                         4  2943  B 363               52
425 13 250          DCW   &VV9                                        3  2949  C52                 52
426 14 010          B     PUTX                                         4  2950  B 363               52
427 14 020          DCW   &WW0                                        3  2956  C55                 52
428 14 030          MLC   DEC2,K2                                      7  2957  M A74 B70           52
429 14 040          MLC   @GNN@,NM2                                    7  2964  M F02 A65           52
430 14 050          B     RNDBB                                        4  2971  B R82               52
431 14 060  PUTI8   B     PUTX                                         4  2975  B 363               53
432 14 070          DCW   &II8                                        3  2981  C58                 53
433 14 080  RNDBB   B     *                                            4  2982  B R85               53
434 14 090  PUTT    SBR   X2                                           4  2986  H 094               53
435 14 100          MLC   2&X2,X3                                     7  2990  M 0!2 099           53
436 14 110  PUTT1   BCE   PUTTBB,0&X3,%                               8  2997  B ?30 0?0 %         53
437 14 120          MLC   2&X3,SY                                      7  3005  M 0?2 B80           53
438 14 130          B     PUTX                                         4  3012  B 363               54
439 14 140          DCW   &SY                                         3  3018  B80                 54
440 14 150          A     @003@,X3                                     7  3019  A E46 099           54
441 14 160          B     PUTT1                                        4  3026  B R97               54
442 14 170  PUTTBB  A     @003@,X2                                     7  3030  A E46 094           54
443 14 180          B     0&X2                                         4  3037  B 0!0               54
444 14 190  OUTOP   SBR   OUTBB&3           PUTOUT OPR, VOP            4  3041  H ?62               54
445 14 200          B     PUTX                                         4  3045  B 363               55
446 14 210          DCW   &OPR                                        3  3051  A17                 55
447 14 220          B     PUTX                                         4  3052  B 363               55
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 230          DCW   &VOP                                        3  3058  B89                 55
449 14 240  OUTBB   B     *                                           4  3059  B ?62               55
450 14 250  OUTA    B     PUTX                                        4  3063  B 363               55
451 15 010          DCW   &NULL                                       3  3069  C28                 55
452 15 020          B     PUTX                                        4  3070  B 363               56
453 15 030          DCW   &MCSEP                                     3  3076  B83                 56
454 15 040          B     GETT                                        4  3077  B W80               56
455 15 050  WMK     SBR   WMKBB&3           CHECK WORDMARK TYPE       4  3081  H A14               56
456 15 060  WMKA    C     WM2,NULL                                    7  3085  C A80 C28           56
457 15 070          BU    WMKBB                                       5  3092  B A11 /             56
458 15 080          B     PUTX                                        4  3097  B 363               56
459 15 090          DCW   &AA3                                        3  3103  C13                 57
460 15 100          MLC   &FF6,CLEAR                                  7  3104  M F05 J39           57
461 15 110  WMKBB   B     *                                           4  3111  B A14               57
462 15 120  OPR     DCW   #3                                          3  3117                      57
463 15 130  INPUT1 EQU   *&1                                           3118
464 15 140  NM1     DCW   #3                                        3  3120                      57
465 15 150  SIZE1         #6                                        6  3126                      57
466 15 160  DEC1          #3                                        3  3129                      57
467 15 170  CL1           #3                                        3  3132                      58
468 15 180  WM1           #3                                        3  3135                      58
469 15 190  TYPE1         #3                                        3  3138                      58
470 15 200  JUST          #3                                        3  3141                      58
471 15 210  ED1           #3                                        3  3144                      58
472 15 220  BLK           #3                                        3  3147                      58
473 15 230  MASK          #3                                        3  3150                      58
474 15 240  COBMSK        #3                                        3  3153                      59
475 15 250  EDIT1A        #3                                        3  3156                      59
476 16 010  EDIT1B        #3                                        3  3159                      59
477 16 020  CHCNT         #3                                        3  3162                      59
478 16 030  INPUT2 EQU   *&1                                           3163
479 16 040  NM2     DCW   #3                                        3  3165                      59
480 16 050  SIZE2         #6                                        6  3171                      59
481 16 060  DEC2    DCW   #3                                        3  3174                      59
482 16 070  CL2           #3                                        3  3177                      60
483 16 080  WM2           #3                                        3  3180                      60
484 16 090  TYPE2         #3                                        3  3183                      60
485 16 100  JUST2         #3                                        3  3186                      60
486 16 110  ED2           #3                                        3  3189                      60
487 16 120  BLK2          #3                                        3  3192                      60
488 16 130  MASK2         #3                                        3  3195                      60
489 16 140  COB22         #3                                        3  3198                      61
490 16 150  EDIT2A        #3                                        3  3201                      61
491 16 160  EDIT2B        #3                                        3  3204                      61
492 16 170  CHCNT2        #3                                        3  3207                      61
493 16 180  INPUT3 EQU   *&1                                           3208
494 16 190  NM3     DCW   #3                                        3  3210                      61
495 16 200  SIZE3         #6                                        6  3216                      61
496 16 210  DEC3          #3                                        3  3219                      61
497 16 220  CL3           #3                                        3  3222                      62
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  WM3           #3                                         3  3225                      62
499 16 240  TYPE3         #3                                         3  3228                      62
500 16 250  JUST3         #3                                         3  3231                      62
501 17 010  ED3           #3                                         3  3234                      62
502 17 020  BLK3          #3                                         3  3237                      62
503 17 030  MASK3        #3                                         3  3240                      62
504 17 040  COB3          #3                                         3  3243                      63
505 17 050  EDIT3A        #3                                         3  3246                      63
506 17 060  EDIT3B        #3                                         3  3249                      63
507 17 070  CHCNT3        #3                                         3  3252                      63
508 17 080  I             #3                                         3  3255                      63
509 17 090  I1            #3                                         3  3258                      63
510 17 100  I2            #3                                         3  3261                      63
511 17 110  I3            #3                                         3  3264                      64
512 17 120  K1            #3                                         3  3267                      64
513 17 130  K2            #3                                         3  3270                      64
514 17 140  OP            #3                                         3  3273                      64
515 17 150  GL            #3                                         3  3276                      64
516 17 160  PCT           @%@                                        1  3277                      64
517 17 170  SY      DCW   #3                                         3  3280                      64
518 17 180  MCSEP         @.MC@                                      3  3283                      65
519 17 190  VEOP          @.EP@                                      3  3286                      65
520 17 200  VOP           @.OP@                                      3  3289                      65
521 17 210  ARITSW        0                                          1  3290                      65
522 17 220  MLTSW   DC    0                                          1  3291                      65
523 17 230  CLGNSW  DC    0                                          1  3292                      65
524 17 240  SW4     DCW   0                                          1  3293                      65
525 17 250  SW5     DC    0                                          1  3294                      65
526 18 010  SW6           0                                          1  3295                      65
527 18 020  SW1     EQU   ARITSW                                        3290
528 18 030  SW2     EQU   MLTSW                                         3291
529 18 040  SW3     EQU   CLGNSW                                        3292
530 18 050  CHGSW   DCW   0                                          1  3296                      65
531 18 060  CLSW          0                                          1  3297                      65
532 18 070  NM3SW         0                                          1  3298                      66
533 18 080  SS2           @.S2@                                      3  3301                      66
534 18 090  FF4           @.F4@                                      3  3304                      66
535 18 100  AA1           @.A0@                                      3  3307                      66
536 18 110  AA2           @.A1@                                      3  3310                      66
537 18 120  AA3           @.A2@                                      3  3313                      66
538 18 130  FF5           @.F5@                                      3  3316                      66
539 18 140  FF6           @.F6@                                      3  3319                      67
540 18 150  CW3           @.F3@                                      3  3322                      67
541 18 160  SWMK3         @.F2@                                      3  3325                      67
542 18 170  NULL          000                                        3  3328                      67
543 18 180  LAB           #3                                         3  3331                      67
544 18 190  AB3           @.A3@                                      3  3334                      67
545 18 200  VA0Q          @A0Q@                                      3  3337                      67
546 18 210  MESS1         @.Q4@                                      3  3340                      68
547 18 220  MESS3         @.Q0@                                      3  3343                      68
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230  MESS11        @.R4@                                     3  3346                      68
549 18 240  MESS19        @.X9@                                     3  3349                      68
550 18 250  VV9           @.V9@                                     3  3352                      68
551 19 010  WW0           @.W0@                                     3  3355                      68
552 19 020  II8           @.I8@                                     3  3358                      68
553 19 030  TEMP6         #6                                        6  3364                      69
554 19 040  TEMP7         #3                                        3  3367                      69
555 19 050  BUCK          #6                                        6  3373                      69
556 19 060  ILIST  EQU    I-2                                          3253
557 19 070  L12    EQU    *&1                                          3374
558 19 080         DCW    @.F1.O9%@                 GIVING          7  3380                      69
559 19 090  L12A   EQU    *&1                                          3381
560 19 100         DCW    @.P1.P2.O9%@              GIVING         10  3390                      69
561 19 110  L13A   EQU    *&1                                          3391
562 19 120         DCW    @.O8%@                    GIVING          4  3394                      69
563 19 130  L14    EQU    *&1                                          3395
564 19 140         DCW    @.P0.O9%@                 GIVING          7  3401                      70
565 19 150  L15    EQU    *&1                                          3402
566 19 160         DCW    @.P3.P4%@                 GIV - EDIT      7  3408                      70
567 19 170  L15B   EQU    *&1                                          3409
568 19 180         DCW    @.B7.Z7.P3.V4.Z8%@                     16  3424                      70
569 19 190  L15A   EQU    *&1                                          3425
570 19 200         DCW    @.Z9.P3.P4.V7%@                        13  3437                      71
571 19 210  L16    EQU    *&1                                          3438
572 19 220         DCW    @.J2.J5.J6.W1.Z7.P7.P3.P4.Z8%@         28  3465                      72
573 19 230  L17    EQU    *&1                                          3466
574 19 240         DCW    @.P8.J6.Z7.P7.P3.P4.Z8%@               22  3487                      73
575 19 250  L17A   EQU    *&1                                          3488
576 20 010         DCW    @.Z7.P5.K3.P7.P3.P4.Z8%@               22  3509                      74
577 20 020  L18    EQU    *&1                                          3510
578 20 030         DCW    @.F8.N7.W9.A1.N9.O0.F0%@               22  3531                      75
579 20 040  STPRUN EQU    *&1                                          3532
580 20 050         DCW    @.W6.W9%@                               7  3538                      75
581 20 060         LTORG                                                      3539
                   DCW    @J@                                     1  3539            LIT       75
                          @E@                                     1  3540            LIT       75
       240                 &INPUT1                                 3  3543  A18       ADCON     75
                          @003@                                   3  3546            LIT       75
                          @1@                                     1  3547            LIT       75
                          @Z@                                     1  3548            LIT       76
                          @R@                                     1  3549            LIT       76
       328                 &FF5                                    3  3552  C16       ADCON     76
       332                 &L14                                    3  3555  C95       ADCON     76
       334                 &L13A                                   3  3558  C91       ADCON     76
       337                 &L12                                    3  3561  C74       ADCON     76
       339                 &L12A                                   3  3564  C81       ADCON     76
       349                 &L17A                                   3  3567  D88       ADCON     77
                          @001@                                   3  3570            LIT       77
       369                 &L17                                    3  3573  D66       ADCON     77
       371                 &L16                                    3  3576  D38       ADCON     77
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
		374			&L15A		3	3579	D25	ADCON	77
		379			&L15B		3	3582	D09	ADCON	77
		383			&STPRUN		3	3585	E32	ADCON	77
		385			&L15		3	3588	D02	ADCON	78
		396			&EDITLB		3	3591	W76	ADCON	78
		400			&L18		3	3594	E10	ADCON	78
					@L@		1	3595		LIT	78
					@ @		1	3596		LIT	78
					@.LC@		3	3599		LIT	78
					@GNN@		3	3602		LIT	78
		460			&FF6		3	3605	C19	ADCON	79
582	20	070		ORG	3790				3790		
583	20	080		DCW	@}@		1	3790			80
584	20	090		END	GETT				/ W80 080		81

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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1401 COBOL - I08 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - I08				
102	1	020		CTL	631 11				
103	1	030	X1	EQU	89		0089		
104	1	040	X2	EQU	94		0094		
105	1	050	X3	EQU	99		0099		
106	1	060	GETX	EQU	335		0335		
107	1	070	SUPER	EQU	351		0351		
108	1	080	PUTX	EQU	363		0363		
109	1	090		ORG	1300		1300		
110	1	100	L40	EQU	*&1		1300		
111	1	110		DCW	@.F9.H3%@	7	1306		4
112	1	120	L41	EQU	*&1		1307		
113	1	130		DCW	@.F9.H4.I5.F0%@	13	1319		4
114	1	140	L42	EQU	*&1		1320		
115	1	150		DCW	@.F9.H4.I2.I5.F0%@	16	1335		4
116	1	160	L43	EQU	*&1		1336		
117	1	170		DCW	@.F9.H4.I3.F0%@	13	1348		5
118	1	180	GETT	MLC	NULL,CLEAR	7	1349	M R81 P61	5
119	1	190		MLC	NULL,SIZE3-3	7	1356	M R81 Q96	5
120	1	200	GETSY	B	GETX GET UNTIL *$%	4	1363	B 335	5
121	1	210		DCW	&SY	3	1369	R63	5
122	1	220			&EOJ	3	1372	U45	5
123	1	230		C	SY,PASSSY	7	1373	C R63 U44	6
124	1	240		BE	GETSY2	5	1380	B T96 S	6
125	1	250		B	PUTX	4	1385	B 363	6
126	2	010		DCW	&SY	3	1391	R63	6
127	2	020		B	GETSY	4	1392	B T63	6
128	2	030	GETSY2	B	GETX	4	1396	B 335	6
129	2	040		DCW	&OPR	3	1402	P94	6
130	2	050			&EOJ	3	1405	U45	7
131	2	060		B	PUTX	4	1406	B 363	7
132	2	070		DCW	&OPR	3	1412	P94	7
133	2	080		B	GETX	4	1413	B 335	7
134	2	090		DCW	&SY	3	1419	R63	7
135	2	100			&EOJ	3	1422	U45	7
136	2	110		B	PUTX	4	1423	B 363	7
137	2	120		DCW	&SY	3	1429	R63	8
138	2	130		BCE	RELAT,OPR-2,,	8	1430	B U59 P92 ,	8
139	2	140		B	GETSY	4	1438	B T63	8
140	2	150	PASSSY	DCW	@*$*@	3	1444		8
141	2	160	EOJ	B	PUTX	4	1445	B 363	8
142	2	170		DCW	&VEOP	3	1451	R69	8
143	2	180		B	SUPER	4	1452	B 351	8
144	2	190		DCW	@I09@	3	1458		9
145	2	200	RELAT	MLC	&SW1,X2	7	1459	M B62 094	9
146	2	210	READ3	B	GETX	4	1466	B 335	9
147	2	220		DCW	&SY	3	1472	R63	9

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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230          &EOJ                                               3  1475  U45                 9
149  2 240          C     SY,MCSEP                                     7  1476  C R63 R66           9
150  2 250          BE    READBB                                       5  1483  B V06 S             9
151  3 010          MLC   SY,2&X2                                      7  1488  M R63 0!2          10
152  3 020          A     @003@,X2                                     7  1495  A B65 094          10
153  3 030          B     READ3                                        4  1502  B U66              10
154  3 040  READBB  MLC   NM3,GL                                      7  1506  M Q93 R59          10
155  3 050          BCE   *&5,SW6,1                                   8  1513  B V25 Q00 1        10
156  3 060          B     RELTST                                       4  1521  B V61              10
157  3 070          BWZ   RELTST,SW5,2                                 8  1525  V V61 P99 2        11
158  3 080          C     DEC1,NULL                                    7  1533  C Q12 R81          11
159  3 090          BU    RELTST                                       5  1540  B V61 /            11
160  3 100          C     DEC2,NULL                                    7  1545  C Q57 R81          11
161  3 110          BU    RELTST                                       5  1552  B V61 /            11
162  3 120          B     ALPCOM                                       4  1557  B !49              11
163  3 130  RELTST  BWZ   RELTS1,SW5,2                                 8  1561  V V81 P99 2        12
164  3 140          BCE   NUMCOM,SIZE3-3,0   ARE THERE FGCONS         8  1569  B L83 Q96 0        12
165  3 150          B     NUMFG               RELATIONAL               4  1577  B Y29              12
166  3 160  RELTS1  BCE   ALPCOM,SIZE3-3,0                             8  1581  B !49 Q96 0        12
167  3 170  ALPFG   BWZ   AFG1,SW1,S         NON-NUMERIC FGCONS       8  1589  V W20 P95 S        12
168  3 180          BWZ   *&5,SW3,2                                   8  1597  V W09 P97 2        13
169  3 190          B     AFG1                                         4  1605  B W20              13
170  3 200          MLC   &L29,LAB                                    7  1609  M B68 P87          13
171  3 210          B     COMOUT                                       4  1616  B P74              13
172  3 220  AFG1    BCE   *&5,SIZE3-3,1                               8  1620  B W32 Q96 1        13
173  3 230          B     AFG2                                         4  1628  B X29              13
174  3 240          C     NM1,VA0Q                                     7  1632  C Q03 R72          14
175  3 250          BE    AFG1A                                        5  1639  B W63 S            14
176  4 010          BCE   *&5,CL2,9                                   8  1644  B W56 Q60 9        14
177  4 020          B     AFG1A                                        4  1652  B W63              14
178  4 030          B     PUTX                                         4  1656  B 363              14
179  4 040          DCW   &MESS18                                     3  1662  R78                14
180  4 050  AFG1A   C     ONE,SIZE1                                    7  1663  C R90 Q09          14
181  4 060          BH    SUBFGB                                       5  1670  B Y18 U            15
182  4 070          BWZ   *&5,SW1,2                                   8  1675  V W87 P95 2        15
183  4 080          B     SUBFGA                                       4  1683  B Y07              15
184  4 090          C     TWEN,SIZE2                                   7  1687  C R84 Q54          15
185  4 100          BH    SUBFGA                                       5  1694  B Y07 U            15
186  4 110          B     TWOWM                                        4  1699  B O85              15
187  4 120          MLC   &L60,LAB                                    7  1703  M B71 P87          16
188  4 130          B     COMMON                                       4  1710  B P66              16
189  4 140          B     CWKSW                                        4  1714  B P39              16
190  4 150          B     PUTX                                         4  1718  B 363              16
191  4 160          DCW   &II6                                        3  1724  ?14                16
192  4 170          B     OUTPAR                                       4  1725  B O93              16
193  4 180  AFG2    C     NM2,VA0Q                                     7  1729  C Q48 R72          16
194  4 190          BE    AFG2A                                        5  1736  B X60 S            17
195  4 200          BCE   *&5,CL1,9                                   8  1741  B X53 Q15 9        17
196  4 210          B     AFG2A                                        4  1749  B X60              17
197  4 220          B     PUTX                                         4  1753  B 363              17
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230          DCW   &MESS18                                    3  1759  R78                 17
199  4 240  AFG2A   C     ONE,SIZE2                                  7  1760  C R90 Q54           17
200  4 250          BH    SUBFGB                                     5  1767  B Y18 U             17
201  5 010          BWZ   *&5,SW1,2                                  8  1772  V X84 P95 2         18
202  5 020          B     SUBFGA                                     4  1780  B Y07               18
203  5 030          C     TWEN,SIZE1                                 7  1784  C R84 Q09           18
204  5 040          BH    SUBFGA                                     5  1791  B Y07 U             18
205  5 050          MLC   &L59,LAB                                  7  1796  M B74 P87           18
206  5 060          B     COMOUT                                     4  1803  B P74               18
207  5 070  SUBFGA  B     PUTX              CALL SUBR. FGA           4  1807  B 363               18
208  5 080          DCW   &GG4                                      3  1813  R93                 19
209  5 090          B     OUTPAR                                     4  1814  B O93               19
210  5 100  SUBFGB  B     PUTX              CALL SUBR. FGB           4  1818  B 363               19
211  5 110          DCW   &GG5                                      3  1824  R96                 19
212  5 120          B     OUTPAR                                     4  1825  B O93               19
213  5 130  NUMFG   C     SW6,@1@                                    7  1829  C Q00 B75           19
214  5 140          BU    *&19                                       5  1836  B Y59 /             19
215  5 150          B     PUTX                                       4  1841  B 363               20
216  5 160          DCW   &MESS17                                    3  1847  R75                 20
217  5 170          B     PUTX                                       4  1848  B 363               20
218  5 180          DCW   &MCSEP                                     3  1854  R66                 20
219  5 190          B     ALPFG                                      4  1855  B V89               20
220  5 200          BWZ   NUMFG2,SW1,2                              8  1859  V Y78 P95 2         20
221  5 210          B     PUTX                                       4  1867  B 363               20
222  5 220          DCW   &GG4                                      3  1873  R93                 21
223  5 230          B     OUTPAR                                     4  1874  B O93               21
224  5 240  NUMFG2  BCE   LTFG,SIZE3-3,1                           8  1878  B Z88 Q96 1         21
225  5 250  ONEWM   C     WM1,NULL                                   7  1886  C Q18 R81           21
226  6 010          BU    NUMFG3                                     5  1893  B Z09 /             21
227  6 020          MLC   &NUMFG3,WMKBB&3                          7  1898  M B78 O29           21
228  6 030          B     WMKB                                       4  1905  B N82               21
229  6 040  NUMFG3  B     PUTX                                       4  1909  B 363               22
230  6 050          DCW   &FF7                                      3  1915  ?50                 22
231  6 060          B     CWKSW                                      4  1916  B P39               22
232  6 070          BCE   FGEQ,OPR,#                               8  1920  B Z55 P94 #         22
233  6 080          BCE   FGNEQ,OPR,E                              8  1928  B Z66 P94 E         22
234  6 090          BCE   NUMFG4,OPR,1                             8  1936  B Z77 P94 1         22
235  6 100          MLC   &L51,LAB                                  7  1944  M B81 P87           23
236  6 110          B     COMOUT                                     4  1951  B P74               23
237  6 120  FGEQ    B     PUTX                                       4  1955  B 363               23
238  6 130          DCW   &HH3                                      3  1961  ?05                 23
239  6 140          B     OUTPAR                                     4  1962  B O93               23
240  6 150  FGNEQ   MLC   &L50,LAB                                  7  1966  M B84 P87           23
241  6 160          B     COMOUT                                     4  1973  B P74               23
242  6 170  NUMFG4  MLC   &L52,LAB                                  7  1977  M B87 P87           24
243  6 180          B     COMOUT                                     4  1984  B P74               24
244  6 190  LTFG    B     TWOWM                                      4  1988  B O85               24
245  6 200          B     PUTX                                       4  1992  B 363               24
246  6 210          DCW   &FF8                                      3  1998  ?53                 24
247  6 220          B     CWKSW                                      4  1999  B P39               24
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230          BCE   FGEQ,OPR,#                               8  2003  B Z55 P94 #         24
249  6 240          BCE   FGNEQ,OPR,E                             8  2011  B Z66 P94 E         25
250  6 250          BCE   LTFG4,OPR,1                             8  2019  B !38 P94 1         25
251  7 010          MLC   &L55,LAB                                7  2027  M B90 P87           25
252  7 020          B     COMOUT                                   4  2034  B P74               25
253  7 030  LTFG4   MLC   &L56,LAB                                7  2038  M B93 P87           25
254  7 040          B     COMOUT                                   4  2045  B P74               25
255  7 050  ALPCOM  BWZ   ALP1A,SW1,2                             8  2049  V !68 P95 2         26
256  7 060          B     PUTX                                     4  2057  B 363               26
257  7 070          DCW   &GG6                                    3  2063  R99                 26
258  7 080          B     OUTPAR                                   4  2064  B O93               26
259  7 090  ALP1A   BWZ   *&5,SW3,2                               8  2068  V !80 P97 2         26
260  7 100          B     ALPCM1                                   4  2076  B J06               26
261  7 110          B     TWOWM                                    4  2080  B O85               26
262  7 120          B     PUTX                                     4  2084  B 363               27
263  7 130          DCW   &HH7                                    3  2090  ?08                 27
264  7 140  ALP1    B     CWKSW                                    4  2091  B P39               27
265  7 150          B     PUTX                                     4  2095  B 363               27
266  7 160          DCW   &II6                                    3  2101  ?14                 27
267  7 170          B     OUTPAR                                   4  2102  B O93               27
268  7 180  ALPCM1  BCE   ALP20,SW6,1                             8  2106  B J52 Q00 1         27
269  7 190          BWZ   ALPCM2,SW3,S                            8  2114  V J37 P97 S         28
270  7 200          B     TWOWM                                    4  2122  B O85               28
271  7 210          MLC   &L32,LAB                                7  2126  M B96 P87           28
272  7 220          B     *&8                                      4  2133  B J44               28
273  7 230  ALPCM2  MLC   &L31,LAB                                7  2137  M B99 P87           28
274  7 240          B     COMMON                                   4  2144  B P66               28
275  7 250          B     ALP1                                     4  2148  B !91               28
276  8 010  ALP20   BWZ   *&5,SW3,S                               8  2152  V J64 P97 S         29
277  8 020          B     ALP60                                    4  2160  B J86               29
278  8 030          MLC   &L34,LAB                                7  2164  M C02 P87           29
279  8 040          B     TWOWM                                    4  2171  B O85               29
280  8 050          MLC   KK4,SY                                  7  2175  M ?26 R63           29
281  8 060          B     ALP61                                    4  2182  B K04               29
282  8 070  ALP60   MLC   &L35,LAB                                7  2186  M C05 P87           30
283  8 080          B     WMK                                      4  2193  B N36               30
284  8 090          MLC   KK5,SY                                  7  2197  M ?29 R63           30
285  8 100  ALP61   B     PUTX                                     4  2204  B 363               30
286  8 110          DCW   &SY                                     3  2210  R63                 30
287  8 120          B     CWKSW                                    4  2211  B P39               30
288  8 130          BCE   ALP21,OPR,E                             8  2215  B K68 P94 E         30
289  8 140          BCE   ALP22,OPR,0                             8  2223  B K97 P94 0         31
290  8 150          BCE   ALP23,OPR,1                             8  2231  B L20 P94 1         31
291  8 160          B     PUTX                                     4  2239  B 363               31
292  8 170          DCW   &JJ8                                    3  2245  ?17                 31
293  8 180          B     COMMON                                   4  2246  B P66               31
294  8 190          B     PUTX                                     4  2250  B 363               31
295  8 200          DCW   &JJ8                                    3  2256  ?17                 31
296  8 210          MLC   &L37,LAB                                7  2257  M C08 P87           32
297  8 220          B     COMOUT                                   4  2264  B P74               32
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230  ALP21  B     PUTX                                       4  2268  B 363              32
299  8 240         DCW   &II6                                       3  2274  ?14                32
300  8 250         B     COMMON                                     4  2275  B P66              32
301  9 010         B     PUTX                                       4  2279  B 363              32
302  9 020         DCW   &II6                                       3  2285  ?14                32
303  9 030         MLC   &L36,LAB                                  7  2286  M C11 P87          33
304  9 040         B     COMOUT                                     4  2293  B P74              33
305  9 050  ALP22  BWZ   *&5,SW3,S                                 8  2297  V L09 P97 S        33
306  9 060         B     ALP24                                      4  2305  B L43              33
307  9 070         B     PUTX                                       4  2309  B 363              33
308  9 080         DCW   &KK0                                      3  2315  ?23                33
309  9 090         B     ALP51                                      4  2316  B L54              33
310  9 100  ALP23  BWZ   *&5,SW3,K                                 8  2320  V L32 P97 K        34
311  9 110         B     ALP24                                      4  2328  B L43              34
312  9 120         B     PUTX                                       4  2332  B 363              34
313  9 130         DCW   &JJ9                                      3  2338  ?20                34
314  9 140         B     ALP51                                      4  2339  B L54              34
315  9 150  ALP24  B     PUTX                                       4  2343  B 363              34
316  9 160         DCW   &II6                                       3  2349  ?14                34
317  9 170         B     OUTPAR                                     4  2350  B O93              35
318  9 180  ALP51  B     PUTX                                       4  2354  B 363              35
319  9 190         DCW   &II6                                       3  2360  ?14                35
320  9 200         B     COMMON                                     4  2361  B P66              35
321  9 210         B     PUTX                                       4  2365  B 363              35
322  9 220         DCW   &II4                                       3  2371  ?11                35
323  9 230         MLC   &L36,LAB                                  7  2372  M C14 P87          35
324  9 240         B     COMOUT                                     4  2379  B P74              36
325  9 250  NUMCOM BWZ   NM4,SW1,2                                 8  2383  V M02 P95 2        36
326 10 010         B     PUTX                                       4  2391  B 363              36
327 10 020         DCW   &GG7                                      3  2397  ?02                36
328 10 030         B     OUTPAR                                     4  2398  B O93              36
329 10 040  NM4    BWZ   *&5,SW2,2                                 8  2402  V M14 P96 2        36
330 10 050         B     NUMC1                                      4  2410  B M49              36
331 10 060         C     DEC1,NULL                                  7  2414  C Q12 R81          37
332 10 070         BU    NUMC1                                      5  2421  B M49 /            37
333 10 080         BCE   *&5,SW6,1                                 8  2426  B M38 Q00 1        37
334 10 090         B     NUMC1                                      4  2434  B M49              37
335 10 100         B     PUTX                                       4  2438  B 363              37
336 10 110         DCW   &MCSEP                                    3  2444  R66                37
337 10 120         B     ALPCOM                                     4  2445  B !49              37
338 10 130  NUMC1  B     WMK                                        4  2449  B N36              38
339 10 140         BWZ   *&5,SW2,S                                 8  2453  V M65 P96 S        38
340 10 150         B     NUMC2                                      4  2461  B M91              38
341 10 160         MLC   &L48,LAB                                  7  2465  M C17 P87          38
342 10 170         B     COMMON                                     4  2472  B P66              38
343 10 180         B     CWKSW                                      4  2476  B P39              38
344 10 190         MLC   I2,LAB                                    7  2480  M R44 P87          38
345 10 200         B     COMOUT                                     4  2487  B P74              39
346 10 210  NUMC2  BWZ   NUMC3-7,SW2,2                             8  2491  V N10 P96 2        39
347 10 220         MLC   &L47,LAB                                  7  2499  M C20 P87          39
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230         B     *&8                                          4  2506  B N17               39
349 10 240         MLC   &L46,LAB                                     7  2510  M C23 P87           39
350 10 250  NUMC3  B     COMMON                                       4  2517  B P66               39
351 11 010         B     CWKSW                                        4  2521  B P39               39
352 11 020         MLC   I3,LAB                                       7  2525  M R47 P87           40
353 11 030         B     COMOUT                                       4  2532  B P74               40
354 11 040  WMK    SBR   WMKBB&3            CHECK WORDMARK TYPE       4  2536  H O29               40
355 11 050         C     WM1,NULL                                     7  2540  C Q18 R81           40
356 11 060         BU    WMKA                      SET                5  2547  B O00 /             40
357 11 070         C     WM2,NULL                                     7  2552  C Q63 R81           40
358 11 080         BU    WMKB                                         5  2559  B N82 /             40
359 11 090         B     PUTX                                         4  2564  B 363               41
360 11 100         DCW   &AA1                                         3  2570  ?32                 41
361 11 110         MLC   &FF4,CLEAR                                   7  2571  M C26 P61           41
362 11 120         B     WMKBB                                        4  2578  B O26               41
363 11 130  WMKB   B     PUTX                                         4  2582  B 363               41
364 11 140         DCW   &AA2                                         3  2588  ?35                 41
365 11 150         MLC   &FF5,CLEAR                                   7  2589  M C29 P61           41
366 11 160         B     WMKBB                                        4  2596  B O26               42
367 11 170  WMKA   C     WM2,NULL                                     7  2600  C Q63 R81           42
368 11 180         BU    WMKBB                                        5  2607  B O26 /             42
369 11 190         B     PUTX                                         4  2612  B 363               42
370 11 200         DCW   &AA3                                         3  2618  ?38                 42
371 11 210         MLC   &FF6,CLEAR                                   7  2619  M C32 P61           42
372 11 220  WMKBB  B     *                                            4  2626  B O29               42
373 11 230  PUTT   SBR   X2                                          4  2630  H 094               43
374 11 240         MLC   2&X2,X3                                      7  2634  M 0!2 099           43
375 11 250  PUTT1  BCE   PUTTBB,0&X3,%                               8  2641  B O74 0?0 %         43
376 12 010         MLC   2&X3,SY                                      7  2649  M 0?2 R63           43
377 12 020         B     PUTX                                         4  2656  B 363               43
378 12 030         DCW   &SY                                          3  2662  R63                 43
379 12 040         A     @003@,X3                                     7  2663  A B65 099           44
380 12 050         B     PUTT1                                        4  2670  B O41               44
381 12 060  PUTTBB A     @003@,X2                                     7  2674  A B65 094           44
382 12 070         B     0&X2                                         4  2681  B 0!0               44
383 12 080  TWOWM  SBR   WMKBB&3                                     4  2685  H O29               44
384 12 090         B     WMKA                                         4  2689  B O00               44
385 12 100  OUTPAR MLC   PCT,TYPE2&1                                 7  2693  M R60 Q67           44
386 12 110         B     PUTT                                         4  2700  B O30               45
387 12 120         DCW   &INPUT1                                     3  2706  Q01                 45
388 12 130         MLC   PCT,SIZE3&1                                 7  2707  M R60 R00           45
389 12 140         B     PUTT                                         4  2714  B O30               45
390 12 150         DCW   &INPUT3                                     3  2720  Q91                 45
391 12 160         B     PUTT                                         4  2721  B O30               45
392 12 170         DCW   &ILIST                                      3  2727  R36                 45
393 12 180  OUT    B     PUTX                                         4  2728  B 363               46
394 12 190         DCW   &MCSEP                                       3  2734  R66                 46
395 12 200         B     GETT                                         4  2735  B T49               46
396 12 210  CWKSW  SBR   CWKBB&3                                     4  2739  H P65               46
397 12 220         C     CLEAR,NULL                                   7  2743  C P61 R81           46
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
398	12	230		BE	CWKBB		5	2750	B P62 S	46
399	12	240		B	PUTX		4	2755	B 363	46
400	12	250	CLEAR	DCW	*		3	2761	P61	47
401	13	010	CWKBB	B	*		4	2762	B P65	47
402	13	020	COMMON	SBR	COMBB&3		4	2766	H P91	47
403	13	030		B	*&8		4	2770	B P81	47
404	13	040	COMOUT	MLC	&OUTPAR,COMBB&3		7	2774	M C35 P91	47
405	13	050		B	PUTT		4	2781	B O30	47
406	13	060	LAB	DCW	*		3	2787	P87	47
407	13	070	COMBB	B	*		4	2788	B P91	48
408	13	080	OPR	DCW	#3		3	2794		48
409	13	090	SW1	DCW	0		1	2795		48
410	13	100	SW2	DC	0		1	2796		48
411	13	110	SW3		0		1	2797		48
412	13	120	SW4	DCW	0		1	2798		48
413	13	130	SW5	DC	0		1	2799		48
414	13	140	SW6		0		1	2800		48
415	13	150	INPUT1	EQU	*&1			2801		
416	13	160	NM1	DCW	#3		3	2803		48
417	13	170	SIZE1		#6		6	2809		48
418	13	180	DEC1		#3		3	2812		48
419	13	190	CL1		#3		3	2815		49
420	13	200	WM1		#3		3	2818		49
421	13	210	TYPE1		#3		3	2821		49
422	13	220	JUST		#3		3	2824		49
423	13	230	ED1		#3		3	2827		49
424	13	240	BLK		#3		3	2830		49
425	13	250	MASK		#3		3	2833		49
426	14	010	COBMSK		#3		3	2836		50
427	14	020	EDIT1A		#3		3	2839		50
428	14	030	EDIT1B		#3		3	2842		50
429	14	040	CHCNT		#3		3	2845		50
430	14	050	INPUT2	EQU	*&1			2846		
431	14	060	NM2	DCW	#3		3	2848		50
432	14	070	SIZE2		#6		6	2854		50
433	14	080	DEC2		#3		3	2857		50
434	14	090	CL2		#3		3	2860		51
435	14	100	WM2		#3		3	2863		51
436	14	110	TYPE2		#3		3	2866		51
437	14	120	JUST2		#3		3	2869		51
438	14	130	ED2		#3		3	2872		51
439	14	140	BLK2		#3		3	2875		51
440	14	150	MASK2		#3		3	2878		51
441	14	160	COB22		#3		3	2881		52
442	14	170	EDIT2A		#3		3	2884		52
443	14	180	EDIT2B		#3		3	2887		52
444	14	190	CHCNT2		#3		3	2890		52
445	14	200	INPUT3	EQU	*&1			2891		
446	14	210	NM3	DCW	#3		3	2893		52
447	14	220	SIZE3		#6		6	2899		52

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
448	14	230	DEC3		#3	3	2902		52
449	14	240	CL3		#3	3	2905		53
450	14	250	WM3		#3	3	2908		53
451	15	010	TYPE3		#3	3	2911		53
452	15	020	JUST3		#3	3	2914		53
453	15	030	ED3		#3	3	2917		53
454	15	040	BLK3		#3	3	2920		53
455	15	050	MASK3		#3	3	2923		53
456	15	060	COB3		#3	3	2926		54
457	15	070	EDIT3A		#3	3	2929		54
458	15	080	EDIT3B		#3	3	2932		54
459	15	090	CHCNT3		#3	3	2935		54
460	15	100	I		#3	3	2938		54
461	15	110	I1		#3	3	2941		54
462	15	120	I2		#3	3	2944		54
463	15	130	I3		#3	3	2947		55
464	15	140	K1		#3	3	2950		55
465	15	150	K2		#3	3	2953		55
466	15	160	OP		#3	3	2956		55
467	15	170	GL		#3	3	2959		55
468	15	180	PCT		@%@	1	2960		55
469	15	190	SY	DCW	#3	3	2963		55
470	15	200	MCSEP		@.MC@	3	2966		56
471	15	210	VEOP		@.EP@	3	2969		56
472	15	220	VA0Q		@A0Q@	3	2972		56
473	15	230	MESS17		@.W4@	3	2975		56
474	15	240	MESS18		@.W5@	3	2978		56
475	15	250	NULL		000	3	2981		56
476	16	010	TWEN	DC	020	3	2984		56
477	16	020	ONE	DCW	@000001@	6	2990		56
478	16	030	GG4		@.G5@	3	2993		57
479	16	040	GG5		@.G5@	3	2996		57
480	16	050	GG6		@.G6@	3	2999		57
481	16	060	GG7		@.G7@	3	3002		57
482	16	070	HH3		@.H3@	3	3005		57
483	16	080	HH7		@.H7@	3	3008		57
484	16	090	II4		@.I4@	3	3011		57
485	16	100	II6		@.I6@	3	3014		58
486	16	110	JJ8		@.J8@	3	3017		58
487	16	120	JJ9		@.J9@	3	3020		58
488	16	130	KK0		@.K0@	3	3023		58
489	16	140	KK4		@.K4@	3	3026		58
490	16	150	KK5		@.K5@	3	3029		58
491	16	160	AA1		@.A0@	3	3032		58
492	16	170	AA2		@.A1@	3	3035		59
493	16	180	AA3		@.A2@	3	3038		59
494	16	190	FF4		@.F4@	3	3041		59
495	16	200	FF5		@.F5@	3	3044		59
496	16	210	FF6		@.F6@	3	3047		59
497	16	220	FF7		@.F7@	3	3050		59

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

498 16 230  FF8          @.F8@                                     3  3053                      59
499 16 240  ILIST  EQU    I-2                                          2936
500 16 250  L29    EQU    *&1                                          3054
501 17 010          DCW    @.H7.I6%@                                 7  3060                      60
502 17 020  L31    EQU    *&1                                          3061
503 17 030          DCW    @.K2.K3.L6.L7%@                          13  3073                      60
504 17 040  L32    EQU    *&1                                          3074
505 17 050          DCW    @.K2.K3.L8.L9%@                          13  3086                      60
506 17 060  L34    EQU    *&1                                          3087
507 17 070          DCW    @.G0.K7.K8.K9.L0%@                       16  3102                      61
508 17 080  L35    EQU    *&1                                          3103
509 17 090          DCW    @.K6.L3.L4.K9.L5%@                       16  3118                      61
510 17 100  L36    EQU    *&1                                          3119
511 17 110          DCW    @.L1.L2.K1.F0%@                          13  3131                      62
512 17 120  L37    EQU    *&1                                          3132
513 17 130          DCW    @.L1.L2.K1.I5.F0%@                       16  3147                      62
514 17 140  L46    EQU    *&1                                          3148
515 17 150          DCW    @.J0.J1%@                                 7  3154                      62
516 17 160  L47    EQU    *&1                                          3155
517 17 170          DCW    @.J2.J3.J4.J1%@                          13  3167                      63
518 17 180  L48    EQU    *&1                                          3168
519 17 190          DCW    @.J2.J5.J6.J7%@                          13  3180                      63
520 17 200  L50    EQU    *&1                                          3181
521 17 210          DCW    @.H4.I5.F0%@                             10  3190                      63
522 17 220  L51    EQU    *&1                                          3191
523 17 230          DCW    @.H4.H8.I5.F0%@                          13  3203                      64
524 17 240  L52    EQU    *&1                                          3204
525 17 250          DCW    @.H4.I0.F0%@                             10  3213                      64
526 18 010  L55    EQU    *&1                                          3214
527 18 020          DCW    @.H4.H9.F0%@                             10  3223                      64
528 18 030  L56    EQU    *&1                                          3224
529 18 040          DCW    @.H4.I1.I5.F0%@                          13  3236                      65
530 18 050  L59    EQU    *&1                                          3237
531 18 060          DCW    @.H5.H6.L7.I6%@                          13  3249                      65
532 18 070  L60    EQU    *&1                                          3250
533 18 080          DCW    @.M0.M1.L9%@                             10  3259                      65
534 18 090          LTORG                                                    3260
       145          DCW    &SW1                                      3  3262  P95         ADCON   65
                           @003@                                     3  3265                LIT     66
       170                 &L29                                      3  3268  ?54         ADCON   66
       187                 &L60                                      3  3271  B50         ADCON   66
       205                 &L59                                      3  3274  B37         ADCON   66
                           @1@                                       1  3275                LIT     66
       227                 &NUMFG3                                   3  3278  Z09         ADCON   66
       235                 &L51                                      3  3281  A91         ADCON   66
       240                 &L50                                      3  3284  A81         ADCON   67
       242                 &L52                                      3  3287  B04         ADCON   67
       251                 &L55                                      3  3290  B14         ADCON   67
       253                 &L56                                      3  3293  B24         ADCON   67
       271                 &L32                                      3  3296  ?74         ADCON   67
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
		273			&L31		3	3299	?61	ADCON	67
		278			&L34		3	3302	?87	ADCON	67
		282			&L35		3	3305	A03	ADCON	68
		296			&L37		3	3308	A32	ADCON	68
		303			&L36		3	3311	A19	ADCON	68
		323			&L36		3	3314	A19	ADCON	68
		341			&L48		3	3317	A68	ADCON	68
		347			&L47		3	3320	A55	ADCON	68
		349			&L46		3	3323	A48	ADCON	68
		361			&FF4		3	3326	?41	ADCON	69
		365			&FF5		3	3329	?44	ADCON	69
		371			&FF6		3	3332	?47	ADCON	69
		404			&OUTPAR		3	3335	O93	ADCON	69
535	18	100		ORG	3790				3790		
536	18	110		DCW	@}@		1	3790			70
537	18	120		END	GETT				/ T49 080		71

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CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - I09
 102  1 020         CTL   631 11
 103  1 030         ORG   1300                                                 1300
 104  1 040  IORW   EQU   343                                          0343
 105  1 050  PUTX   EQU   363                                          0363
 106  1 060  SUPER  EQU   351                                          0351
 107  1 070  GETX   EQU   335                                          0335
 108  1 080  X1     EQU   89                                           0089
 109  1 090  X2     EQU   94                                           0094
 110  1 100  X3     EQU   99                                           0099
 111  1 110  STARTS EQU   332                                          0332
 112  1 120         MLCWA 188,3                                     7  1300  L 188 003           4
 113  1 130         CS    332                                       4  1307  / 332               4
 114  1 140         CS                                              1  1311  /                   4
 115  1 150         CS                                              1  1312  /                   4
 116  1 160         SBR   358,959                                   7  1313  H 358 959           4
 117  1 170         BSS   PHASE,F                                   5  1320  B T33 F             4
 118  1 180         BW    START,86                                  8  1325  V T40 086 1         4
 119  1 190  PHASE  B     SUPER                                     4  1333  B 351               5
 120  1 200         DCW   @J01@                                     3  1339                      5
 121  1 210  START  SBR   X3,STARTS                                 7  1340  H 099 332           5
 122  1 220  L1     B     GETBLK                                    4  1347  B A93               5
 123  1 230         DCW   SX                                        3  1353  F98                 5
 124  1 240         DCW   L1                                        3  1356  T47                 5
 125  1 250         C     SX,@.IC@                                  7  1357  C F98 G15           5
 126  2 010         BU    L1                                        5  1364  B T47 /             6
 127  2 020  L2     B     GETSX                                     4  1369  B ?59               6
 128  2 030         C     SX,@.DI@                                  7  1373  C F98 G18           6
 129  2 040         BU    L2                                        5  1380  B T69 /             6
 130  2 050         B     PUTSX                                     4  1385  B L93               6
 131  2 060  L3     B     GETSX                                     4  1389  B ?59               6
 132  2 070         C     SX,@.MC@                                  7  1393  C F98 G21           6
 133  2 080         BU    L3                                        5  1400  B T89 /             7
 134  2 090  L4     B     GETSX                                     4  1405  B ?59               7
 135  2 100         C     SX,@.DE@                                  7  1409  C F98 G24           7
 136  2 110         BE    KK12                                      5  1416  B A85 S             7
 137  2 120         C     SX,@***@                                  7  1421  C F98 G27           7
 138  2 130         BE    TOOS                                      5  1428  B V39 S             7
 139  2 140         BCE   IODEV,SX-2,I                             8  1433  B U85 F96 I         8
 140  2 150         BCE   DIOC,SX-2,D                             8  1441  B X99 F96 D         8
 141  2 160         BCE   TAPE,SX-2,T                             8  1449  B W24 F96 T         8
 142  2 170         BCE   LABEL,SX-2,L                            8  1457  B W58 F96 L         8
 143  2 180         BCE   ALTDR,SX-2,A                           8  1465  B X73 F96 A         9
 144  2 190         BCE   REAER,SX-2,R                           8  1473  B W05 F96 R         9
 145  2 200         B     FEAT                                      4  1481  B X84               9
 146  2 210  IODEV  B     GETOP                                     4  1485  B ?77               9
 147  2 220  BACK1  BCE   READ,SX-2,R                             8  1489  B V17 F96 R         9
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         BCE   PUNCH,SX-1,U                             8  1497  B V28 F97 U         10
149  2 240         BCE   PRINT,SX-2,P                            8  1505  B V55 F96 P         10
150  2 250         B     TAPEK                                    4  1513  B V66               10
151  3 010  READ   B     PUTX                                     4  1517  B 363               10
152  3 020         DCW   &@ 34@                                   3  1523  G30                 10
153  3 030         B     IDE                                      4  1524  B V81               10
154  3 040  PUNCH  B     PUTX                                     4  1528  B 363               10
155  3 050         DCW   &@ 33@                                   3  1534  G33                 11
156  3 060         B     IDE                                      4  1535  B V81               11
157  3 070  TOOS   B     PUTSX                                    4  1539  B L93               11
158  3 080         B     GETSX                                    4  1543  B ?59               11
159  3 090         B     PUTSX                                    4  1547  B L93               11
160  3 100         B     L4                                       4  1551  B U05               11
161  3 110  PRINT  B     PUTX                                     4  1555  B 363               11
162  3 120         DCW   &@ 32@                                   3  1561  G36                 12
163  3 130         B     IDE                                      4  1562  B V81               12
164  3 140  TAPEK  B     PUTX                                     4  1566  B 363               12
165  3 150         DCW   &@ 35@                                   3  1572  G39                 12
166  3 160         B     IDE                                      4  1573  B V81               12
167  3 170  IDEA   B     GETSX                                    4  1577  B ?59               12
168  3 180  IDE    BCE   BACK,SX,,                                8  1581  B A77 F98 ,         12
169  3 190         C     SX,@.MC@                                 7  1589  C F98 G21           13
170  3 200         BE    L4                                       5  1596  B U05 S             13
171  3 210         B     IDEA                                     4  1601  B V77               13
172  3 220  REAER  BCE   RWDOR,SX-1,W                            8  1605  B X39 F97 W         13
173  3 230         B     PUTX                                     4  1613  B 363               13
174  3 240         DCW   &@ 10@                                   3  1619  G42                 13
175  3 250         B     IDE                                      4  1620  B V81               13
176  4 010  TAPE   B     GETOP                                    4  1624  B ?77               14
177  4 020         BCE   INPUT,SX-2,I                            8  1628  B W47 F96 I         14
178  4 030         B     PUTX                                     4  1636  B 363               14
179  4 040         DCW   &@ 40@                                   3  1642  G45                 14
180  4 050         B     IDE                                      4  1643  B V81               14
181  4 060  INPUT  B     PUTX                                     4  1647  B 363               14
182  4 070         DCW   &@ 39@                                   3  1653  G48                 14
183  4 080         B     IDE                                      4  1654  B V81               15
184  4 090  LABEL  B     GETOP                                    4  1658  B ?77               15
185  4 100         BCE   STAND,SX-2,S                            8  1662  B X28 F96 S         15
186  4 110         B     PUTX                                     4  1670  B 363               15
187  4 120         DCW   &@ 29@                                   3  1676  G51                 15
188  4 130  LAB    B     GETSX                                    4  1677  B ?59               15
189  4 140         C     SX,@.MC@                                 7  1681  C F98 G21           15
190  4 150         BE    L4                                       5  1688  B U05 S             16
191  4 160         BCE   IDENT,SX,,                               8  1693  B X05 F98 ,         16
192  4 170         B     LAB                                      4  1701  B W77               16
193  4 180  IDENT  B     GETSX                                    4  1705  B ?59               16
194  4 190         BCE   CHERDL,SX-2,C                           8  1709  B ?41 F96 C         16
195  4 200         B     PUTX                                     4  1717  B 363               16
196  4 210         DCW   &@ 27@                                   3  1723  G54                 16
197  4 220         B     IDEA                                     4  1724  B V77               17
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230  STAND   B     PUTX                                 4  1728  B 363               17
199  4 240          DCW   &@ 31@                              3  1734  G57                 17
200  4 250          B     LAB                                  4  1735  B W77               17
201  5 010  RWDOR   B     GETOP                                4  1739  B ?77               17
202  5 020          BCE   UNLOAD,SX-2,U                        8  1743  B X62 F96 U         17
203  5 030          B     PUTX                                 4  1751  B 363               17
204  5 040          DCW   &@ 13@                              3  1757  G60                 18
205  5 050          B     IDE                                  4  1758  B V81               18
206  5 060  UNLOAD  B     PUTX                                 4  1762  B 363               18
207  5 070          DCW   &@ 12@                              3  1768  G63                 18
208  5 080          B     IDE                                  4  1769  B V81               18
209  5 090  ALTDR   B     PUTX                                 4  1773  B 363               18
210  5 100          DCW   &@ 25@                              3  1779  G66                 18
211  5 110          B     IDE                                  4  1780  B V81               19
212  5 120  FEAT    B     GETOP                                4  1784  B ?77               19
213  5 130          B     PUTX                                 4  1788  B 363               19
214  5 140          DCW   &@ 02@                              3  1794  G69                 19
215  5 150          B     IDE                                  4  1795  B V81               19
216  5 160  DIOC    B     PUTX                                 4  1799  B 363               19
217  5 170          DCW   DIOC1                               3  1805  Y12                 19
218  5 180          B     PUTT                                 4  1806  B O35               20
219  5 190  DIOC1   DCW   @237@                               3  1812                      20
220  5 200          B     IDE                                  4  1813  B V81               20
221  5 210  K1      B     GETBLK                               4  1817  B A93               20
222  5 220          DCW   SX                                   3  1823  F98                 20
223  5 230          DCW   K1                                   3  1826  Y17                 20
224  5 240          C     SX,@.DT@                             7  1827  C F98 G72           20
225  5 250          BU    K1                                   5  1834  B Y17 /             21
226  6 010          B     PUTX                                 4  1839  B 363               21
227  6 020          DCW   SX                                   3  1845  F98                 21
228  6 030          SW    SW1A                                 4  1846  , F45               21
229  6 040  K2      B     GETSX                                4  1850  B ?59               21
230  6 050          C     SX,@DTF@                             7  1854  C F98 G75           21
231  6 060          BE    FILEN                                5  1861  B O01 S             21
232  6 070          B     K2                                   4  1866  B Y50               22
233  6 080  K3      B     GETSX                                4  1870  B ?59               22
234  6 090          C     SX,@.LC@                             7  1874  C F98 G78           22
235  6 100          BE    K2                                   5  1881  B Y50 S             22
236  6 110          C     SX,@***@                             7  1886  C F98 G27           22
237  6 120          BE    GGT                                  5  1893  B Z82 S             22
238  6 130          BCE   ALTAPE,SX-2,A                       8  1898  B !18 F96 A         23
239  6 140          BCE   BLOCK,SX-2,B                       8  1906  B !36 F96 B         23
240  6 150          BCE   DET,SX-2,C                         8  1914  B !54 F96 C         23
241  6 160          BCE   FILE,SX-2,F                       8  1922  B J63 F96 F         23
242  6 170          BCE   HEAD,SX-2,H                       8  1930  B K85 F96 H         24
243  6 180          BCE   IOAREA,SX-2,I                     8  1938  B L45 F96 I         24
244  6 190          BCE   DETER,SX-2,R                      8  1946  B M08 F96 R         24
245  6 200          BCE   SIZE,SX-2,S                       8  1954  B N46 F96 S         24
246  6 210          BCE   TYPE,SX-2,T                       8  1962  B N72 F96 T         25
247  6 220          BCE   WORK,SX-2,W                       8  1970  B N83 F96 W         25
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         B     DONE                                       4  1978  B F49               25
249  6 240  GGT    B     PUTSX                                      4  1982  B L93               25
250  6 250         B     GETSX                                      4  1986  B ?59               25
251  7 010         B     PUTSX                                      4  1990  B L93               25
252  7 020         B     K3                                         4  1994  B Y70               25
253  7 030  NEXT1  B     GETSX                                      4  1998  B ?59               26
254  7 040  NEXT   C     SX,@.MC@                                   7  2002  C F98 G21           26
255  7 050         BU    NEXT1                                      5  2009  B Z98 /             26
256  7 060         B     K3                                         4  2014  B Y70               26
257  7 070  ALTAPE B     PUTX                                       4  2018  B 363               26
258  7 080         DCW   ALT1                                       3  2024  !31                 26
259  7 090         B     PUTT                                       4  2025  B O35               26
260  7 100  ALT1   DCW   @143@                                      3  2031                      27
261  7 110         B     NEXT                                       4  2032  B !02               27
262  7 120  BLOCK  B     PUTX                                       4  2036  B 363               27
263  7 130         DCW   BLOCK1                                     3  2042  !49                 27
264  7 140         B     PUTT                                       4  2043  B O35               27
265  7 150  BLOCK1 DCW   @236@                                      3  2049                      27
266  7 160         B     NEXT                                       4  2050  B !02               27
267  7 170  DET    BCE   CARD,SX,R                                 8  2054  B !82 F98 R         28
268  7 180         BCE   CHAN,SX,A                                 8  2062  B J00 F98 A         28
269  7 190         BCE   CHECK,SX,E                                8  2070  B J18 F98 E         28
270  7 200         B     COBOL                                      4  2078  B J52               28
271  7 210  CARD   B     PUTX                                       4  2082  B 363               28
272  7 220         DCW   CARD1                                      3  2088  !95                 28
273  7 230         B     PUTT                                       4  2089  B O35               28
274  7 240  CARD1  DCW   @144@                                      3  2095                      29
275  7 250         B     NEXT                                       4  2096  B !02               29
276  8 010  CHAN   B     PUTX                                       4  2100  B 363               29
277  8 020         DCW   CHAN1                                      3  2106  J13                 29
278  8 030         B     PUTT                                       4  2107  B O35               29
279  8 040  CHAN1  DCW   @145@                                      3  2113                      29
280  8 050         B     NEXT                                       4  2114  B !02               29
281  8 060  CHECK  B     GETOP                                      4  2118  B ?77               30
282  8 070         BCE   ALL,SX-2,A                                8  2122  B J41 F96 A         30
283  8 080         B     PUTX                                       4  2130  B 363               30
284  8 090         DCW   &@ 23@                                     3  2136  G81                 30
285  8 100         B     NEXT                                       4  2137  B !02               30
286  8 110  ALL    B     PUTX                                       4  2141  B 363               30
287  8 120         DCW   &@ 24@                                     3  2147  G84                 30
288  8 130         B     NEXT                                       4  2148  B !02               31
289  8 140  COBOL  B     PUTX                                       4  2152  B 363               31
290  8 150         DCW   &@ 56@                                     3  2158  G87                 31
291  8 160         B     NEXT                                       4  2159  B !02               31
292  8 170  FILE   B     GETOP                                      4  2163  B ?77               31
293  8 180         BCE   PUNCHA,SX-1,U                            8  2167  B K06 F97 U         31
294  8 190         BCE   PRINTA,SX-2,P                            8  2175  B J95 F96 P         31
295  8 200         BCE   READA,SX-2,R                             8  2183  B K17 F96 R         32
296  8 210         B     TAPEA                                      4  2191  B K28               32
297  8 220  PRINTA B     PUTX                                       4  2195  B 363               32
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230          DCW   &@ 48@                                     3  2201  G90                32
299  8 240          B     NEXT                                       4  2202  B !02              32
300  8 250  PUNCHA  B     PUTX                                       4  2206  B 363              32
301  9 010          DCW   &@ 49@                                     3  2212  G93                32
302  9 020          B     NEXT                                       4  2213  B !02              33
303  9 030  READA   B     PUTX                                       4  2217  B 363              33
304  9 040          DCW   &@ 50@                                     3  2223  G96                33
305  9 050          B     NEXT                                       4  2224  B !02              33
306  9 060  TAPEA   B     PUTX                                       4  2228  B 363              33
307  9 070          DCW   &@ 51@                                     3  2234  G99                33
308  9 080  TAPE1   B     GETSX                                      4  2235  B ?59              33
309  9 090          C     SX,@  ,@                                   7  2239  C F98 H02          34
310  9 100          BU    TAPE1                                      5  2246  B K35 /            34
311  9 110          B     GETSX                                      4  2251  B ?59              34
312  9 120          BCE   INPUTA,SX-2,I                             8  2255  B K74 F96 I        34
313  9 130          B     PUTX                                       4  2263  B 363              34
314  9 140          DCW   &@ 52@                                     3  2269  H05                34
315  9 150          B     NEXT                                       4  2270  B !02              34
316  9 160  INPUTA  B     PUTX                                       4  2274  B 363              35
317  9 170          DCW   &@ 53@                                     3  2280  H08                35
318  9 180          B     NEXT                                       4  2281  B !02              35
319  9 190  HEAD    B     PUTX                                       4  2285  B 363              35
320  9 200          DCW   HEAD1                                      3  2291  K98                35
321  9 210          B     PUTT                                       4  2292  B O35              35
322  9 220  HEAD1   DCW   @520@                                     3  2298                     35
323  9 230  HEAD8   C     SX,@.MC@                                   7  2299  C F98 G21          36
324  9 240          BE    K3                                         5  2306  B Y70 S            36
325  9 250          SW    SWTT&4                                     4  2311  , O54              36
326 10 010          B     GETSX                                      4  2315  B ?59              36
327 10 020          BCE   CREAT,SX-2,                                8  2319  B ?23 F96          36
328 10 030          B     PUTX                                       4  2327  B 363              36
329 10 040          DCW   HEAD2                                      3  2333  L40                36
330 10 050          B     PUTT                                       4  2334  B O35              37
331 10 060  HEAD2   DCW   @122@                                     3  2340                     37
332 10 070          B     NEXT                                       4  2341  B !02              37
333 10 080  IOAREA  B     PUTX                                       4  2345  B 363              37
334 10 090          DCW   IO1                                        3  2351  L58                37
335 10 100          B     PUTT                                       4  2352  B O35              37
336 10 110  IO1     DCW   @234@                                     3  2358                     37
337 10 120          C     SX,@.MC@                                   7  2359  C F98 G21          38
338 10 130          BE    K3                                         5  2366  B Y70 S            38
339 10 140          B     PUTX                                       4  2371  B 363              38
340 10 150          DCW   IO2                                        3  2377  L88                38
341 10 160          SW    ST10                                       4  2378  , F44              38
342 10 170          B     PUTT                                       4  2382  B O35              38
343 10 180  IO2     DCW   @235@                                     3  2388                     38
344 10 190          B     NEXT                                       4  2389  B !02              39
345 10 200  PUTSX   SBR   FINNS&3                                    4  2393  H M07              39
346 10 210          B     PUTX                                       4  2397  B 363              39
347 10 220          DCW   SX                                         3  2403  F98                39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230  FINNS  B     *                                          4  2404  B M07               39
349 10 240  DETER  BCE   RECF,SX,C                                  8  2408  B M58 F98 C         39
350 10 250         BCE   REEL,SX,E                                  8  2416  B R87 F98 E         39
351 11 010         B     GETOP                                      4  2424  B ?77               40
352 11 020         BCE   NOR,SX-2,N                                8  2428  B M47 F96 N         40
353 11 030         B     PUTX                                       4  2436  B 363               40
354 11 040         DCW   &@ 09@                                     3  2442  H11                 40
355 11 050         B     NEXT                                       4  2443  B !02               40
356 11 060  NOR    B     PUTX                                       4  2447  B 363               40
357 11 070         DCW   &@ 08@                                     3  2453  H14                 40
358 11 080         B     NEXT                                       4  2454  B !02               41
359 11 090  RECF   B     GETOP                                      4  2458  B ?77               41
360 11 100         BCE   BLOCKE,SX-2,B                            8  2462  B M88 F96 B         41
361 11 110         B     PUTX                                       4  2470  B 363               41
362 11 120         DCW   &@ 41@                                     3  2476  H17                 41
363 11 130  RECF1  B     PUTX                                       4  2477  B 363               41
364 11 140         DCW   &@ 40@                                     3  2483  G45                 41
365 11 150         B     NEXT                                       4  2484  B !02               42
366 11 160  BLOCKE B     PUTX                                       4  2488  B 363               42
367 11 170         DCW   &@ 42@                                     3  2494  H20                 42
368 11 180  BLOCKS B     GETSX                                      4  2495  B ?59               42
369 11 190         BCE   BLOOS,SX-2,,                              8  2499  B N23 F96 ,         42
370 11 200         C     SX,@.MC@                                   7  2507  C F98 G21           42
371 11 210         BE    RECF1                                      5  2514  B M77 S             42
372 11 220         B     BLOCKS                                     4  2519  B M95               43
373 11 230  BLOOS  BCE   BLLK,SX-1,V                               8  2523  B N35 F97 V         43
374 11 240         B     RECF1                                      4  2531  B M77               43
375 11 250  BLLK   B     PUTX                                       4  2535  B 363               43
376 12 010         DCW   &@ 39@                                     3  2541  G48                 43
377 12 020         B     NEXT                                       4  2542  B !02               43
378 12 030  SIZE   BCE   SERIAL,SX,R                               8  2546  B ?05 F98 R         43
379 12 040         B     PUTX                                       4  2554  B 363               44
380 12 050         DCW   SIZE1                                      3  2560  N67                 44
381 12 060         B     PUTT                                       4  2561  B O35               44
382 12 070  SIZE1  DCW   @138@                                     3  2567                      44
383 12 080         B     NEXT                                       4  2568  B !02               44
384 12 090  TYPE   B     PUTX                                       4  2572  B 363               44
385 12 100         DCW   &@ 27@                                     3  2578  G54                 44
386 12 110         B     NEXT                                       4  2579  B !02               45
387 12 120  WORK   B     PUTX                                       4  2583  B 363               45
388 12 130         DCW   WORK1                                      3  2589  N96                 45
389 12 140         B     PUTT                                       4  2590  B O35               45
390 12 150  WORK1  DCW   @233@                                     3  2596                      45
391 12 160         B     NEXT                                       4  2597  B !02               45
392 12 170  FILEN  BW    FILL,SW1A                                  8  2601  V O13 F45 1         45
393 12 180         B     KK1                                        4  2609  B A05               46
394 12 190  FILL   B     PUTX                                       4  2613  B 363               46
395 12 200         DCW   FILEN1                                    3  2619  O30                 46
396 12 210         CW    SW1A                                       4  2620  ) F45               46
397 12 220         B     PUTT                                       4  2624  B O35               46
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230  FILEN1 DCW   @254@                                     3  2630                      46
399 12 240          B     NEXT                                    4  2631  B !02               46
400 12 250  PUTT    SBR   X2                                      4  2635  H 094               47
401 13 010          MLC   2&X2,0&X3                              7  2639  M 0!2 0?0           47
402 13 020          SBR   X3                                      4  2646  H 099               47
403 13 030  SWTT    BEF   PUTTS                                   5  2650  B O67 K             47
404 13 040          BW    PUAT,ST10                               8  2655  V P28 F44 1         47
405 13 050          B     GETOP                                   4  2663  B ?77               47
406 13 060  PUTTS   C     SX,@.MC@                                7  2667  C F98 G21           47
407 13 070          BE    END                                     5  2674  B P59 S             48
408 13 080          BCE   END,SX,,                               8  2679  B P59 F98 ,         48
409 13 090          BCE   PUT1,SX-1,                            8  2687  B P36 F97           48
410 13 100          MA    @003@,PUTT3&6                                                MACRO
411                 SW    PUTT3&6-2                               4  2695  , P14       GEN     48
412                 A     @003@,PUTT3&6                           7  2699  A H23 P16   GEN     48
413                 CW    PUTT3&6-2                               4  2706  ) P14       GEN     48
414 13 110  PUTT3   MLC   SX,HOLD                                 7  2710  M F98 F98           49
415 13 120          CW    SX,ST10                                 7  2717  ) F98 F44           49
416 13 130          CW    SWTT&4                                  4  2724  ) O54               49
417 13 140  PUAT    B     GETSX                                   4  2728  B ?59               49
418 13 150          B     PUTTS                                   4  2732  B O67               49
419 13 160  PUT1    MA    @001@,PUTT3&6                                                MACRO
420         PUT1    SW    PUTT3&6-2                               4  2736  , P14       GEN     49
421                 A     @001@,PUTT3&6                           7  2740  A H26 P16   GEN     49
422                 CW    PUTT3&6-2                               4  2747  ) P14       GEN     50
423 13 170          SW    SX                                      4  2751  , F98               50
424 13 180          B     PUTT3                                   4  2755  B P10               50
425 13 190  END     BCE   ONE,0&X2,1                             8  2759  B P79 0!0 1         50
426 13 200          BCE   TWO,0&X2,2                             8  2767  B Q23 0!0 2         50
427 13 210          B     FIVE                                    4  2775  B R35               50
428 13 220  ONE     MLC   PUTT3&6,X1                            7  2779  M P16 089           50
429 13 230          MLC   0&X1,SY                                 7  2786  M 0|0 F48           51
430 13 240          MLC   SY,0&X3                               7  2793  M F48 0?0           51
431 13 250          SBR   X3                                      4  2800  H 099               51
432 14 010          B     EX                                      4  2804  B Q99               51
433 14 020  FIX     MLC   @  0@,0&X3                            7  2808  M H29 0?0           51
434 14 030          SBR   X3                                      4  2815  H 099               51
435 14 040          B     ONE                                     4  2819  B P79               51
436 14 050  TWO     BCE   FIX,HOLD&4,                            8  2823  B Q08 G02           52
437 14 060          BCE   FIX1,HOLD&5,                           8  2831  B Q55 G03           52
438 14 070          BCE   FIX2,HOLD&6,                           8  2839  B Q77 G04           52
439 14 080          BCE   FIX3,HOLD&7,                           8  2847  B Q88 G05           52
440 14 090  FIX1    MLC   HOLD&1,SY                              7  2855  M F99 F48           52
441 14 100  FIXX1   MLC   SY,0&X3                               7  2862  M F48 0?0           53
442 14 110          SBR   X3                                      4  2869  H 099               53
443 14 120          B     ONE                                     4  2873  B P79               53
444 14 130  FIX2    MLC   HOLD&2,SY                              7  2877  M G00 F48           53
445 14 140          B     FIXX1                                   4  2884  B Q62               53
446 14 150  FIX3    MLC   HOLD&3,SY                              7  2888  M G01 F48           53
447 14 160          B     FIXX1                                   4  2895  B Q62               53
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
448 14 170  EX      MLC   @  ,@,0&X3                          7  2899  M H02 0?0           54
449 14 180          SBR   X3                                  4  2906  H 099               54
450 14 190          MLC   BLANK#10,HOLD&10                   7  2910  M H39 G08           54
451 14 200          MLC   BLANK,SY                           7  2917  M H39 F48           54
452 14 210          SBR   PUTT3&6,HOLD                       7  2924  H P16 F98           54
453 14 220          B     3&X2                               4  2931  B 0!3               54
454 14 230  FIVE    SBR   X1,HOLD&2                          7  2935  H 089 G00           55
455 14 240  FOUR1   BCE   EX,0&X1,                           8  2942  B Q99 0|0           55
456 14 250          SW    SY-1                               4  2950  , F47               55
457 15 010          MLC   0&X1,SY                           7  2954  M 0|0 F48           55
458 15 020          CW    SY-1                               4  2961  ) F47               55
459 15 030          MLC   SY,0&X3                          7  2965  M F48 0?0           55
460 15 040          SBR   X3                                 4  2972  H 099               56
461 15 050          A     @002@,X1                           7  2976  A H42 089           56
462 15 060          B     FOUR1                              4  2983  B R42               56
463 15 070  REEL    B     PUTX                               4  2987  B 363               56
464 15 080          DCW   REEL1                              3  2993  ?00                 56
465 15 090          B     PUTT                               4  2994  B O35               56
466 15 100  REEL1   DCW   @105@                             3  3000                      56
467 15 110          B     NEXT                               4  3001  B !02               57
468 15 120  SERIAL  B     PUTX                               4  3005  B 363               57
469 15 130          DCW   SERL1                              3  3011  ?18                 57
470 15 140          B     PUTT                               4  3012  B O35               57
471 15 150  SERL1   DCW   @219@                             3  3018                      57
472 15 160          B     NEXT                               4  3019  B !02               57
473 15 170  CREAT   B     PUTX                               4  3023  B 363               57
474 15 180          DCW   CREAT1                             3  3029  ?36                 58
475 15 190          B     PUTT                               4  3030  B O35               58
476 15 200  CREAT1  DCW   @221@                             3  3036                      58
477 15 210          B     HEAD8                              4  3037  B K99               58
478 15 220  CHERDL  B     PUTX                               4  3041  B 363               58
479 15 230          DCW   &@ 28@                             3  3047  H45                 58
480 15 240          B     PUTX                               4  3048  B 363               58
481 15 250          DCW   &@ 16@                             3  3054  H48                 59
482 16 010          B     IDEA                               4  3055  B V77               59
483 16 020  GETSX   SBR   EXT&3                              4  3059  H ?76               59
484 16 030  A2      B     GETTP                              4  3063  B B08               59
485 16 040          DCW   SX                                 3  3069  F98                 59
486 16 050          DCW   A2                                 3  3072  ?63                 59
487 16 060  EXT     B     *                                  4  3073  B ?76               59
488 16 070  GETOP   SBR   EXT1&3                             4  3077  H A04               60
489 16 080  GETT1B  B     GETSX                              4  3081  B ?59               60
490 16 090          C     SX,@.OP@                           7  3085  C F98 H51           60
491 16 100          BU    GETT1B                             5  3092  B ?81 /             60
492 16 110          B     GETSX                              4  3097  B ?59               60
493 16 120  EXT1    B     *                                  4  3101  B A04               60
494 16 130  KK1     SBR   EXIT&3                             4  3105  H A76               60
495 16 140          B     PUTX                               4  3109  B 363               61
496 16 150          DCW   &@  .@                             3  3115  H54                 61
497 16 160          SBR   X3,STARTS                          7  3116  H 099 332           61
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SEQ PG LIN  LABEL  OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 170  KK2    BCE   K12,0&X3,                     8  3123  B A53 0?0          61
499 16 180         MLC   0&X3,SY                      7  3131  M 0?0 F48          61
500 16 190         SAR   X3                          4  3138  Q 099              61
501 16 200         B     PUTX                        4  3142  B 363              61
502 16 210         DCW   SY                          3  3148  F48                62
503 16 220         B     KK2                         4  3149  B A23              62
504 16 230  K12    B     PUTX                        4  3153  B 363              62
505 16 240         DCW   &@.MC@                      3  3159  G21                62
506 16 250         CS    STARTS                      4  3160  / 332              62
507 17 010         CS                                1  3164  /                  62
508 17 020         CS                                1  3165  /                  62
509 17 030         SBR   X3,STARTS                   7  3166  H 099 332          63
510 17 040  EXIT   B     *                           4  3173  B A76              63
511 17 050  BACK   B     GETSX                       4  3177  B ?59              63
512 17 060         B     BACK1                       4  3181  B U89              63
513 17 070  KK12   B     KK1                         4  3185  B A05              63
514 17 080         B     K1                          4  3189  B Y17              63
515 17 090  GETBLK SBR   X1                          4  3193  H 089              63
516 17 100         MLC   &CMAX,GET1&3                7  3197  M H57 B63          64
517 17 110         B     GETT1                       4  3204  B B12              64
518 17 120  GETTP  SBR   X1                          4  3208  H 089              64
519 17 130  GETT1  SBR   GET3&3,6&X1                 7  3212  H B89 0|6          64
520 17 140         MLC   2&X1,GET2&6                 7  3219  M 0|2 B73          64
521 17 150         MLC   5&X1,GET7&3                 7  3226  M 0|5 C39          64
522 17 160         C     GET1&3,&CMAX                7  3233  C B63 H60          65
523 17 170         BE    GET4                        5  3240  B B90 S            65
524 17 180         MA    @003@,GET1&3                                 MACRO
525                SW    GET1&3-2                    4  3245  , B61        GEN   65
526                A     @003@,GET1&3                7  3249  A H23 B63    GEN   65
527                CW    GET1&3-2                    4  3256  ) B61        GEN   65
528 17 190  GET1   MLC   CMAX,C1                     7  3260  M F42 C42          65
529 17 200  GET2   MLC   C1,*                        7  3267  M C42 B73          66
530 17 210         C     C1,@.EB@                    7  3274  C C42 H63          66
531 17 220         BE    GET6                        5  3281  B C29 S            66
532 17 230  GET3   B     0                           4  3286  B 000              66
533 17 240  GET4   SW    GETGM                       4  3290  , F43              66
534 17 250         B     IORW                        4  3294  B 343              66
535 18 010         RT    4,CIN1                      8  3298  M %U4 C43 R        66
536 18 020         DCW   GET5                        3  3308  C20                67
537 18 030         MLC   &CIN2,GET1&3                7  3309  M H66 B63          67
538 18 040         B     GET1                        4  3316  B B60              67
539 18 050  GET5   RWD   4                           5  3320  U %U4 R            67
540 18 060         B     GET4                        4  3325  B B90              67
541 18 070  GET6   MLC   &CMAX,GET1&3                7  3329  M H69 B63          67
542 18 080  GET7   B     0                           4  3336  B 000              67
543 18 090  C1     DCW   #3                          3  3342                     68
544 18 100  CIN1   DA    1X300                          3343   3642             68
545 18 110  CIN2         1,3                            3345          FIELD   68
546 18 120  CMAX         300                            3642          SBFLD
547 18 130  GETGM  DC    @}@                         1  3643                     69
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 140  ST10   DC    #1                                        1  3644                      69
549 18 150  SW1A   DC    #1                                        1  3645                      69
550 18 160  SY     DCW   #3                                        3  3648                      69
551 18 170  DONE   B     KK1                                       4  3649  B A05               69
552 18 180         B     PUTX                                      4  3653  B 363               69
553 18 190         DCW   &@.EE@                                   3  3659  H72                 69
554 18 200  DONE7  CS    3890                                      4  3660  / H90               70
555 18 202         CS                                              1  3664  /                   70
556 18 203         B     GETX                                      4  3665  B 335               70
557 18 210         DCW   SX                                        3  3671  F98                 70
558 18 220         DCW   EOP                                       3  3674  F82                 70
559 18 230         B     SUPER                                     4  3675  B 351               70
560 18 240         DCW   @SP1@                                    3  3681                      70
561 18 250  EOP    B     PUTX                                      4  3682  B 363               71
562 19 010         DCW   SX                                        3  3688  F98                 71
563 19 020         B     SUPER                                     4  3689  B 351               71
564 19 030         DCW   @I10@                                    3  3695                      71
565 19 040  SX     DCW   #3                                        3  3698                      71
566 19 050  HOLD   EQU   *                                           3698
567 19 060         DCW   #14                                      14  3712                      71
568 19 070         LTORG                                                   3713
                   DCW   @.IC@                                     3  3715             LIT  71
                         @.DI@                                     3  3718             LIT  72
                         @.MC@                                     3  3721             LIT  72
                         @.DE@                                     3  3724             LIT  72
                         @***@                                     3  3727             LIT  72
                         @ 34@                                     3  3730             LIT  72
                         @ 33@                                     3  3733             LIT  72
                         @ 32@                                     3  3736             LIT  72
                         @ 35@                                     3  3739             LIT  73
                         @ 10@                                     3  3742             LIT  73
                         @ 40@                                     3  3745             LIT  73
                         @ 39@                                     3  3748             LIT  73
                         @ 29@                                     3  3751             LIT  73
                         @ 27@                                     3  3754             LIT  73
                         @ 31@                                     3  3757             LIT  73
                         @ 13@                                     3  3760             LIT  74
                         @ 12@                                     3  3763             LIT  74
                         @ 25@                                     3  3766             LIT  74
                         @ 02@                                     3  3769             LIT  74
                         @.DT@                                     3  3772             LIT  74
                         @DTF@                                     3  3775             LIT  74
                         @.LC@                                     3  3778             LIT  74
                         @ 23@                                     3  3781             LIT  75
                         @ 24@                                     3  3784             LIT  75
                         @ 56@                                     3  3787             LIT  75
                         @ 48@                                     3  3790             LIT  75
                         @ 49@                                     3  3793             LIT  75
                         @ 50@                                     3  3796             LIT  75
                         @ 51@                                     3  3799             LIT  75
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @  ,@                                       3  3802              LIT     76
                          @ 52@                                       3  3805              LIT     76
                          @ 53@                                       3  3808              LIT     76
                          @ 09@                                       3  3811              LIT     76
                          @ 08@                                       3  3814              LIT     76
                          @ 41@                                       3  3817              LIT     76
                          @ 42@                                       3  3820              LIT     76
                          @003@                                       3  3823              LIT     77
                          @001@                                       3  3826              LIT     77
                          @  0@                                       3  3829              LIT     77
       450  BLANK         #10                                        10  3839              AREA    77
                          @002@                                       3  3842              LIT     77
                          @ 28@                                       3  3845              LIT     77
                          @ 16@                                       3  3848              LIT     77
                          @.OP@                                       3  3851              LIT     78
                          @  .@                                       3  3854              LIT     78
       516                &CMAX                                       3  3857  F42         ADCON   78
       522                &CMAX                                       3  3860  F42         ADCON   78
                          @.EB@                                       3  3863              LIT     78
       537                &CIN2                                       3  3866  C45         ADCON   78
       541                &CMAX                                       3  3869  F42         ADCON   78
                          @.EE@                                       3  3872              LIT     79
569 19 080         DCW   @}@                                         1  3873                      79
570 19 090         END                                                    / 000 080                80
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - SP1
 102  1 020         CTL   661 11
 103  1 030  SUPER  EQU   351                                             0351
 104  1 040  X1     EQU   89                                              0089
 105  1 050  X2     EQU   94                                              0094
 106  1 060  X3     EQU   99                                              0099
 107  1 070  IORW   EQU   343                                             0343
 108  1 080  PUTX   EQU   363                                             0363
 109  1 090  BSPBKT EQU   1299                                            1299
 110  1 100         ORG   2730                                                  2730
 111  1 110  INIT   MLC   564,PBAD                                   7  2730  M 564 F20           4
 112  1 120         MLC   448,PIAD                                   7  2737  M 448 F23           4
 113  1 130         MLC   570,GBAD                                   7  2744  M 570 F26           4
 114  1 140         MLC   665,GIAD                                   7  2751  M 665 F29           4
 115  1 145         MLC   GIAD,X1                                    7  2758  M F29 089           4
 116  2 171         SW    0&X1                                       4  2765  , 0|0               4
 117  1 150         MLC   628,GETA                                   7  2769  M 628 F32           5
 118  1 160         C     573,GETA                                   7  2776  C 573 F32           5
 119  1 170         BU    INIT1                                      5  2783  B P95 /             5
 120  1 180         MLC   @T@,WMSW                                   7  2788  M F67 F63           5
 121  1 190  INIT1  MLC   394,PUTA                                    7  2795  M 394 F35           5
 122  1 200         MLC   662,READAD-3                               7  2802  M 662 F38           6
 123  1 210         MLC   GIAD,READAD                                7  2809  M F29 F41           6
 124  1 220         MLC   READAD,RTR01&6                             7  2816  M F41 A85           6
 125  1 230         MLC   READAD,RTR03&6                             7  2823  M F41 C37           6
 126  1 240         MLC   READAD,RTR04&6                             7  2830  M F41 C70           6
 127  1 250         MLC   445,READAD-3                               7  2837  M 445 F38           7
 128  2 010         MLC   READAD,WRTG01&6                            7  2844  M F41 B00           7
 129  2 020         MLC   PIAD,READAD                                7  2851  M F23 F41           7
 130  2 030         MLC   READAD,WRT01&6                             7  2858  M F41 D66           7
 131  2 040         MLZS  PBAD,RZNSV                                 7  2865  Y F20 F44           7
 132  2 050         MLZS                                           1  2872  Y                   7
 133  2 060         MLZS                                           1  2873  Y                   7
 134  2 070         MLZS  @ @,PIAD                                   7  2874  Y F68 F23           8
 135  2 080         S     &1,PIAD                                    7  2881  S F69 F23           8
 136  2 090         MLZS  RZNSV,PIAD                                 7  2888  Y F44 F23           8
 137  2 100         MLZS                                           1  2895  Y                   8
 138  2 110         MLZS                                           1  2896  Y                   8
 139  2 120         MLZS  @ @,GIAD                                   7  2897  Y F68 F29           8
 140  2 130         S     &1,GIAD                                    7  2904  S F69 F29           8
 141  2 140         MLZS  RZNSV,GIAD                                 7  2911  Y F44 F29           9
 142  2 150         MLZS                                           1  2918  Y                   9
 143  2 160         MLZS                                           1  2919  Y                   9
 144  2 170         MLC   GBAD,X1                                    7  2920  M F26 089           9
 145  2 180  INIT2  C     0&X1                                       4  2927  C 0|0               9
 146  2 190         SAR   X1                                         4  2931  Q 089               9
 147  2 200         C     X1,GIAD                                    7  2935  C 089 F29           9
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SEQ PG LIN  LABEL  OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 210         BE    INIT3                         5  2942  B R55 S             10
149  2 220         CW    1&X1                          4  2947  ) 0|1               10
150  2 230         B     INIT2                         4  2951  B R27               10
151  2 240  INIT3  MLC   PBAD,X1                       7  2955  M F20 089           10
152  2 250  INIT4  C     0&X1                          4  2962  C 0|0               10
153  3 010         SAR   X1                            4  2966  Q 089               10
154  3 020         C     X1,PIAD                       7  2970  C 089 F23           10
155  3 030         BE    INIT5                         5  2977  B R90 S             11
156  3 040         CW    1&X1                          4  2982  ) 0|1               11
157  3 050         B     INIT4                         4  2986  B R62               11
158  3 060  INIT5  MLZS  @ @,GETA                      7  2990  Y F68 F32           11
159  3 070         MLZS  @ @,PUTA                      7  2997  Y F68 F35           11
160  3 080  ADCALC MLC   GBAD,ADBUCK                   7  3004  M F26 F47           11
161  3 090         MLZS  @ @,ADBUCK                    7  3011  Y F68 F47           12
162  3 100         S     GETA,ADBUCK                   7  3018  S F32 F47           12
163  3 110         MLC   ADBUCK,GL                     7  3025  M F47 F50           12
164  3 120         A     &3,GL                         7  3032  A F70 F50           12
165  3 130         MLZS  @ @,GL                        7  3039  Y F68 F50           12
166  3 140         MLC   PBAD,ADBUCK                   7  3046  M F20 F47           13
167  3 150         MLZS  @ @,ADBUCK                    7  3053  Y F68 F47           13
168  3 160         S     PUTA,ADBUCK                   7  3060  S F35 F47           13
169  3 170         A     &3,ADBUCK                     7  3067  A F70 F47           13
170  3 180         MLC   ADBUCK,PL                     7  3074  M F47 F53           13
171  3 190         MLZS  @ @,PL                        7  3081  Y F68 F53           14
172  3 200         MLZS  RZNSV,GETA                    7  3088  Y F44 F32           14
173  3 210         MLC   GETA,X1                       7  3095  M F32 089           14
174  3 220         C     @   @,0&X1                    7  3102  C F73 0|0           14
175  3 230         SBR   X1                            4  3109  H 089               14
176  3 240         SBR   SWSV                          4  3113  H F62               14
177  3 250         SW    1&X1                          4  3117  , 0|1               15
178  4 010  ADCL01 C     PL,GL                         7  3121  C F53 F50           15
179  4 020         BH    GRTRNR                        5  3128  B B09 U             15
180  4 030         BL    LSTRNR                        5  3133  B B70 T             15
181  4 040  EQTRNR MLC   GBAD,X2                       7  3138  M F26 094           15
182  4 050         MLC   PBAD,X3                       7  3145  M F20 099           15
183  4 060         MLC   0&X2,0&X3                     7  3152  M 0!0 0?0           16
184  4 070         BCE   EQTR02,WMSW,T                 8  3159  B A71 F63 T         16
185  4 080         CW    1&X1                          4  3167  ) 0|1               16
186  4 090  EQTR02 B     WRITE                         4  3171  B D52               16
187  4 100  EQTR01 B     IORW                          4  3175  B 343               16
188  4 110  RTR01  RT    *,*                           8  3179  M A86 A86 R          16
189  4 120         DCW   EXIT                          3  3189  C83                 16
190  4 130         B     IORW                          4  3190  B 343               17
191  4 140  WRTG01 WT    *,*                           8  3194  M B01 B01 W         17
192  4 150         DCW   EOTW                          3  3204  D47                 17
193  4 160         B     EQTR01                        4  3205  B A75               17
194  4 170  GRTRNR MLC   GETA,GX                       7  3209  M F32 F56           17
195  4 180         MLZS  @ @,GX                        7  3216  Y F68 F56           17
196  4 190         S     &3,GX                         7  3223  S F70 F56           18
197  4 200         A     PL,GX                         7  3230  A F53 F56           18
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 210         MLC   PIAD,PX                                    7  3237  M F23 F59           18
199  4 220         B     SETMVS                                     4  3244  B E43               18
200  4 230         MLC   GX,MVLB01&3                                7  3248  M F56 B58           18
201  4 240  MVLB01 MLC   *,0&X3                                     7  3255  M B61 0?0           18
202  4 250         B     SWRTN                                      4  3262  B D75               19
203  5 010         B     LSTR01                                     4  3266  B C49               19
204  5 020  LSTRNR MLC   PBAD,PX                                    7  3270  M F20 F59           19
205  5 030         MLC   GIAD,GX                                   7  3277  M F29 F56           19
206  5 040         MLZS  @ @,GX                                     7  3284  Y F68 F56           19
207  5 050         A     PL,GX                                      7  3291  A F53 F56           19
208  5 060         S     GL,GX                                      7  3298  S F50 F56           20
209  5 070         B     SETMVS                                     4  3305  B E43               20
210  5 080         MLC   PX,MVLB04&6                                7  3309  M F59 C22           20
211  5 090  MVLB04 MLC   0&X2,*                                     7  3316  M 0!0 C22           20
212  5 100         B     SWRTN                                      4  3323  B D75               20
213  5 110         B     IORW                                       4  3327  B 343               20
214  5 120  RTR03  RT    *,*                                        8  3331  M C38 C38 R         21
215  5 130         DCW   EOTW1                                      3  3341  C79                 21
216  5 140  MVLB05 MLC   *,0&X3                                     7  3342  M C48 0?0           21
217  5 150  LSTR01 B     WRITE                                      4  3349  B D52               21
218  5 160  MVLB06 MLC   0&X2,*                                     7  3353  M 0!0 C59           21
219  5 170         B     IORW                                       4  3360  B 343               21
220  5 180  RTR04  RT    *,*                                        8  3364  M C71 C71 R         22
221  5 190         DCW   EOTW1                                      3  3374  C79                 22
222  5 200         B     MVLB05                                     4  3375  B C42               22
223  5 210  EOTW1  B     WRITE                                      4  3379  B D52               22
224  5 220  EXIT   MLC   GBAD,628                                   7  3383  M F26 628           22
225  5 230         MLC   701,*&4                                    7  3390  M 701 D00           22
226  5 240         RWD   1                                          5  3397  U %U1 R             22
227  5 250  TMRKXT MLNS  445,TMR01&3                               7  3402  D 445 D12           23
228  6 010  TMR01  WTM   1                                          5  3409  U %U1 M             23
229  6 020         BCE   EXIT1,WMSW,T                              8  3414  B D33 F63 T         23
230  6 030         MLC   SWSV,X1                                   7  3422  M F62 089           23
231  6 040         CW    1&X1                                       4  3429  ) 0|1               23
232  6 050  EXIT1  B     PUTX                                       4  3433  B 363               23
233  6 060         DCW   VEOP                                       3  3439  F66                 23
234  6 070         B     SUPER                                      4  3440  B 351               24
235  6 080         DCW   @I10@                                      3  3446                      24
236  6 090  EOTW   H                                                1  3447  .                   24
237  6 100         B     *-4                                        4  3448  B D47               24
238  6 110  WRITE  SBR   WRT02&3                                    4  3452  H D74               24
239  6 120         B     IORW                                       4  3456  B 343               24
240  6 130  WRT01  WT    *,*                                        8  3460  M D67 D67 W         24
241  6 140         DCW   EOTW                                       3  3470  D47                 25
242  6 150  WRT02  B     *                                          4  3471  B D74               25
243  6 160  SWRTN  SBR   SWRT02&3                                   4  3475  H E42               25
244  6 170         BCE   SWRT01,WMSW,T                            8  3479  B D91 F63 T         25
245  6 180         CW    1&X1                                       4  3487  ) 0|1               25
246  6 190  SWRT01 C     GIAD,GX                                    7  3491  C F29 F56           25
247  6 200         BU    SWRT03                                     5  3498  B E14 /             25
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 210          MLC   @T@,WMSW                                 7  3503  M F67 F63           26
249  6 220          B     SWRT02                                   4  3510  B E39               26
250  6 230  SWRT03  MLC   @F@,WMSW                                7  3514  M F74 F63           26
251  6 240          MLC   GX,X1                                    7  3521  M F56 089           26
252  6 250          MLC   GX,SWSV                                  7  3528  M F56 F62           26
253  7 010          SW    1&X1                                     4  3535  , 0|1               26
254  7 020  SWRT02  B     *                                        4  3539  B E42               27
255  7 030  SETMVS  SBR   SETMV1&3                                 4  3543  H F17               27
256  7 040          MLZS  RZNSV,GX                                 7  3547  Y F44 F56           27
257  7 050          MLZS                                           1  3554  Y                   27
258  7 060          MLZS                                           1  3555  Y                   27
259  7 070          MLC   GBAD,X2                                  7  3556  M F26 094           27
260  7 080          MLC   PBAD,X3                                  7  3563  M F20 099           27
261  7 090          MLC   GX,MVLB05&3                              7  3570  M F56 C45           28
262  7 100          MLZS  @ @,PX                                   7  3577  Y F68 F59           28
263  7 110          S     PL,PX                                    7  3584  S F53 F59           28
264  7 120          A     GL,PX                                    7  3591  A F50 F59           28
265  7 130          MLZS  RZNSV,PX                                 7  3598  Y F44 F59           28
266  7 140          MLZS                                           1  3605  Y                   28
267  7 150          MLZS                                           1  3606  Y                   28
268  7 160          MLC   PX,MVLB06&6                              7  3607  M F59 C59           29
269  7 170  SETMV1  B     *                                        4  3614  B F17               29
270  7 180  PBAD    DCW   #3                                       3  3620                      29
271  7 190  PIAD    DCW   #3                                       3  3623                      29
272  7 200  GBAD    DCW   #3                                       3  3626                      29
273  7 210  GIAD    DCW   #3                                       3  3629                      29
274  7 220  GETA    DCW   #3                                       3  3632                      29
275  7 230  PUTA    DCW   #3                                       3  3635                      30
276  7 240  READAD  DCW   #6                                       6  3641                      30
277  7 250          DCW   #1                                       1  3642                      30
278  8 010          DCW   #1                                       1  3643                      30
279  8 020  RZNSV   DCW   #1                                       1  3644                      30
280  8 030  ADBUCK  DCW   #3                                       3  3647                      30
281  8 040  GL      DCW   #3                                       3  3650                      30
282  8 050  PL      DCW   #3                                       3  3653                      31
283  8 060  GX      DCW   #3                                       3  3656                      31
284  8 070  PX      DCW   #3                                       3  3659                      31
285  8 080  SWSV    DCW   #3                                       3  3662                      31
286  8 090  WMSW    DCW   @F@                                      1  3663                      31
287  8 100  VEOP    DCW   @.EP@                                    3  3666                      31
288  8 110          LTORG                                                 3667
                    DCW   @T@                                      1  3667          LIT     31
                          @ @                                      1  3668          LIT     32
                          &1                                       1  3669          LIT     32
                          &3                                       1  3670          LIT     32
                          @   @                                    3  3673          LIT     32
                          @F@                                      1  3674          LIT     32
289  8 120  GMRK    DCW   @}@      GROUP MARK                      1  3675                      32
290  8 130          END                                                   / 000 080           33
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - I10
 102  1 020         CTL   661 11
 103  1 030         ORG   1300                                                 1300
 104  1 040  GETX   EQU   335                                                 0335
 105  1 050  IOSBR  EQU   940                                                 0940
 106  1 060  SCRBKT EQU   1126                                                1126
 107  1 070  HEADER EQU   1135                                                1135
 108  1 080  IORW   EQU   343                                                 0343
 109  1 090  PUTX   EQU   363                                                 0363
 110  1 100  SUPER  EQU   351                                                 0351
 111  1 110  X1     EQU   89                                                  0089
 112  1 120  X2     EQU   94                                                  0094
 113  1 130  X3     EQU   99                                                  0099
 114  1 140  DIOC   EQU   2697                                                2697
 115  1 150  BEGIN  EQU   332                                                 0332
 116  1 160         B     STTA                                    4  1300  B ?00               4
 117  1 170  S3     B     READ                                    4  1304  B !71               4
 118  1 180  S2     B     GETSX                                   4  1308  B L47               4
 119  1 190         C     SX,ENDSYM                               7  1312  C N37 N24           4
 120  1 200         BE    FINSH                                   5  1319  B Z42 S             4
 121  1 210         MLC   @0@,SX-2                                7  1324  M N66 N35           4
 122  1 220         BCE   DONE,SX,.                               8  1331  B W97 N37 .         4
 123  1 230         MLC   SX,X2                                   7  1339  M N37 094           5
 124  1 234         BWZ   SWLAB,SX-1,2                            8  1346  V T58 N36 2         5
 125  1 235         B     S2                                      4  1354  B T08               5
 126  1 240  SWLAB  SW    DIOC&X2                                 4  1358  , OR7               5
 127  1 250         B     S2                                      4  1362  B T08               5
 128  2 010  COMMON SBR   X2                                      4  1366  H 094               5
 129  2 020         MLC   2&X2,X2                                 7  1370  M 0!2 094           5
 130  2 030  N142   BCE   FINH1,0&X2,                            8  1377  B Z22 0!0           6
 131  2 040         MLC   0&X2,KEEP#3                             7  1385  M 0!0 N69           6
 132  2 050         BCE   COMMS,COMTYP,                          8  1392  B Y93 N44           6
 133  2 060         MLC   COMTYP,X2                               7  1400  M N44 094           6
 134  2 070  N12    MLC   @000@,X3                               7  1407  M N72 099           6
 135  2 080  N127   BCE   FIN,0&X2,:                            8  1414  B Y71 0!0 :         7
 136  2 090  N123   BCE   GOTO,0&X2,[                           8  1422  B N05 0!0 [         7
 137  2 100         BCE   CONT,0&X2,%                           8  1430  B V49 0!0 %         7
 138  2 110         BCE   NEXT7,0&X2,.                          8  1438  B V93 0!0 .         7
 139  2 120         BWZ   PREST,0&X2,B                          8  1446  V U66 0!0 B         8
 140  2 130         BWZ   NOTPRT,0&X2,S                         8  1454  V V05 0!0 S         8
 141  2 140         B     NEXT                                    4  1462  B W12               8
 142  2 150  PREST  MN    0&X2,X3                                 7  1466  D 0!0 099           8
 143  2 160         MN                                            1  1473  D                   8
 144  2 170         SAR   X2                                      4  1474  Q 094               8
 145  2 180         BW    OK,DIOC&X3                              8  1478  V V29 OI7 1         9
 146  2 190         B     SKIPER                                  4  1486  B V61               9
 147  2 200  TABK   MLC   0&X2,0&X2                               7  1490  M 0!0 0!0           9
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	210		SBR	X2		4	1497	H 094	9
149	2	220		B	AKA		4	1501	B W74	9
150	2	230	NOTPRT	MN	0&X2,X3		7	1505	D 0!0 099	9
151	2	240		MN			1	1512	D	9
152	2	250		SAR	X2		4	1513	Q 094	10
153	3	010		BW	SKIPER,DIOC&X3		8	1517	V V61 OI7 1	10
154	3	020		B	N12		4	1525	B U07	10
155	3	030	OK	BWZ	SUB,1&X2,B		8	1529	V V41 0!1 B	10
156	3	040		B	N12		4	1537	B U07	10
157	3	050	SUB	SW	AAB&4		4	1541	, W66	10
158	3	060		B	N12		4	1545	B U07	10
159	3	070	CONT	CW	0&X2		4	1549	) 0!0	11
160	3	080		SAR	X2		4	1553	Q 094	11
161	3	090		B	N12		4	1557	B U07	11
162	3	100	SKIPER	BCE	CONT,0&X2,.		8	1561	B V49 0!0 .	11
163	3	110		BCE	TABK,0&X2,#		8	1569	B U90 0!0 #	11
164	3	120		BCE	TABK,0&X2,%		8	1577	B U90 0!0 %	11
165	3	130		SBR	X2		4	1585	H 094	12
166	3	140		B	SKIPER		4	1589	B V61	12
167	3	150	NEXT7	CW	0&X2		4	1593	) 0!0	12
168	3	160		SAR	X2		4	1597	Q 094	12
169	3	170		MLC	X2,KEEPS#3		7	1601	M 094 N75	12
170	3	180		SW	AAA&4		4	1608	, W61	12
171	3	190	NEXT	BEF	NEXTS		5	1612	B W28 K	12
172	3	200		SW	NEXT&4		4	1617	, W16	13
173	3	210		B	PUTX		4	1621	B 363	13
174	3	220		DCW	&@.ST@		3	1627	N78	13
175	3	230	NEXTS	MLC	0&X2,0&X2		7	1628	M 0!0 0!0	13
176	3	240		SBR	X2		4	1635	H 094	13
177	3	250		MLC	2&X2,HOLD		7	1639	M 0!2 N87	13
178	4	010		MLC	@.@		4	1646	M N79	13
179	4	020		B	PUTX		4	1650	B 363	14
180	4	030		DCW	HOLD		3	1656	N87	14
181	4	040	AAA	BEF	NEXT9		5	1657	B W82 K	14
182	4	050	AAB	BEF	NEXT1		5	1662	B X58 K	14
183	4	060	A0C	B	PUTX		4	1667	B 363	14
184	4	070		DCW	&@.MC@		3	1673	N82	14
185	4	080	AKA	CW	AAB&4		4	1674	) W66	14
186	4	090		B	COMS		4	1678	B Z04	15
187	4	100	NEXT9	MLC	KEEPS,X2		7	1682	M N75 094	15
188	4	110		CW	AAA&4		4	1689	) W61	15
189	4	120		B	AAB		4	1693	B W62	15
190	4	130	DONE	SBR	X2,BEGIN		7	1697	H 094 332	15
191	4	140	DN1	B	GETSX		4	1704	B L47	15
192	4	150		MLCWA	SX,0&X2		7	1708	L N37 0!0	15
193	4	160		SBR	X2		4	1715	H 094	16
194	4	170		C	SX,@.MC@		7	1719	C N37 N82	16
195	4	180	DD1	BE	GOTO		5	1726	B N05 S	16
196	4	190	DONE1	B	GETSX		4	1731	B L47	16
197	4	200		MLC	SX,0&X2		7	1735	M N37 0!0	16

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SEQ PG LIN  LABEL   OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 210          SBR   X2                             4  1742  H 094               16
199  4 220          BCE   DN1,SX,,                       8  1746  B X04 N37 ,         16
200  4 230          B     DONE1                          4  1754  B X31               17
201  4 240  NEXT1   MLC   SAVE,X1                        7  1758  M N40 089           17
202  4 250  NXT     SBR   X3,BEGIN-3                     7  1765  H 099 329           17
203  5 010          MN    0&X1,TWO#2                     7  1772  D 0|0 N84           17
204  5 020          MN                                   1  1779  D                   17
205  5 030          SAR   X1                             4  1780  Q 089               17
206  5 040          BW    A0C,0&X1                       8  1784  V W67 0|0 1         17
207  5 050          BWZ   A0C,1&X1,2                     8  1792  V W67 0|1 2         18
208  5 060  FOUND   C     3&X3,TWO                       7  1800  C 0?3 N84           18
209  5 070          BE    FOUND1                         5  1807  B Y27 S             18
210  5 080          MLC   0&X3,0&X3                      7  1812  M 0?0 0?0           18
211  5 090          SBR   X3                             4  1819  H 099               18
212  5 100          B     FOUND                          4  1823  B Y00               18
213  5 110  FOUND1  MLC   X1,HOLD#3                      7  1827  M 089 N87           19
214  5 120          B     PUTX                           4  1834  B 363               19
215  5 130          DCW   @0?0@                          3  1840                      19
216  5 140          MLC   HOLD,X1                        7  1841  M N87 089           19
217  5 150          MLC   0&X3,HOLD                      7  1848  M 0?0 N87           19
218  5 160          SAR   X3                             4  1855  Q 099               19
219  5 170          BCE   NXT,0&X3,,                     8  1859  B X65 0?0 ,         20
220  5 180          B     FOUND1                         4  1867  B Y27               20
221  5 190  FIN     C     READ1,@06@                     7  1871  C J42 N89           20
222  5 200          BE    FIN2                           5  1878  B Z15 S             20
223  5 210          BH    DIOCS                          5  1883  B N01 U             20
224  5 220  AAC     BEF   FIN2                           5  1888  B Z15 K             20
225  5 230  COMMS   SW    AAC&4                          4  1893  , Y92               20
226  5 240          MLC   KEEP,X2                        7  1897  M N69 094           21
227  5 250  COMS    MLC   X2,SAVE                       7  1904  M 094 N40           21
228  6 010          B     N12                            4  1911  B U07               21
229  6 020  FIN2    B     PUTX                           4  1915  B 363               21
230  6 030          DCW   &@.FS@                         3  1921  N92                 21
231  6 040  FINH1   CS    BEGIN                          4  1922  / 332               21
232  6 050          CS                                   1  1926  /                   21
233  6 060          CS    2780                           4  1927  / P80               22
234  6 070          CW    NEXT&4,AAC&4                   7  1931  ) W16 Y92           22
235  6 080          B     S2                             4  1938  B T08               22
236  6 090  FINSH   BEF   FSH                            5  1942  B Z75 K             22
237  6 100          MLC   @.EE@,ENDSYM                   7  1947  M N95 N24           22
238  6 110          SBR   DD1&3,FINDS                    7  1954  H X29 K95           22
239  6 120          MLC   @14@,CONSTX                    7  1961  M N97 N21           23
240  6 130          SBR   REDD&3,TABNT                   7  1968  H J57 N65           23
241  6 140  FSH     C     READ1,CONSTX                   7  1975  C J42 N21           23
242  6 150          BE    FINSH1                         5  1982  B !22 S             23
243  6 160          BW    FINT,SWT01                     8  1987  V Z99 N41 1         23
244  6 170  FINK    B     FINSH3                         4  1995  B !07               23
245  6 180  FINT    CW    SWT01                          4  1999  ) N41               24
246  6 190          B     S3                             4  2003  B T04               24
247  6 200  FINSH3  SBR   FINK&3,FINSH1                  7  2007  H Z98 !22           24
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SEQ PG LIN  LABEL  OP   OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 210         SW   FINSH&4                     4  2014  , Z46               24
249  6 220         B    FINT                        4  2018  B Z99               24
250  6 230  FINSH1 B    GETX                        4  2022  B 335               24
251  6 240         DCW  SX                          3  2028  N37                 24
252  6 250         DCW  EOP                         3  2031  L31                 25
253  7 010         B    SUPER                       4  2032  B 351               25
254  7 020         DCW  @SP2@                       3  2038                      25
255  7 030  SKIPS1 BEF  SKIPS                       5  2039  B !51 K             25
256  7 040         B    PUTX                        4  2044  B 363               25
257  7 050         DCW  SX                          3  2050  N37                 25
258  7 060  SKIPS  B    GETSR                       4  2051  B M76               25
259  7 070         C    SX,@.FS@                    7  2055  C N37 N92           26
260  7 080         BU   SKIPS                       5  2062  B !51 /             26
261  7 090         B    GET                         4  2067  B L51               26
262  7 100  READ   SBR  X2                          4  2071  H 094               26
263  7 110  READA  BW   0&X2,SWT01                  8  2075  V 0!0 N41 1         26
264  7 120  READX1 BEF  SS4K                        5  2083  B J85 K             26
265  7 130         SW   SWT01                       4  2088  , N41               26
266  7 131         SBR  R&6,2790                    7  2092  H J38 P90           27
267  7 140  READ0  A    @1@,READ1                   7  2099  A N98 J42           27
268  7 150  READS  B    IORW                        4  2106  B 343               27
269  7 160         RTW  1,HEADER                    8  2110  L %U1 /35 R         27
270  7 170         DCW  *                           3  2120  J20                 27
271  7 180         S    @2@,1299                    7  2121  S N99 S99           27
272  7 190         B    IORW                        4  2128  B 343               28
273  7 200  R      RTW  1,2790                      8  2132  L %U1 P90 R         28
274  7 210  READ1  DCW  @T01@                       3  2142                      28
275  7 220         MLC  IOSBR,X1                    7  2143  M 940 089           28
276  7 230         CW   0&X1                        4  2150  ) 0|0               28
277  7 240  REDD   SAR  TABNT                       4  2154  Q N65               28
278  7 250         SAR  REDD&3                      4  2158  Q J57               28
279  8 010         C    READ1,CONSTX                7  2162  C J42 N21           29
280  8 020  READ4  BE   0&X2                        5  2169  B 0!0 S             29
281  8 030         MLC  IOSBR,R&6                   7  2174  M 940 J38           29
282  8 040         B    READ0                       4  2181  B !99               29
283  8 050  SS4K   C    READ1,@13@                  7  2185  C J42 O01           29
284  8 060         BU   SS4K1                       5  2192  B K15 /             29
285  8 070         SBR  N127&3,FINH1                7  2197  H U17 Z22           30
286  8 080         MLC  @N@,N142                    7  2204  M O02 T77           30
287  8 090         SW   SKIPS1&4                    4  2211  , !43               30
288  8 100  SS4K1  MLC  @ @,TABNT                   7  2215  M O03 N65           30
289  8 110         MLC  TABNT                       4  2222  M N65               30
290  8 120         B    READ0                       4  2226  B !99               30
291  8 130  PRINT  B    COMMON                      4  2230  B T66               30
292  8 140         DCW  &PRT                        3  2236  N47                 31
293  8 150  READER B    COMMON                      4  2237  B T66               31
294  8 160         DCW  &RED                        3  2243  N53                 31
295  8 170  PUNCH  B    COMMON                      4  2244  B T66               31
296  8 180         DCW  PNH                         3  2250  N50                 31
297  8 190  OUT    BW   VAROUT,DIOC&39              8  2251  V K81 P36 1         31
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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 200         B     COMMON                               4  2259  B T66               31
299  8 210         DCW   FIXOUT                              3  2265  N62                 32
300  8 220  IN     BW    VARIN,DIOC&39                        8  2266  V K88 P36 1         32
301  8 230         B     COMMON                               4  2274  B T66               32
302  8 240         DCW   &FIXIN                               3  2280  N65                 32
303  8 250  VAROUT B     COMMON                               4  2281  B T66               32
304  9 010         DCW   &VARIUT                             3  2287  N56                 32
305  9 020  VARIN  B     COMMON                               4  2288  B T66               32
306  9 030         DCW   &VARINT                            3  2294  N59                 33
307  9 040  FINDS  BW    READER,DIOC&50                       8  2295  V K37 P47 1         33
308  9 050         BW    PUNCH,DIOC&49                        8  2303  V K44 P46 1         33
309  9 060         BW    PRINT,DIOC&48                        8  2311  V K30 P45 1         33
310  9 070         BW    OUT,DIOC&52                          8  2319  V K51 P49 1         33
311  9 080         B     IN                                   4  2327  B K66               33
312  9 090  EOP    C     READ1,@14@                           7  2331  C J42 N97           34
313  9 100         BE    THEND                                5  2338  B N25 S             34
314  9 110         B     FINT                                 4  2343  B Z99               34
315  9 120  GETSX  SBR   EXIT&3                              4  2347  H M60               34
316  9 130  GET    B     GETX                                 4  2351  B 335               34
317  9 140         DCW   SX                                   3  2357  N37                 34
318  9 150         DCW   EOP                                  3  2360  L31                 34
319  9 160         C     SX,@***@                             7  2361  C N37 O06           35
320  9 170         BE    DIAG                                 5  2368  B M61 S             35
321  9 180         C     SX,@.DI@                             7  2373  C N37 O09           35
322  9 190         BE    GETS                                 5  2380  B M50 S             35
323  9 200         C     SX,@.DT@                             7  2385  C N37 O12           35
324  9 210         BE    GETS                                 5  2392  B M50 S             35
325  9 220         C     SX,@.EE@                             7  2397  C N37 N95           36
326  9 230         BE    GETS                                 5  2404  B M50 S             36
327  9 240         C     SX,ST0                               7  2409  C N37 N34           36
328  9 250         BE    SKIPS1                               5  2416  B !39 S             36
329 10 010         C     READ1,@06@                           7  2421  C J42 N89           36
330 10 020         BE    EXIT                                 5  2428  B M57 S             36
331 10 030         BH    EXIT                                 5  2433  B M57 U             37
332 10 040         C     READ1,@14@                           7  2438  C J42 N97           37
333 10 050         BE    EXIT                                 5  2445  B M57 S             37
334 10 060  GETS   B     PUTX                                 4  2450  B 363               37
335 10 070         DCW   SX                                   3  2456  N37                 37
336 10 080  EXIT   B     *                                    4  2457  B M60               37
337 10 090  DIAG   B     PUTX                                 4  2461  B 363               37
338 10 100         DCW   SX                                   3  2467  N37                 38
339 10 110         B     GETSR                                4  2468  B M76               38
340 10 120         B     GET                                  4  2472  B L51               38
341 10 130  GETSR  SBR   SR&3                                4  2476  H N00               38
342 10 140         B     GETX                                 4  2480  B 335               38
343 10 150         DCW   SX                                   3  2486  N37                 38
344 10 160         DCW   EOP                                  3  2489  L31                 38
345 10 170         B     PUTX                                 4  2490  B 363               39
346 10 180         DCW   SX                                   3  2496  N37                 39
347 10 190  SR     B     *                                    4  2497  B N00               39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 200  DIOCS  B     READ                                        4  2501  B !71               39
349 10 210  GOTO   MLC   TABNT,X2                                    7  2505  M N65 094           39
350 10 220         SAR   GOTO&3                                     4  2512  Q N08               39
351 10 230         B     COMS                                      4  2516  B Z04               39
352 10 240  CONSTX DCW   @06@                                       2  2521                      40
353 10 250  ENDSYM DCW   @.DT@                                      3  2524                      40
354 11 010  THEND  B     SUPER                                     4  2525  B 351               40
355 11 020         DCW   @J01@                                     3  2531                      40
356 11 030  ST0    DCW   @.ST@                                     3  2534                      40
357 11 040  SX     DCW   #3                                        3  2537                      40
358 11 050  SAVE   DCW   #3                                        3  2540                      40
359 11 060  SWT01  DC    #1                                        1  2541                      41
360 11 070  COMTYP DCW   #3                                        3  2544                      41
361 11 080  PRT    DCW   #3                                        3  2547                      41
362 11 090  PNH    DC    #3                                        3  2550                      41
363 11 100  RED    DC    #3                                        3  2553                      41
364 11 110  VARIUT DC    #3                                        3  2556                      41
365 11 120  VARINT DC    #3                                        3  2559                      41
366 11 130  FIXOUT DC    #3                                        3  2562                      41
367 11 140  FIXIN  DC    #3                                        3  2565                      41
368 11 150  TABNT  EQU   *                                           2565
369 11 160         LTORG                                                 2566
                   DCW   @0@                                       1  2566            LIT     41
       131  KEEP         #03                                       3  2569            AREA    41
                         @000@                                     3  2572            LIT     42
       169  KEEPS        #03                                       3  2575            AREA    42
                         @.ST@                                     3  2578            LIT     42
                         @.@                                       1  2579            LIT     42
                         @.MC@                                     3  2582            LIT     42
       203  TWO          #02                                       2  2584            AREA    42
       213  HOLD         #03                                       3  2587            AREA    42
                         @06@                                      2  2589            LIT     43
                         @.FS@                                     3  2592            LIT     43
                         @.EE@                                     3  2595            LIT     43
                         @14@                                      2  2597            LIT     43
                         @1@                                       1  2598            LIT     43
                         @2@                                       1  2599            LIT     43
                         @13@                                      2  2601            LIT     43
                         @N@                                       1  2602            LIT     44
                         @ @                                       1  2603            LIT     44
                         @***@                                     3  2606            LIT     44
                         @.DI@                                     3  2609            LIT     44
                         @.DT@                                     3  2612            LIT     44
370 11 170         ORG   3000                                            3000
371 11 180  STTA   MLCWA @28@,1299                                  7  3000  L ?52 S99           45
372 11 190         CS    332                                       4  3007  / 332               45
373 11 200         CS                                              1  3011  /                   45
374 11 210         CS                                              1  3012  /                   45
375 11 220         BCE   FOURK,SCRBKT,4                            8  3013  B ?33 /26 4         45
376 11 230         BCE   FOURK,SCRBKT,8                            8  3021  B ?33 /26 8         45
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

377 11 240         B     S3                                        4  3029  B T04               45
378 11 250  FOURK  SW    READX1&4,READ4&4                          7  3033  , !87 J73           46
379 12 010         SBR   N123&3,FIN                                7  3040  H U25 Y71           46
380 12 020         B     S3                                        4  3047  B T04               46
381 12 030         LTORG                                                    3051
                   DCW   @28@                                      2  3052             LIT     46
382 12 040         DCW   @}@                                       1  3053                     46
383 12 050         END                                                      / 000 080           47
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - S01				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@[@	1	2500		4
105	1	050			@)5#2I.3A%4|3E@	13	2513		4
106	1	060			@)4#2I.3A%4|3E@	13	2526		4
107	1	070			@)3#2I.3A%4|3E@	13	2539		5
108	1	080			@)2#1Z4|2I3E@	11	2550		5
109	1	090			@)1#2I.3A%4|3E@	13	2563		5
110	1	100			@)0#4|2I3E@	9	2572		6
111	1	110			@)Z#3D4|3E@	9	2581		6
112	1	120			@)Y$@	3	2584		6
113	1	130			@)X#3D.3U4|3E@	12	2596		6
114	1	140			@)W#3D.3U4|3E@	12	2608		7
115	1	150			@)V#3Z3E@	7	2615		7
116	1	160			@)U#3V3D@	7	2622		7
117	1	170			@)T#3E@	5	2627		7
118	1	180			@)S#2I3E@	7	2634		7
119	1	190			@)|#3D.3U3C.3T3U3B%3E@	20	2654		8
120	1	200			@)R#2I3E@	7	2661		8
121	1	210			@)Q#2I.3A%3E@	11	2672		8
122	1	220			@)P#2I.3A.2I.3A%3E@	17	2689		9
123	1	230			@)O#2I.3A%3E@	11	2700		9
124	1	240			@)N#2I.3A%3Z3E@	13	2713		10
125	1	250			@)M#2I.3A%3Z3E@	13	2726		10
126	2	010			@)L#2I.3A%3Z3E@	13	2739		10
127	2	020			@)K#2I.3A%3E@	11	2750		11
128	2	030			@)J#2I.3A%3E@	11	2761		11
129	2	040			@)!#2I.3A%3Z3E@	13	2774		11
130	2	050			@)I#2I.3A%3E@	11	2785		12
131	2	060			@)H#2I.3A%3E@	11	2796		12
132	2	070			@)G#3/3|2I3E@	11	2807		12
133	2	080			@)F#2I3E@	7	2814		13
134	2	090			@)E#2I.3A%3E@	11	2825		13
135	2	100			@)D#2I.3A%3E@	11	2836		13
136	2	110			@)C#2I.3A%3E@	11	2847		14
137	2	120			@)B#3Z3E@	7	2854		14
138	2	130			@)A#4|3E@	7	2861		14
139	2	140			@)?#3D.3U3C.3U3T3B%3E@	20	2881		15
140	2	150			@)@$@	3	2884		15
141	2	160			@)#$@	3	2887		15
142	2	170			@)%$@	3	2890		15
143	2	180			@)/$@	3	2893		15
144	2	190			@)-$@	3	2896		15
145	2	200			@)*$@	3	2899		15
146	2	210			@)$$@	3	2902		16
147	2	220			@)&$@	3	2905		16

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@))$@	3	2908		16
149	2	240			@).$@	3	2911		16
150	2	250			@.9$@	3	2914		16
151	3	010			@.8#3C@	5	2919		16
152	3	020			@.7#3C@	5	2924		16
153	3	030			@.6#3C@	5	2929		17
154	3	040			@.5#3C@	5	2934		17
155	3	050			@.4#3C@	5	2939		17
156	3	060			@.3#3C@	5	2944		17
157	3	070			@.2#3C@	5	2949		17
158	3	080			@.1#3C@	5	2954		17
159	3	090			@.0#3C@	5	2959		17
160	3	100			@.Z#3S3U3E.3S3D.3B%3C@	20	2979		18
161	3	110			@.Y#3Z3E@	7	2986		18
162	3	120			@.X#3Z3E@	7	2993		18
163	3	130			@.W#3Z3E@	7	3000		19
164	3	140			@.V#3Z3E@	7	3007		19
165	3	150			@.U#3Z3E@	7	3014		19
166	3	160			@.T#0/3Z3E@	9	3023		19
167	3	170			@.S#3Z3E@	7	3030		19
168	3	180			@.|#3U3T3B4?.3U3C4?.3D4?.3T3S3D3Z4|.3S3C3Z4|.3B3Z4|@	50	3080		21
169	3	190		DC	@%3E@	3	3083		21
170	3	200		DCW	@.R#3D.3U3B@	10	3093		21
171	3	210			@.Q#3S3U3E.3S3D.3B%3C@	20	3113		22
172	3	220			@.P#3U3T3B4?.3U3C4?.3D4?.3T3S3D3Z4|.3S3C3Z4|.3B3Z4|@	50	3163		24
173	3	230		DC	@%3E@	3	3166		24
174	3	240		DCW	@.O#3U3T3S3I3E@	13	3179		24
175	3	250			@.N#3U3T3S3Z.3T3S3D.3S3C.3B%4|3E@	31	3210		25
176	4	010			@.M$@	3	3213		25
177	4	020			@.L$@	3	3216		25
178	4	030			@.K$@	3	3219		26
179	4	040			@.J$@	3	3222		26
180	4	050			@.!$@	3	3225		26
181	4	060			@.I#4|3E@	7	3232		26
182	4	070			@.H#3U3T3S3I.3U3T3S3Z4|.3T3S3D4|.3S3C4|.3B4|%3E@	46	3278		28
183	4	080			@.G$@	3	3281		28
184	4	090			@.F$@	3	3284		28
185	4	100			@.E$@	3	3287		28
186	4	110			@.D$@	3	3290		28
187	4	120			@.C#0/@	5	3295		29
188	4	130			@.B$@	3	3298		29
189	4	140			@.A$@	3	3301		29
190	4	150			@.?$@	3	3304		29
191	4	160			@.@$@	3	3307		29
192	4	170			@.##CG@	5	3312		29
193	4	180			@.%#3X@	5	3317		29
194	4	190			@./$@	3	3320		30
195	4	200			@.-$@	3	3323		30
196	4	210			@.*$@	3	3326		30
197	4	220			@.$$@	3	3329		30

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 198  4 230          @.&$@                                           3  3332                      30
 199  4 240          @.)$@                                           3  3335                      30
 200  4 250          @..$@                                           3  3338                      30
 201  5 010       DCW @}@                                            1  3339                      31
 202  5 020       END                                                       / 000 080             32
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                 2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3


                         1401 COBOL - S02                                                          PAGE    1


 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - S02
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                          2500
 104  1 040         DCW   @[@                                                  1  2500                       4
 105  1 050               @$J#2I.3A%3Z3E@                                     13  2513                       4
 106  1 060               @$!#2I.3A%3Z3E@                                     13  2526                       4
 107  1 070               @$I#2I.3A%3Z3E@                                     13  2539                       5
 108  1 080               @$H#2I3Z3E@                                          9  2548                       5
 109  1 090               @$G#2I.3A%4|3Z3E@                                   15  2563                       5
 110  1 100               @$F#2H.2Y2G%4|3E@                                   15  2578                       6
 111  1 110               @$E#2Y2G.2H%4|3E@                                   15  2593                       6
 112  1 120               @$D#2Y2G.2H%4|3E@                                   15  2608                       7
 113  1 130               @$C#2Y2G.2H%4|3E@                                   15  2623                       7
 114  1 140               @$B#2H.2Y2G%4|3E@                                   15  2638                       8
 115  1 150               @$A#2H.2Y2G%4|3E@                                   15  2653                       8
 116  1 160               @$?#2H.2Y2G%4|3E@                                   15  2668                       9
 117  1 170               @$@#2H.2Y2G%4|3E@                                   15  2683                       9
 118  1 180               @$##2H.2Y2G%4|3E@                                   15  2698                      10
 119  1 190               @$%#2H.2Y2G%4|3E@                                   15  2713                      10
 120  1 200               @$/#2H.2Y2G%4|3E@                                   15  2728                      11
 121  1 210               @$-#2H.2Y2G%4|3E@                                   15  2743                      11
 122  1 220               @$*#3A.2I%4|3E@                                     13  2756                      12
 123  1 230               @$$#2H3A.2Y2G3A.2I%4|3E@                            22  2778                      12
 124  1 240               @$&#2H4|3E@                                          9  2787                      13
 125  1 250               @$)#2H4|3E@                                          9  2796                      13
 126  2 010               @$.#2H4|3E@                                          9  2805                      13
 127  2 020               @&9#2H4|3E@                                          9  2814                      13
 128  2 030               @&8#2H4|3E@                                          9  2823                      14
 129  2 040               @&7#2H4|3E@                                          9  2832                      14
 130  2 050               @&6#2H4|3E@                                          9  2841                      14
 131  2 060               @&5#2H4|3E@                                          9  2850                      14
 132  2 070               @&4#2H4|3E@                                          9  2859                      15
 133  2 080               @&3#2H.2Y2G%4|3E@                                   15  2874                      15
 134  2 090               @&2#2H.2Y2G%4|3E@                                   15  2889                      15
 135  2 100               @&1#2H.2Y2G%4|3E@                                   15  2904                      16
 136  2 110               @&0#4|2I3E@                                          9  2913                      16
 137  2 120               @&Z#2I.3A%4|3Z3E@                                   15  2928                      16
 138  2 1 30               @&Y#2I3E@                                           7  2935                      17
 139  2 140               @&X#2I.3A%4?3E@                                     13  2948                      17
 140  2 150               @&W#2I.3A%4?3E@                                     13  2961                      17
 141  2 160               @&V#2I.3A%4?3E@                                     13  2974                      18
 142  2 170               @&U#2I.3A%4?3E@                                     13  2987                      18
 143  2 180               @&T#2I.3A%4?3E@                                     13  3000                      18
 144  2 190               @&S#2I.3A%4|3E@                                     13  3013                      19
 145  2 200               @&|#2I.3A%4|3E@                                     13  3026                      19
 146  2 210               @&R#2I.3A%4|3E@                                     13  3039                      19
 147  2 220               @&Q#2I3E@                                            7  3046                      20
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230              @&P#3/3|2Z3E@                             11  3057                    20
149  2 240              @&O#2I3E@                                  7  3064                    20
150  2 250              @&N#3E@                                    5  3069                    20
151  3 010              @&M#2I.3A%3Z3E@                           13  3082                    21
152  3 020              @&L#1C.1B%3E@                             11  3093                    21
153  3 030              @&K#3E@                                    5  3098                    21
154  3 040              @&J#3E@                                    5  3103                    21
155  3 050              @&!#1C.1B%3E@                             11  3114                    22
156  3 060              @&I#3D.3U3C.3U3T3B%3E@                    20  3134                    22
157  3 070              @&H#3E@                                    5  3139                    22
158  3 080              @&G#2E3E@                                  7  3146                    23
159  3 090              @&F#2E3E@                                  7  3153                    23
160  3 100              @&E#2E3E@                                  7  3160                    23
161  3 110              @&D#2V3E@                                  7  3167                    23
162  3 120              @&C#2E3E@                                  7  3174                    23
163  3 130              @&B#3A.2I%3E@                             11  3185                    24
164  3 140              @&A#3E@                                    5  3190                    24
165  3 150              @&?#1C.1B%3E@                             11  3201                    24
166  3 160              @&@#1B3E@                                  7  3208                    24
167  3 170              @&##1B3E@                                  7  3215                    25
168  3 180              @&%#1B3E@                                  7  3222                    25
169  3 190              @&/#3E@                                    5  3227                    25
170  3 200              @&-#3E@                                    5  3232                    25
171  3 210              @&*#1B3E@                                  7  3239                    25
172  3 220              @&$#1C.1B%3E@                             11  3250                    26
173  3 230              @&&#3E@                                    5  3255                    26
174  3 240              @&)#3D.3U4|3E@                            12  3267                    26
175  3 250              @&.#2I.3A%4|3E@                           13  3280                    27
176  4 010              @)9#2I.3A%4|3E@                           13  3293                    27
177  4 020              @)8#2G.2X2H%4|3E@                         15  3308                    28
178  4 030              @)7#2G.2X2H%4|3E@                         15  3323                    28
179  4 040              @)6#2I.3A%4|3E@                           13  3336                    29
180  4 050         DCW  @}@                                        1  3337                    29
181  4 060         END                                                    / 000 080            30
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - S03 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - S03				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@[@	1	2500		4
105	1	050			@*Z#2I.3A%4?3E@	13	2513		4
106	1	060			@*Y#2I.3A%4?3E@	13	2526		4
107	1	070			@*X#2I.3A%4?3E@	13	2539		5
108	1	080			@*W#3A.2I%3Z3E@	13	2552		5
109	1	090			@*V#3A.2I%3Z3E@	13	2565		5
110	1	100			@*U#3A.2I%3Z3E@	13	2578		6
111	1	110			@*T#2I3Z3E@	9	2587		6
112	1	120			@*S#3A.2I%3Z3E@	13	2600		6
113	1	130			@*|#2I.3A%3Z3E@	13	2613		7
114	1	140			@*R#3A.2I%3Z3E@	13	2626		7
115	1	150			@*Q#3A.2I%3Z3E@	13	2639		7
116	1	160			@*P#3A.2I%3Z3E@	13	2652		8
117	1	170			@*O#3A.2I%3Z3E@	13	2665		8
118	1	180			@*N#3A.2I%3Z3E@	13	2678		8
119	1	190			@*M#3A.2I%3Z3E@	13	2691		9
120	1	200			@*L#3A.2I%0V0U3Z3E@	17	2708		9
121	1	210			@*K#3A.2I%0V0U3Z3E@	17	2725		10
122	1	220			@*J#2I.3A%3Z3E@	13	2738		10
123	1	230			@*!#2I3Z3E@	9	2747		10
124	1	240			@*I#3/3|2Z3Z3E@	13	2760		11
125	1	250			@*H#2I3Z3E@	9	2769		11
126	2	010			@*G#3Z3E@	7	2776		11
127	2	020			@*F#3Z3E@	7	2783		11
128	2	030			@*E#3Z3E@	7	2790		12
129	2	040			@*D#2I.3A%3Z3E@	13	2803		12
130	2	050			@*C#2I.3A%3Z3E@	13	2816		12
131	2	060			@*B#2I.3A%3Z3E@	13	2829		13
132	2	070			@*A#3A.2I%3Z3E@	13	2842		13
133	2	080			@*?#2I3Z3E@	9	2851		13
134	2	090			@*@#2I.3A%3Z3E@	13	2864		14
135	2	100			@*##3A.2I%3Z3E@	13	2877		14
136	2	110			@*%#2I.3A%3Z3E@	13	2890		14
137	2	120			@*/#2I.3A%3Z3E@	13	2903		15
138	2	130			@*-#2I.3A%3Z3E@	13	2916		15
139	2	140			@**#2I.3A%3Z3E@	13	2929		15
140	2	150			@*$#2I.3A%3Z3E@	13	2942		16
141	2	160			@*&#2I.3A%3Z3E@	13	2955		16
142	2	170			@*)#2I.3A%3Z3E@	13	2968		16
143	2	180			@*.#2I.3A%3Z3E@	13	2981		17
144	2	190			@$9#2I.3A%3Z3E@	13	2994		17
145	2	200			@$8#2I.3A%3Z3E@	13	3007		17
146	2	210			@$7#2I.3A%3Z3E@	13	3020		18
147	2	220			@$6#2I.3A%3Z3E@	13	3033		18

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230              @$5#2I.3A%3Z3E@                          13  3046                      18
149  2 240              @$4#2I.3A%3Z3E@                          13  3059                      19
150  2 250              @$3#2I.3A%3Z3E@                          13  3072                      19
151  3 010              @$2#2I.3A%3Z3E@                          13  3085                      19
152  3 020              @$1#2I.3A%3Z3E@                          13  3098                      20
153  3 030              @$0#2I.3A%3Z3E@                          13  3111                      20
154  3 040              @$Z#2I.3A%3Z3E@                          13  3124                      20
155  3 050              @$Y#2I.3A%3Z3E@                          13  3137                      21
156  3 060              @$X#3A.2I%3Z3E@                          13  3150                      21
157  3 070              @$W#2I.3A%3Z3E@                          13  3163                      21
158  3 080              @$V#2I.3A%3Z3E@                          13  3176                      22
159  3 090              @$U#2I.3A%3Z3E@                          13  3189                      22
160  3 100              @$T#2I.3A%3Z3E@                          13  3202                      22
161  3 110              @$S#2I.3A%3Z3E@                          13  3215                      23
162  3 120              @$|#2I.3A%3Z3E@                          13  3228                      23
163  3 130              @$R#2I.3A%3Z3E@                          13  3241                      23
164  3 140              @$Q#2I.3A%3Z3E@                          13  3254                      24
165  3 150              @$P#2I.3A.2I.3A%3Z3E@                    19  3273                      24
166  3 160              @$O#2I.3A%3Z3E@                          13  3286                      25
167  3 170              @$N#2I.3A%3Z3E@                          13  3299                      25
168  3 180              @$M#2I.3A%3Z3E@                          13  3312                      25
169  3 190              @$L#2I.3A%3Z3E@                          13  3325                      26
170  3 200              @$K#2I.3A%3Z3E@                          13  3338                      26
171  3 210         DCW  @}@                                       1  3339                      26
172  3 220         END                                                    / 000 080            27
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?              2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040              3
```

1401 COBOL - S04 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - S04				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@[@	1	2500		4
105	1	050			@/R#1F@	5	2505		4
106	1	060			@/Q#1F@	5	2510		4
107	1	070			@/P#1F@	5	2515		4
108	1	080			@/O#1F@	5	2520		4
109	1	090			@/N#1F@	5	2525		4
110	1	100			@/M#1F@	5	2530		4
111	1	110			@/L#1F@	5	2535		5
112	1	120			@/K#1F@	5	2540		5
113	1	130			@/J#1F@	5	2545		5
114	1	140			@/!#1F@	5	2550		5
115	1	150			@/I#3V3T3D3B.3V3S3D3C.3V3C3B.3E@	30	2580		6
116	1	160			@/H#3E@	5	2585		6
117	1	170			@/G#2E3E@	7	2592		7
118	1	180			@/F#3D.4|3U3E@	12	2604		7
119	1	190			@/E#1C.1B%3E@	11	2615		7
120	1	200			@/D#3E@	5	2620		7
121	1	210			@/C#3A.2I%3Z3E@	13	2633		8
122	1	220			@/B#3A.2I%3Z3E@	13	2646		8
123	1	230			@/A#2I.3A%3E@	11	2657		8
124	1	240			@/?$@	3	2660		9
125	1	250			@/@$@	3	2663		9
126	2	010			@/##2I.3A%3E@	11	2674		9
127	2	020			@/%#2I.3A%3E@	11	2685		9
128	2	030			@//#2I.3A%3E@	11	2696		9
129	2	040			@/-#2I3Z.3A3Z.2H3I%3E@	20	2716		10
130	2	050			@/*#3A.2I%3E@	11	2727		10
131	2	060			@/$#2H4|3E@	9	2736		11
132	2	070			@/&#2I.3A%3E@	11	2747		11
133	2	080			@/)#2I.3A%3E@	11	2758		11
134	2	090			@/.#2I.3A%3E@	11	2769		12
135	2	100			@-9#2I.3A%0/3E@	13	2782		12
136	2	110			@-8#2I.3A%3E@	11	2793		12
137	2	120			@-7#2I.3A%3E@	11	2804		13
138	2	130			@-6#2I.3A%3E@	11	2815		13
139	2	140			@-5#3A.2I%3E@	11	2826		13
140	2	150			@-4#2I.3A%3E@	11	2837		14
141	2	160			@-3#2I.3A%4|3E@	13	2850		14
142	2	170			@-2#2I.3A%4|3E@	13	2863		14
143	2	180			@-1#2I.3A%4|3E@	13	2876		15
144	2	190			@-0#2I.3A%3E@	11	2887		15
145	2	200			@-Z#2I.3A%3E@	11	2898		15
146	2	210			@-Y#2I.3A%3E@	11	2909		16
147	2	220			@-X#2I.3A%3E@	11	2920		16

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230              @-W#2I.3A%3E@                            11  2931                      16
149  2 240              @-V#2I.3A%3E@                            11  2942                      17
150  2 250              @-U$@                                     3  2945                      17
151  3 010              @-T#3E@                                   5  2950                      17
152  3 020              @-S#3E@                                   5  2955                      17
153  3 030              @-|#3E@                                   5  2960                      17
154  3 040              @-R$@                                     3  2963                      17
155  3 050              @-Q$@                                     3  2966                      17
156  3 060              @-P$@                                     3  2969                      18
157  3 070              @-O$@                                     3  2972                      18
158  3 080              @-N$@                                     3  2975                      18
159  3 090              @-M$@                                     3  2978                      18
160  3 100              @-L$@                                     3  2981                      18
161  3 110              @-K$@                                     3  2984                      18
162  3 120              @-J$@                                     3  2987                      18
163  3 130              @-!$@                                     3  2990                      19
164  3 140              @-I$@                                     3  2993                      19
165  3 150              @-H$@                                     3  2996                      19
166  3 160              @-G#3D.3U3C.3U3T3B%3E@                   20  3016                      19
167  3 170              @-F#3A.2I%3E@                            11  3027                      20
168  3 180              @-E#2I3E@                                 7  3034                      20
169  3 190              @-D#2I.3A%3E@                            11  3045                      20
170  3 200              @-C#2I.3A%3E@                            11  3056                      21
171  3 210              @-B#2I.3A%3E@                            11  3067                      21
172  3 220              @-A#2I3E@                                 7  3074                      21
173  3 230              @-?#2I3E@                                 7  3081                      21
174  3 240              @-@#3A.2I%3E@                            11  3092                      22
175  3 250              @-##3D.3U3C.3U3T3B%3E@                   20  3112                      22
176  4 010              @-%#3A.2I%3E@                            11  3123                      23
177  4 020              @-/#3D.3U3E@                             10  3133                      23
178  4 030              @--#2I.3A%3Z3E@                          13  3146                      23
179  4 040              @-*#2I.3A%3Z3E@                          13  3159                      24
180  4 050              @-$#2I.3A%3Z3E@                          13  3172                      24
181  4 060              @-&#2I.3A%3Z3E@                          13  3185                      24
182  4 070              @-)#2I.3A%3Z3E@                          13  3198                      25
183  4 080              @-.#2I.3A%3Z3E@                          13  3211                      25
184  4 090              @*9#2I.3A%3Z3E@                          13  3224                      25
185  4 100              @*8#3A.2I%3Z3E@                          13  3237                      26
186  4 110              @*7#2I.3A%3Z3E@                          13  3250                      26
187  4 120              @*6#2I.3A%3Z3E@                          13  3263                      26
188  4 130              @*5#2I.3A%3Z3E@                          13  3276                      27
189  4 140              @*4#2I.3A%3Z3E@                          13  3289                      27
190  4 150              @*3#2I.3A%4?3E@                          13  3302                      27
191  4 160              @*2#2I.3A%4?3E@                          13  3315                      28
192  4 170              @*1#2I.3A%4?3E@                          13  3328                      28
193  4 180              @*0#2I.3A%4?3E@                          13  3341                      28
194  4 190         DCW  @}@                                       1  3342                      29
195  4 200         END                                                    / 000 080            30
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - S05					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@:@		1	2500		4
105	1	050			@#6#0H3E4|@		9	2509		4
106	1	060			@#5#3E@		5	2514		4
107	1	070			@#4#3E3Z@		7	2521		4
108	1	080			@#3#3E3Z@		7	2528		4
109	1	090			@#2#3E3Z@		7	2535		4
110	1	100			@#1#3E3Z@		7	2542		5
111	1	110			@#0#3E3Z@		7	2549		5
112	1	120			@#Z#3E3Z@		7	2556		5
113	1	130			@#Y#3E@		5	2561		5
114	1	140			@#X#3E3Z@		7	2568		5
115	1	150			@#W#3E3Z@		7	2575		6
116	1	160			@#V#3E3Z@		7	2582		6
117	1	170			@#U#3E3Z@		7	2589		6
118	1	180			@#T#3E3Z@		7	2596		6
119	1	190			@#S#3E3Z@		7	2603		6
120	1	200			@#|#3E4|@		7	2610		7
121	1	210			@#R#3E4|@		7	2617		7
122	1	220			@#Q#3E4|@		7	2624		7
123	1	230			@#P#3E4|@		7	2631		7
124	1	240			@#O#1?3E4|@		9	2640		7
125	1	250			@#N#1?3E4|@		9	2649		8
126	2	010			@#M#1?3E4|@		9	2658		8
127	2	020			@#L#1?3E4|@		9	2667		8
128	2	030			@#K#1?3E4|@		9	2676		8
129	2	040			@#J#1?3E4|@		9	2685		9
130	2	050			@#!#1?3E4|@		9	2694		9
131	2	060			@#I#1?3E4|@		9	2703		9
132	2	070			@#H#0Z1|3E4|@		11	2714		9
133	2	080			@#G#0Y3E4|@		9	2723		10
134	2	090			@#F#3E3Z@		7	2730		10
135	2	100			@#E#3E3Z@		7	2737		10
136	2	110			@#D#3E3Z@		7	2744		10
137	2	120			@#C#3E3Z@		7	2751		10
138	2	130			@#B#3E3Z@		7	2758		11
139	2	140			@#A#3E3Z@		7	2765		11
140	2	150			@#?#3Z3E@		7	2772		11
141	2	160			@#@#3E4|@		7	2779		11
142	2	170			@###3E4|@		7	2786		11
143	2	180			@#%#3E4|@		7	2793		12
144	2	190			@#/#0/3E4|@		9	2802		12
145	2	200			@#-#3E3Z4|@		9	2811		12
146	2	210			@#*#3E3Z4|@		9	2820		12
147	2	220			@#$#3E3Z4|@		9	2829		13

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@#&#3E@	5	2834		13
149	2	240			@#)#3E3Z4?@	9	2843		13
150	2	250			@#.#3E3Z4?@	9	2852		13
151	3	010			@%9#3E3I4|@	9	2861		14
152	3	020			@%8#3E3I4|@	9	2870		14
153	3	030			@%7#3E3Z4|@	9	2879		14
154	3	040			@%6#3E3Z4|@	9	2888		14
155	3	050			@%5#3E3Z4|@	9	2897		15
156	3	060			@%4#3E@	5	2902		15
157	3	070			@%3#3E3Z@	7	2909		15
158	3	080			@%2#4|3Z3E@	9	2918		15
159	3	090			@%1#0Y3E@	7	2925		15
160	3	100			@%0#0Y3E@	7	2932		16
161	3	110			@%Z#3I.3Z%0Y3E4|@	15	2947		16
162	3	120			@%Y#3E@	5	2952		16
163	3	130			@%X#0/3E@	7	2959		16
164	3	140			@%W#3E@	5	2964		16
165	3	150			@%V#3E@	5	2969		17
166	3	160			@%U#3E@	5	2974		17
167	3	170			@%T#0Z0Y1?3E4|@	13	2987		17
168	3	180			@%S#3E3Z@	7	2994		17
169	3	190			@%|#3I4|.4?%3E@	13	3007		18
170	3	200			@%R#3E3Z4|@	9	3016		18
171	3	210			@%Q#3E4|@	7	3023		18
172	3	220			@%P#3E4|@	7	3030		18
173	3	230			@%O#3E4|@	7	3037		19
174	3	240			@%N#3E3Z4|@	9	3046		19
175	3	250			@%M#0/3E4|@	9	3055		19
176	4	010			@%L#3E4|@	7	3062		19
177	4	020			@%K#3E@	5	3067		19
178	4	030			@%J#0/3Z3E@	9	3076		20
179	4	040			@%!#0/3E@	7	3083		20
180	4	050			@%I#0/0Z3E4|@	11	3094		20
181	4	060			@%H#0/3E4|@	9	3103		20
182	4	070			@%G#0/4|3E@	9	3112		21
183	4	080			@%F#0/4|3E@	9	3121		21
184	4	090			@%E#3Z0/3E@	9	3130		21
185	4	100			@%D#0/3E@	7	3137		21
186	4	110			@%C#0/3E@	7	3144		22
187	4	120			@%B#0/3E@	7	3151		22
188	4	130			@%A#0/3E@	7	3158		22
189	4	140			@%?#0/3E@	7	3165		22
190	4	150			@%@#0/0B3E@	9	3174		22
191	4	160			@%##0/0B3E@	9	3183		23
192	4	170			@%%#3E@	5	3188		23
193	4	180			@%/#3U0B@	7	3195		23
194	4	190			@%-#3U0B@	7	3202		23
195	4	200			@%*#3T0B@	7	3209		23
196	4	210			@%$#3T0B@	7	3216		24
197	4	220			@%&#1F@	5	3221		24

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230              @%)#1F@                                        5  3226                      24
199  4 240              @%.#1F@                                        5  3231                      24
200  4 250              @/9#1F@                                        5  3236                      24
201  5 010              @/8#1F@                                        5  3241                      24
202  5 020              @/7#1F@                                        5  3246                      24
203  5 030              @/6#1F@                                        5  3251                      25
204  5 040              @/5#1F@                                        5  3256                      25
205  5 050              @/4#1F@                                        5  3261                      25
206  5 060              @/3#1F@                                        5  3266                      25
207  5 070              @/2#1F@                                        5  3271                      25
208  5 080              @/1#1F@                                        5  3276                      25
209  5 090              @/0#1F@                                        5  3281                      25
210  5 100              @/Z#1F@                                        5  3286                      26
211  5 110              @/Y#1F@                                        5  3291                      26
212  5 120              @/X#1F@                                        5  3296                      26
213  5 130              @/W#1F@                                        5  3301                      26
214  5 140              @/V#1F@                                        5  3306                      26
215  5 150              @/U#1F@                                        5  3311                      26
216  5 160              @/T#1F@                                        5  3316                      26
217  5 170              @/S#1F@                                        5  3321                      27
218  5 180              @/|#1F@                                        5  3326                      27
219  5 190         DCW  @}@                                            1  3327                      27
220  5 200         END                                                       / 000 080               28
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - T02
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                 2500
 104  1 040         DCW   @:@                                        1  2500                        4
 105  1 050               @.0#0/5C5A3Z@                             11  2511                        4
 106  1 060               @.Z#0/4B5C5A3Z@                           13  2524                        4
 107  1 070               @.Y#0/5C5A3Z@                             11  2535                        4
 108  1 080               @.X#0/5C5A3Z@                             11  2546                        5
 109  1 090               @.W#0/5C5A3Z@                             11  2557                        5
 110  1 100               @.V#0/5C5A3ZED@                           13  2570                        5
 111  1 110               @.U#0/5C5A3Z@                             11  2581                        6
 112  1 120               @.T#0/5C5A3ZCD@                           13  2594                        6
 113  1 130               @.S#0/5C5A3Z@                             11  2605                        6
 114  1 140               @.|#0/5C5A3Z@                             11  2616                        7
 115  1 150               @.R#4S.4B3S%0/5C5A3Z@                     19  2635                        7
 116  1 160               @.Q#0/5C5A3Z@                             11  2646                        8
 117  1 170               @.P#0/4X5C5A3ZCDDE@                       17  2663                        8
 118  1 180               @.O#0/5C5A3Z@                             11  2674                        8
 119  1 190               @.N#0/5C5A3Z@                             11  2685                        9
 120  1 200               @.M#0/5C5A3Z@                             11  2696                        9
 121  1 210               @.L#0/4B3S5C5A3Z@                         15  2711                        9
 122  1 220               @.K#0/4S5C5A3Z@                           13  2724                       10
 123  1 230               @.J#0/4B5C5A3Z@                           13  2737                       10
 124  1 240               @.!#0/4S5C5A3Z@                           13  2750                       10
 125  1 250               @.I#0/4S5C5A3Z@                           13  2763                       11
 126  2 010               @.H#0/4S5C5A3Z@                           13  2776                       11
 127  2 020               @.G#0/5C5A3ZED@                           13  2789                       11
 128  2 030               @.F#3S0/4B5C5A3Z@                         15  2804                       12
 129  2 040               @.E#0/5C5A3Z@                             11  2815                       12
 130  2 050               @.D#0/5C5A3Z@                             11  2826                       12
 131  2 060               @.C#0/4C5C5A3ZED@                         15  2841                       13
 132  2 070               @.B#0/5C5A3Z@                             11  2852                       13
 133  2 080               @.A#0/4B5C5A3Z@                           13  2865                       13
 134  2 090               @.?#0/3S4B5C5A3ZCF@                       17  2882                       14
 135  2 100               @.@#0/4B5C5A3Z@                           13  2895                       14
 136  2 110               @.##0/3S4B5C5A3ZCF@                       17  2912                       15
 137  2 120               @.%#0/5C5A3Z@                             11  2923                       15
 138  2 130               @./#4S.4B3S%0/5C5A3Z@                     19  2942                       16
 139  2 140               @.-#0/3T4S5C5A3ZCD@                       17  2959                       16
 140  2 150               @.*#0/3T4S5C5A3Z@                         15  2974                       17
 141  2 160               @.$#0/4S5C5A3ZCCCD@                       17  2991                       17
 142  2 170               @.&#0/4S5C5A3Z@                           13  3004                       18
 143  2 180               @.[#0/4B3S3T5C5A3ZCH@                     19  3023                       18
 144  2 190               @.)#0/4B3S3T5C5A3ZCD@                     19  3042                       19
 145  2 200               @..#0/4B3S3T5C5A3Z@                       17  3059                       19
 146  2 210               @. #0/4S5C5A3Z@                           13  3072                       20
 147  2 220               @ 9#0/3C4B3S5C5A3ZCH@                     19  3091                       20
```

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230              @ 8#0/4B3S5C5A3ZCCCD@                     19  3110                      21
 149  2 240              @ 7#0/4B3S5C5A3ZCD@                       17  3127                      21
 150  2 250              @ 6#0/4B3S5C5A3Z@                         15  3142                      22
 151  3 010              @ 5#0/3S3T5C5A3Z@                         15  3157                      22
 152  3 020              @ 4#0/3S3T5C5A3Z@                         15  3172                      23
 153  3 030              @ 3#0/3S3T5C5A3Z@                         15  3187                      23
 154  3 040              @ 2#0/3S3T5W5C5A3Z@                       17  3204                      24
 155  3 050              @ 1#0/3S3T5F5C5A3Z@                       17  3221                      24
 156  3 060              @ 0#0/5F5C5A3ZED@                         15  3236                      25
 157  3 070              @ Z#5W3S3T.5F%0/5C5A3Z@                   21  3257                      25
 158  3 080              @ Y#5W3S3T.5F%0/5C5A3Z@                   21  3278                      26
 159  3 090              @ X#5W3S3T.5F%0/5C5A3Z@                   21  3299                      27
 160  3 100              @ W#4S.4B3S%0/5C5A3Z@                     19  3318                      28
 161  3 110         DCW  @}@                                        1  3319                      28
 162  3 120         END                                                    / 000 080            29
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - T03				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@:@	1	2500		4
105	1	050			@[-#0/4B5B5A3Z@	13	2513		4
106	1	060			@[*#0/4B5B5A3Z@	13	2526		4
107	1	070			@[$#0/4B5B5A3Z@	13	2539		5
108	1	080			@[&#0/4B5B5A3ZCC@	15	2554		5
109	1	090			@[[#0/3T3S4B5B5A3Z@	17	2571		6
110	1	100			@[)#0/3S4B5B5A3Z@	15	2586		6
111	1	110			@[.#0/3S4B5B5A3ZED@	17	2603		7
112	1	120			@[#0/3S4B5B5A3Z@	15	2618		7
113	1	130			@)9#0/3C4B5B5A3ZCHED@	19	2637		8
114	1	140			@)8#0/3T3S4B5B5A3ZCHED@	21	2658		9
115	1	150			@)7#0/3T4B5B5A3Z@	15	2673		9
116	1	160			@)6#0/3T3S4B5B5A3Z@	17	2690		10
117	1	170			@)5#0/3T3S4B5B5A3Z@	17	2707		10
118	1	180			@)4#0/3T3S4B5B5A3Z@	17	2724		11
119	1	190			@)3#0/3T3S4B5B5A3ZCD@	19	2743		11
120	1	200			@)2#0/4B5B5A3ZCC@	15	2758		12
121	1	210			@)1#0/3S4B5B5A3Z@	15	2773		12
122	1	220			@)0#0/4B5B5A3Z@	13	2786		13
123	1	230			@)Z#0/4B5B5A3Z@	13	2799		13
124	1	240			@)Y#0/4S5B5A3Z@	13	2812		13
125	1	250			@)X#0/5B5A3Z@	11	2823		14
126	2	010			@)W#0/5B5A3Z@	11	2834		14
127	2	020			@)V#0/5B5A3Z@	11	2845		14
128	2	030			@)U#0/5B5A3ZED@	13	2858		15
129	2	040			@)T#0/5B5A3Z@	11	2869		15
130	2	050			@)S#0/5B5A3Z@	11	2880		15
131	2	060			@)|#0/5B5A3Z@	11	2891		16
132	2	070			@)R#3T4S.4B3S%0/5B5A3Z@	21	2912		16
133	2	080			@)Q#0/5B5A3Z@	11	2923		17
134	2	090			@)P#0/4X5B5A3ZCDDE@	17	2940		17
135	2	100			@)O#0/5B5A3Z@	11	2951		17
136	2	110			@)N#0/5B5A3Z@	11	2962		18
137	2	120			@)M#0/5B5A3Z@	11	2973		18
138	2	130			@)L#0/5B5A3Z@	11	2984		18
139	2	140			@)K#0/4B5B5A3Z@	13	2997		19
140	2	150			@)J#0/5B5A3Z@	11	3008		19
141	2	160			@)!#0/5B5A3Z@	11	3019		19
142	2	170			@)I#0/5B5A3Z@	11	3030		20
143	2	180			@)H#0/4C5B5A3ZED@	15	3045		20
144	2	190			@)G#0/5B5A3ZED@	13	3058		20
145	2	200			@)F#0/4B5B5A3Z@	13	3071		21
146	2	210			@)E#0/5B5A3Z@	11	3082		21
147	2	220			@)D#0/4B5B5A3Z@	13	3095		21

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230              @)C#0/5B5A3Z@                             11  3106                      22
149  2 240              @)B#0/5B5A3Z@                             11  3117                      22
150  2 250              @)A#0/3S4B5B5A3Z@                         15  3132                      22
151  3 010              @)?#0/4S5B5A3Z@                           13  3145                      23
152  3 020              @)@#0/3S4B5B5A3Z@                         15  3160                      23
153  3 030              @)##0/4S3T3S5B5A3ZCD@                     19  3179                      24
154  3 040              @)%#0/4S3T3S5B5A3Z@                       17  3196                      24
155  3 050              @)/#0/4S5B5A3ZCDCC@                       17  3213                      25
156  3 060              @)-#0/3S4B5B5A3ZCC@                       17  3230                      25
157  3 070              @)*#0/3T3S4B5B5A3Z@                       17  3247                      26
158  3 080              @)$#0/3S4B5B5A3Z@                         15  3262                      26
159  3 090              @)&#3T4S.3S4B%0/5B5A3Z@                   21  3283                      27
160  3 100              @)[#0/3S4B5B5A3ZCH@                       17  3300                      27
161  3 110              @))#0/3S4B5B5A3ZCHCD@                     19  3319                      28
162  3 120              @).#0/3S4B5B5A3ZCD@                       17  3336                      28
163  3 130              @) #0/4B3S5B5A3Z@                         15  3351                      29
164  3 140              @.9#0/4B5B5A3Z@                           13  3364                      29
165  3 150              @.8#0/3S3T5B5A3Z@                         15  3379                      30
166  3 160              @.7#0/3S3T5B5A3Z@                         15  3394                      30
167  3 170              @.6#0/3S3T5B5A3Z@                         15  3409                      31
168  3 180              @.5#0/3S3T5B5A3Z@                         15  3424                      31
169  3 190              @.4#0/3S3T5B5A3Z@                         15  3439                      32
170  3 200              @.3#0/3S3T5B5A3Z@                         15  3454                      32
171  3 210              @.2#3T4S.4B3S%0/5B5A3Z@                   21  3475                      33
172  3 220              @.1#0/4B5B5A3Z@                           13  3488                      33
173  3 230         DCW  @}@                                        1  3489                      33
174  3 240         END                                                    / 000 080             34
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - T04 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - T04				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@:@	1	2500		4
105	1	050			@&)#0/4B5C5A3I@	13	2513		4
106	1	060			@&.#0/4B5C5A3ICD@	15	2528		4
107	1	070			@& #0/4B5C5A3I@	13	2541		5
108	1	080			@[9#0/4B5C5A3I@	13	2554		5
109	1	090			@[8#0/4B5C5A3IED@	15	2569		6
110	1	100			@[7#0/4B5C5A3I@	13	2582		6
111	1	110			@[6#0/4B5C5A3ICD@	15	2597		7
112	1	120			@[5#0/4B5C5A3I@	13	2610		7
113	1	130			@[4#0/4B5C5A3I@	13	2623		8
114	1	140			@[3#0/4B5C5A3I@	13	2636		8
115	1	150			@[2#0/4X4B5C5A3ICDDE@	19	2655		9
116	1	160			@[1#0/4B5C5A3I@	13	2668		9
117	1	170			@[0#0/4B5C5A3I@	13	2681		10
118	1	180			@[Z#0/4B5C5A3I@	13	2694		10
119	1	190			@[Y#0/4B5C5A3I@	13	2707		10
120	1	200			@[X#0/4B5C5A3IED@	15	2722		11
121	1	210			@[W#0/4B5C5A3I@	13	2735		11
122	1	220			@[V#0/4B5C5A3I@	13	2748		12
123	1	230			@[U#0/4B5C5A3I@	13	2761		12
124	1	240			@[T#0/4B5C5A3I@	13	2774		12
125	1	250			@[S#0/4C4B5C5A3IED@	17	2791		13
126	2	010			@[|#0/4B5C5A3I@	13	2804		13
127	2	020			@[R#0/4B5C5A3I@	13	2817		14
128	2	030			@[Q#0/4B5C5A3I@	13	2830		14
129	2	040			@[P#0/4B5C5A3I@	13	2843		14
130	2	050			@[O#0/3T4B5C5A3ICDCHCD@	21	2864		15
131	2	060			@[N#0/3T4B5C5A3ICHCD@	19	2883		16
132	2	070			@[M#0/3T4B5C5A3ICD@	17	2900		16
133	2	080			@[L#0/3T4B5C5A3I@	15	2915		17
134	2	090			@[K#0/4B5C5A3ICDCHCC@	19	2934		17
135	2	100			@[J#0/4B5C5A3ICHCC@	17	2951		18
136	2	110			@[!#0/4B5C5A3ICCCD@	17	2968		18
137	2	120			@[I#0/4B5C5A3I@	13	2981		19
138	2	130			@[H#0/4B5C5A3I@	13	2994		19
139	2	140			@[G#0/4B5C5A3ICD@	15	3009		20
140	2	150			@[F#0/4B5C5A3I@	13	3022		20
141	2	160			@[E#0/3T4B5C5A3I@	15	3037		21
142	2	170			@[D#0/3T4B5C5A3I@	15	3052		21
143	2	180			@[C#0/3T4B5C5A3I@	15	3067		22
144	2	190			@[B#0/5W3T4B5C5A3I@	17	3084		22
145	2	200			@[A#0/3T5F4B5C5A3I@	17	3101		23
146	2	210			@[?#0/5F4B5C5A3IED@	17	3118		23
147	2	220			@[@#5W3T.5F%0/4B5C5A3I@	21	3139		24

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230              @[##5W3T.5F%0/4B5C5A3I@                     21  3160                      25
 149  2 240              @[%#5W3T.5F%0/4B5C5A3I@                     21  3181                      26
 150  2 250              @[/#0/4B5C5A3I@                             13  3194                      26
 151  3 010         DCW  @}@                                          1  3195                      26
 152  3 020         END                                                    / 000 080               27
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - T05
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                    2500
 104  1 040         DCW   @:@                                               1  2500                        4
 105  1 050               @$A#0/4B5B5A3I@                                  13  2513                        4
 106  1 060               @$?#0/4B5B5A3I@                                  13  2526                        4
 107  1 070               @$@#0/1|4B5B5A3I@                                15  2541                        5
 108  1 080               @$##0/4B5B5A3I@                                  13  2554                        5
 109  1 090               @$%#0/1|4B5B5A3I@                                15  2569                        6
 110  1 100               @$/#0/4B5B5A3I@                                  13  2582                        6
 111  1 110               @$-#0/1|4B5B5A3I@                                15  2597                        7
 112  1 120               @$*#0/1|4B5B5A3I@                                15  2612                        7
 113  1 130               @$$#0/4B5B5A3I@                                  13  2625                        8
 114  1 140               @$&#0/4B5B5A3I@                                  13  2638                        8
 115  1 150               @$[#0/4B5B5A3IED@                                15  2653                        9
 116  1 160               @$)#0/4B5B5A3I@                                  13  2666                        9
 117  1 170               @$.#0/4B5B5A3I@                                  13  2679                       10
 118  1 180               @$ #0/4B5B5A3I@                                  13  2692                       10
 119  1 190               @&9#0/4B5B5A3I@                                  13  2705                       10
 120  1 200               @&8#0/4X4B5B5A3ICDDE@                            19  2724                       11
 121  1 210               @&7#0/4B5B5A3I@                                  13  2737                       11
 122  1 220               @&6#0/4B5B5A3I@                                  13  2750                       12
 123  1 230               @&5#0/4B5B5A3I@                                  13  2763                       12
 124  1 240               @&4#0/4B5B5A3ICF@                                15  2778                       13
 125  1 250               @&3#0/4B5B5A3I@                                  13  2791                       13
 126  2 010               @&2#0/1|4B5B5A3I@                                15  2806                       14
 127  2 020               @&1#0/1|3T4B5B5A3I@                              17  2823                       14
 128  2 030               @&0#0/1|3T4B5B5A3I@                              17  2840                       15
 129  2 040               @&Z#0/4B5B5A3I@                                  13  2853                       15
 130  2 050               @&Y#0/4B5B5A3I@                                  13  2866                       16
 131  2 060               @&X#0/4B5B5A3ICD@                                15  2881                       16
 132  2 070               @&W#0/1|4B5B5A3I@                                15  2896                       17
 133  2 080               @&V#0/4B5B5A3I@                                  13  2909                       17
 134  2 090               @&U#0/4B5B5A3I@                                  13  2922                       18
 135  2 100               @&T#0/4B5B5A3I@                                  13  2935                       18
 136  2 110               @&S#0/4B5B5A3I@                                  13  2948                       18
 137  2 120               @&|#0/4C4B5B5A3IED@                              17  2965                       19
 138  2 130               @&R#0/4B5B5A3IED@                                15  2980                       19
 139  2 140               @&Q#0/4B5B5A3ICD@                                15  2995                       20
 140  2 150               @&P#0/1|4B5B5A3ICD@                              17  3012                       20
 141  2 160               @&O#0/4B5B5A3ICD@                                15  3027                       21
 142  2 170               @&N#0/1|4B5B5A3ICD@                              17  3044                       21
 143  2 180               @&M#0/4B5B5A3I@                                  13  3057                       22
 144  2 190               @&L#0/1|3T4B5B5A3I@                              17  3074                       22
 145  2 200               @&K#0/4B5B5A3I@                                  13  3087                       23
 146  2 210               @&J#0/1|3T4B5B5A3ICH@                            19  3106                       23
 147  2 220               @&!#0/4B5B5A3ICHCC@                              17  3123                       24
```

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230              @&I#0/1|3T4B5B5A3ICD@                      19  3142                      24
 149  2 240              @&H#0/4B5B5A3ICDCC@                        17  3159                      25
 150  2 250              @&G#0/1|3T4B5B5A3ICDCH@                    21  3180                      25
 151  3 010              @&F#0/4B5B5A3ICDCHCC@                      19  3199                      26
 152  3 020              @&E#0/1|4B5B5A3I@                          15  3214                      26
 153  3 030              @&D#0/1|4B5B5A3I@                          15  3229                      27
 154  3 040              @&C#0/4B5B5A3I@                            13  3242                      27
 155  3 050              @&B#0/1|3T4B5B5A3ICH@                      19  3261                      28
 156  3 060              @&A#0/4B5B5A3ICHCC@                        17  3278                      28
 157  3 070              @&?#0/1|3T4B5B5A3I@                        17  3295                      29
 158  3 080              @&@#0/1|3T4B5B5A3I@                        17  3312                      29
 159  3 090              @&##0/1|3T4B5B5A3I@                        17  3329                      30
 160  3 100              @&%#0/1|3T4B5B5A3I@                        17  3346                      30
 161  3 110              @&/#0/1|3T4B5B5A3I@                        17  3363                      31
 162  3 120              @&-#0/1|3T4B5B5A3I@                        17  3380                      31
 163  3 130              @&*#0/1|3T4B5B5A3I@                        17  3397                      32
 164  3 140              @&$#0/1|3T4B5B5A3I@                        17  3414                      32
 165  3 150              @&&#0/4B5B5A3I@                            13  3427                      33
 166  3 160              @&[#0/4B5B5A3I@                            13  3440                      33
 167  3 170         DCW  @}@                                         1  3441                      33
 168  3 180         END                                                    / 000 080              34
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - T06
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                 2500
 104  1 040         DCW   @:@                                          1  2500                      4
 105  1 050               @*A#5?@                                      5  2505                      4
 106  1 060               @*?#0B0/5?@                                  9  2514                      4
 107  1 070               @*@#0B0/5?@                                  9  2523                      4
 108  1 080               @*##0B0/5?@                                  9  2532                      4
 109  1 090               @*%#0B0/5?DD@                               11  2543                      5
 110  1 100               @*/#0B0/5?@                                  9  2552                      5
 111  1 110               @*-#0B0/5?@                                  9  2561                      5
 112  1 120               @**#0B0/5?@                                  9  2570                      5
 113  1 130               @*$#0B0/5?@                                  9  2579                      6
 114  1 140               @*&#0B0/5?@                                  9  2588                      6
 115  1 150               @*[#5?ED@                                    7  2595                      6
 116  1 160               @*)#0/5?@                                    7  2602                      6
 117  1 170               @*.#0/5?@                                    7  2609                      6
 118  1 180               @* #0/5?@                                    7  2616                      7
 119  1 190               @$9#0B0/5?@                                  9  2625                      7
 120  1 200               @$8#5?@                                      5  2630                      7
 121  1 210               @$7#0/5?@                                    7  2637                      7
 122  1 220               @$6#5?@                                      5  2642                      7
 123  1 230               @$5#0/5?@                                    7  2649                      8
 124  1 240               @$4#0B0/5?@                                  9  2658                      8
 125  1 250               @$3#0/5?@                                    7  2665                      8
 126  2 010               @$2#0B0/5?@                                  9  2674                      8
 127  2 020               @$1#0B0/5?@                                  9  2683                      9
 128  2 030               @$0#0/5?@                                    7  2690                      9
 129  2 040               @$Z#3T0/5?@                                  9  2699                      9
 130  2 050               @$Y#3T0/5?@                                  9  2708                      9
 131  2 060               @$X#0/5?CC@                                  9  2717                     10
 132  2 070               @$W#0/5?4U@                                  9  2726                     10
 133  2 080               @$V#0/5?DD@                                  9  2735                     10
 134  2 090               @$U#0/5?@                                    7  2742                     10
 135  2 100               @$T#0B0/5?@                                  9  2751                     11
 136  2 110               @$S#0S0/5?@                                  9  2760                     11
 137  2 120               @$|#0B0/5?@                                  9  2769                     11
 138  2 130               @$R#0B0/5?@                                  9  2778                     11
 139  2 140               @$Q#0B0/5?@                                  9  2787                     12
 140  2 150               @$P#0B0/5?@                                  9  2796                     12
 141  2 160               @$O#0B0/5?@                                  9  2805                     12
 142  2 170               @$N#0B0/5?@                                  9  2814                     12
 143  2 180               @$M#5W4D3T.5W4U.5F%5?@                      20  2834                     13
 144  2 190               @$L#3T5?@                                    7  2841                     13
 145  2 200               @$K#3T5?@                                    7  2848                     13
 146  2 210               @$J#4U.4D%3T5?@                             13  2861                     14
 147  2 220               @$!#0/4U5?@                                  9  2870                     14
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@$I#4D3T.4U%5?@		13	2883		14
149	2	240			@$H#4D3T.4U%5W5?@		15	2898		15
150	2	250			@$G#5F5?ED@		9	2907		15
151	3	010			@$F#5F.5W4U.5W4D3T%5?@		20	2927		16
152	3	020			@$E#5W4D3T.5W4U.5F%5?@		20	2947		17
153	3	030			@$D#5F.5W4U.5W4D3T%5?@		20	2967		18
154	3	040			@$C#5W4D3T.5W4U.5F%5?@		20	2987		19
155	3	050			@$B#0/5?@		7	2994		19
156	3	060		DCW	@}@		1	2995		19
157	3	070		END					/ 000 080	20

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - T07
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                 2500
 104  1 040         DCW   @:@                                          1  2500                      4
 105  1 050               @-J#4I@                                      5  2505                      4
 106  1 060               @-!#0/0B4I@                                  9  2514                      4
 107  1 070               @-I#0/0B4I@                                  9  2523                      4
 108  1 080               @-H#0B0/4I@                                  9  2532                      4
 109  1 090               @-G#0B0/4I@                                  9  2541                      5
 110  1 100               @-F#0B0/4I@                                  9  2550                      5
 111  1 110               @-E#0B0/4I@                                  9  2559                      5
 112  1 120               @-D#0/0B4I@                                  9  2568                      5
 113  1 130               @-C#4I@                                      5  2573                      6
 114  1 140               @-B#4I@                                      5  2578                      6
 115  1 150               @-A#0B0/4I@                                  9  2587                      6
 116  1 160               @-?#0B0/4I@                                  9  2596                      6
 117  1 170               @-@#0B0/4I@                                  9  2605                      6
 118  1 180               @-##0S0/4I@                                  9  2614                      7
 119  1 190               @-%#4I@                                      5  2619                      7
 120  1 200               @-/#4I@                                      5  2624                      7
 121  1 210               @--#0B0/4I@                                  9  2633                      7
 122  1 220               @-*#0B0/4I@                                  9  2642                      7
 123  1 230               @-$#0S0/4I@                                  9  2651                      8
 124  1 240               @-&#4I@                                      5  2656                      8
 125  1 250               @-[#4I@                                      5  2661                      8
 126  2 010               @-)#4U4I@                                    7  2668                      8
 127  2 020               @-.#4U4I@                                    7  2675                      8
 128  2 030               @- #0/4IDD@                                  9  2684                      9
 129  2 040               @*9#4I@                                      5  2689                      9
 130  2 050               @*8#4I@                                      5  2694                      9
 131  2 060               @*7#0/4I@                                    7  2701                      9
 132  2 070               @*6#4I@                                      5  2706                      9
 133  2 080               @*5#0B0/4I@                                  9  2715                     10
 134  2 090               @*4#0/4U4I@                                  9  2724                     10
 135  2 100               @*3#0B0/4I@                                  9  2733                     10
 136  2 110               @*2#0/4U4I@                                  9  2742                     10
 137  2 120               @*1#0/4U4I@                                  9  2751                     11
 138  2 1 30               @*0#0/0B4U4I@                              11  2762                      11
 139  2 140               @*Z#0/4IDD@                                  9  2771                     11
 140  2 150               @*Y#0/0B4D4I@                               11  2782                     12
 141  2 160               @*X#0S0/4D4I@                               11  2793                     12
 142  2 170               @*W#0/4I@                                    7  2800                     12
 143  2 180               @*V#0/4I@                                    7  2807                     12
 144  2 190               @*U#0B0/4I@                                  9  2816                     13
 145  2 200               @*T#0B0/4I@                                  9  2825                     13
 146  2 210               @*S#0B0/4I@                                  9  2834                     13
 147  2 220               @*|#0B0/4I@                                  9  2843                     13
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          @*R#4I@                                       5  2848                      14
149  2 240          @*Q#4I@                                       5  2853                      14
150  2 250          @*P#4I@                                       5  2858                      14
151  3 010          @*O#3T4I@                                     7  2865                      14
152  3 020          @*N#3T4I@                                     7  2872                      14
153  3 030          @*M#4ICC@                                     7  2879                      14
154  3 040          @*L#0/4I@                                     7  2886                      15
155  3 050          @*K#3C4U.3T%4I@                              13  2899                      15
156  3 060          @*J#0B0/4I@                                   9  2908                      15
157  3 070          @*!#3T4I@                                     7  2915                      15
158  3 080          @*I#3T4I@                                     7  2922                      16
159  3 090          @*H#3T4D4I@                                   9  2931                      16
160  3 100          @*G#4U4I@                                     7  2938                      16
161  3 110          @*F#3C4U.3T%4I@                              13  2951                      16
162  3 120          @*E#3C4U.3T%4I@                              13  2964                      17
163  3 130          @*D#3C4U.3T%4I@                              13  2977                      17
164  3 140          @*C#3C4U.3T%4I@                              13  2990                      17
165  3 150          @*B#3C4U.3T%4I@                              13  3003                      18
166  3 160       DCW @}@                                          1  3004                      18
167  3 170       END                                                      / 000 080            19
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - T08 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - T08					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@:@		1	2500		4
105	1	050		DCW	@-8#4H@		5	2505		4
106	1	060			@-7#4H@		5	2510		4
107	1	070			@-6#4H@		5	2515		4
108	1	080			@-5#4H@		5	2520		4
109	1	090			@-4#4H@		5	2525		4
110	1	100			@-3#3T4H@		7	2532		4
111	1	110			@-2#3T4H@		7	2539		5
112	1	120			@-1#4HCC@		7	2546		5
113	1	130			@-0#0U4H@		7	2553		5
114	1	140			@-Z#0U4H@		7	2560		5
115	1	150			@-Y#0U4H@		7	2567		5
116	1	160			@-X#0U4H@		7	2574		6
117	1	170			@-W#4H@		5	2579		6
118	1	180			@-V#4H@		5	2584		6
119	1	190			@-U#0B0/4H@		9	2593		6
120	1	200			@-T#0/0B4H@		9	2602		6
121	1	210			@-S#3C0U.3T%4H@		13	2615		7
122	1	220			@-|#3T4H@		7	2622		7
123	1	230			@-R#3T4H@		7	2629		7
124	1	240			@-Q#0U4H@		7	2636		7
125	1	250			@-P#3C0U.3T%4H@		13	2649		8
126	2	010			@-O#0U4H@		7	2656		8
127	2	020			@-N#3C0U.3T%4H@		13	2669		8
128	2	030			@-M#3C0U.3T%4H@		13	2682		9
129	2	040			@-L#3C0U.3T%4H@		13	2695		9
130	2	050			@-K#3C0U.3T%4H@		13	2708		9
131	2	060		DCW	@}@		1	2709		10
132	2	070		END					/ 000 080	11

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - T09 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - T09					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@:@		1	2500		4
105	1	050			@ V$@		3	2503		4
106	1	060			@ U#0/@		5	2508		4
107	1	070			@ T#ED@		5	2513		4
108	1	080			@ S#4X@		5	2518		4
109	1	090			@ |# 5A5B@		7	2525		4
110	1	100			@ R#5A5C@		7	2532		4
111	1	110			@ Q#5?@		5	2537		5
112	1	120			@ P#4I@		5	2542		5
113	1	130			@ O#4H@		5	2547		5
114	1	140			@ N#4V@		5	2552		5
115	1	150			@ M#DE@		5	2557		5
116	1	160			@ L#4T@		5	2562		5
117	1	170			@ K#DC@		5	2567		5
118	1	180			@ J#2W2X@		7	2574		6
119	1	190			@ !#2U2T2G5C5A@		13	2587		6
120	1	200			@ I#2C2G5C5A@		11	2598		6
121	1	210			@ H#5B.2D5C%2G5A@		15	2613		7
122	1	220			@ G#3X@		5	2618		7
123	1	230			@ F#3/@		5	2623		7
124	1	240			@ E#0H@		5	2628		7
125	1	250			@ D#0I@		5	2633		7
126	2	010			@ C#0Z0Y@		7	2640		8
127	2	020			@ B$@		3	2643		8
128	2	030			@ A#5A@		5	2648		8
129	2	040			@ ?#2|2G5A@		9	2657		8
130	2	050			@ @#2G5AB?@		9	2666		8
131	2	060			@ ##1Z2G5A@		9	2675		9
132	2	070			@ %#2G5AAI@		9	2684		9
133	2	080			@ /#0V2G5A@		9	2693		9
134	2	090			@ -#2G5A?E@		9	2702		9
135	2	100		DCW	@ *#5B.5C%2S2G5C@		15	2717		10
136	2	110		DCW	@ $#5B.5C%5A2GBB@		15	2732		10
137	2	120		DCW	@ &#5B.5C%2/2G5A@		15	2747		11
138	2	130		DCW	@)#5C2G5ABA@		11	2758		11
139	2	140			@ .#2Z5A@		7	2765		11
140	2	150			@ #2Y5A@		7	2772		12
141	2	160		DCW	@}@		1	2773		12
142	2	170		END					/ 000 080	13

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - SP2
 102  1 020         CTL   661 11
 103  1 030  SUPER  EQU   351                                             0351
 104  1 040  X1     EQU   89                                              0089
 105  1 050  X2     EQU   94                                              0094
 106  1 060  X3     EQU   99                                              0099
 107  1 070  IORW   EQU   343                                             0343
 108  1 080  PUTX   EQU   363                                             0363
 109  1 090  BSPBKT EQU   1299                                            1299
 110  1 091         ORG   2800                                                  2800
 111  1 110  INIT   MLC   564,PBAD                                   7  2800  M 564 G36           4
 112  1 120         MLC   448,PIAD                                   7  2807  M 448 G39           4
 113  1 130         MLC   570,GBAD                                   7  2814  M 570 G42           4
 114  1 140         MLC   665,GIAD                                   7  2821  M 665 G45           4
 115  1 145         MLC   GIAD,X1                                    7  2828  M G45 089           4
 116  2 171         SW    0&X1                                       4  2835  , 0|0               4
 117  1 150         MLC   628,GETA                                   7  2839  M 628 G48           5
 118  1 160         C     573,GETA                                   7  2846  C 573 G48           5
 119  1 170         BU    INIT1                                      5  2853  B Q65 /             5
 120  1 180         MLC   @T@,WMSW                                   7  2858  M G83 G79           5
 121  1 190  INIT1  MLC   394,PUTA                                   7  2865  M 394 G51           5
 122  1 210         MLC   GIAD,READAD                                7  2872  M G45 G57           6
 123  1 205         MLC   662                                        4  2879  M 662               6
 124  1 220         MLC   READAD,RTR01&6                             7  2883  M G57 B52           6
 125  1 230         MLC   READAD,RTR03&6                             7  2890  M G57 D04           6
 126  1 240         MLC   READAD,RTR04&6                             7  2897  M G57 D37           6
 127  1 250         MLC   445,READAD-3                               7  2904  M 445 G54           6
 128  2 010         MLC   READAD,WRTG01&6                            7  2911  M G57 B67           7
 129  2 020         MLC   PIAD,READAD                                7  2918  M G39 G57           7
 130  2 030         MLC   READAD,WRT01&6                             7  2925  M G57 E82           7
 131  2 040         MLZS  PBAD,RZNSV                                 7  2932  Y G36 G60           7
 132  2 050         MLZS                                           1  2939  Y                   7
 133  2 060         MLZS                                           1  2940  Y                   7
 134  2 070         MLZS  @ @,PIAD                                 7  2941  Y G84 G39           7
 135  2 080         S     &1,PIAD                                  7  2948  S G85 G39           8
 136  2 090         MLZS  RZNSV,PIAD                               7  2955  Y G60 G39           8
 137  2 100         MLZS                                           1  2962  Y                   8
 138  2 110         MLZS                                           1  2963  Y                   8
 139  2 120         MLZS  @ @,GIAD                                 7  2964  Y G84 G45           8
 140  2 130         S     &1,GIAD                                  7  2971  S G85 G45           8
 141  2 140         MLZS  RZNSV,GIAD                               7  2978  Y G60 G45           8
 142  2 150         MLZS                                           1  2985  Y                   9
 143  2 160         MLZS                                           1  2986  Y                   9
 144  2 170         MLC   GBAD,X1                                  7  2987  M G42 089           9
 145  2 180  INIT2  C     0&X1                                     4  2994  C 0|0               9
 146  2 190         SAR   X1                                       4  2998  Q 089               9
 147  2 200         C     X1,GIAD                                  7  3002  C 089 G45           9
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 210         BE    INIT3                                      5  3009  B ?22 S             9
149  2 220         CW    1&X1                                       4  3014  ) 0|1              10
150  2 230         B     INIT2                                      4  3018  B R94              10
151  2 240  INIT3  MLC   PBAD,X1                                    7  3022  M G36 089          10
152  2 250  INIT4  C     0&X1                                       4  3029  C 0|0              10
153  3 010         SAR   X1                                       4  3033  Q 089              10
154  3 020         C     X1,PIAD                                    7  3037  C 089 G39          10
155  3 030         BE    INIT5                                      5  3044  B ?57 S            10
156  3 040         CW    1&X1                                       4  3049  ) 0|1              11
157  3 050         B     INIT4                                      4  3053  B ?29              11
158  3 060  INIT5  MLZS  @ @,GETA                                  7  3057  Y G84 G48          11
159  3 070         MLZS  @ @,PUTA                                   7  3064  Y G84 G51          11
160  3 080  ADCALC MLC   GBAD,ADBUCK                               7  3071  M G42 G63          11
161  3 090         MLZS  @ @,ADBUCK                                 7  3078  Y G84 G63          11
162  3 100         S     GETA,ADBUCK                                7  3085  S G48 G63          12
163  3 110         MLC   ADBUCK,GL                                  7  3092  M G63 G66          12
164  3 120         A     &3,GL                                      7  3099  A G86 G66          12
165  3 130         MLZS  @ @,GL                                     7  3106  Y G84 G66          12
166  3 140         MLC   PBAD,ADBUCK                                7  3113  M G36 G63          12
167  3 150         MLZS  @ @,ADBUCK                                 7  3120  Y G84 G63          13
168  3 160         S     PUTA,ADBUCK                                7  3127  S G51 G63          13
169  3 170         A     &3,ADBUCK                                  7  3134  A G86 G63          13
170  3 180         MLC   ADBUCK,PL                                  7  3141  M G63 G69          13
171  3 190         MLZS  @ @,PL                                     7  3148  Y G84 G69          13
172  3 200         MLZS  RZNSV,GETA                                 7  3155  Y G60 G48          14
173  3 210         MLC   GETA,X1                                    7  3162  M G48 089          14
174  3 220         C     @   @,0&X1                                 7  3169  C G89 0|0          14
175  3 230         SBR   X1                                       4  3176  H 089              14
176  3 240         SBR   SWSV                                     4  3180  H G78              14
177  3 250         SW    1&X1                                       4  3184  , 0|1              14
178  4 010  ADCL01 C     PL,GL                                      7  3188  C G69 G66          15
179  4 020         BH    GRTRNR                                     5  3195  B B76 U            15
180  4 030         BL    LSTRNR                                     5  3200  B C37 T            15
181  4 040  EQTRNR MLC   GBAD,X2                                    7  3205  M G42 094          15
182  4 050         MLC   PBAD,X3                                    7  3212  M G36 099          15
183  4 060         MLC   0&X2,0&X3                                  7  3219  M 0!0 0?0          15
184  4 070         BCE   EQTR02,WMSW,T                              8  3226  B B38 G79 T        16
185  4 080         CW    1&X1                                       4  3234  ) 0|1              16
186  4 090  EQTR02 B     WRITE                                      4  3238  B E68              16
187  4 100  EQTR01 B     IORW                                       4  3242  B 343              16
188  4 110  RTR01  RT    *,*                                        8  3246  M B53 B53 R        16
189  4 120         DCW   EXIT                                       3  3256  D50                16
190  4 130         B     IORW                                       4  3257  B 343              16
191  4 140  WRTG01 WT    *,*                                        8  3261  M B68 B68 W        17
192  4 150         DCW   EOTW                                       3  3271  E63                17
193  4 160         B     EQTR01                                     4  3272  B B42              17
194  4 170  GRTRNR MLC   GETA,GX                                    7  3276  M G48 G72          17
195  4 180         MLZS  @ @,GX                                     7  3283  Y G84 G72          17
196  4 190         S     &3,GX                                      7  3290  S G86 G72          17
197  4 200         A     PL,GX                                      7  3297  A G69 G72          18
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 210         MLC   PIAD,PX                                   7  3304  M G39 G75           18
199  4 220         B     SETMVS                                    4  3311  B F59               18
200  4 230         MLC   GX,MVLB01&3                               7  3315  M G72 C25           18
201  4 240  MVLB01 MLC   *,0&X3                                    7  3322  M C28 0?0           18
202  4 250         B     SWRTN                                     4  3329  B E91               18
203  5 010         B     LSTR01                                    4  3333  B D16               19
204  5 020  LSTRNR MLC   PBAD,PX                                   7  3337  M G36 G75           19
205  5 030         MLC   GIAD,GX                                   7  3344  M G45 G72           19
206  5 040         MLZS  @ @,GX                                    7  3351  Y G84 G72           19
207  5 050         A     PL,GX                                     7  3358  A G69 G72           19
208  5 060         S     GL,GX                                     7  3365  S G66 G72           19
209  5 070         B     SETMVS                                    4  3372  B F59               20
210  5 080         MLC   PX,MVLB04&6                               7  3376  M G75 C89           20
211  5 090  MVLB04 MLC   0&X2,*                                    7  3383  M 0!0 C89           20
212  5 100         B     SWRTN                                     4  3390  B E91               20
213  5 110         B     IORW                                      4  3394  B 343               20
214  5 120  RTR03  RT    *,*                                       8  3398  M D05 D05 R         20
215  5 130         DCW   EOTW1                                     3  3408  D46                 20
216  5 140  MVLB05 MLC   *,0&X3                                    7  3409  M D15 0?0           21
217  5 150  LSTR01 B     WRITE                                     4  3416  B E68               21
218  5 160  MVLB06 MLC   0&X2,*                                    7  3420  M 0!0 D26           21
219  5 170         B     IORW                                      4  3427  B 343               21
220  5 180  RTR04  RT    *,*                                       8  3431  M D38 D38 R         21
221  5 190         DCW   EOTW1                                     3  3441  D46                 21
222  5 200         B     MVLB05                                    4  3442  B D09               21
223  5 210  EOTW1  B     WRITE                                     4  3446  B E68               22
224  5 220  EXIT   MLC   GBAD,628                                  7  3450  M G42 628           22
225  5 230         MLC   701,*&4                                   7  3457  M 701 D67           22
226  5 240         RWD   1                                         5  3464  U %U1 R             22
227  5 250  TMRKXT MLNS  445,TMR01&3                              7  3469  D 445 D79           22
228  6 010  TMR01  WTM   1                                         5  3476  U %U1 M             22
229  6 020         BCE   EXIT1,WMSW,T                             8  3481  B E00 G79 T         23
230  6 030         MLC   SWSV,X1                                   7  3489  M G78 089           23
231  6 040         CW    1&X1                                      4  3496  ) 0|1               23
232  6 050  EXIT1  B     PUTX                                      4  3500  B 363               23
233  6 060         DCW   VEOP                                      3  3506  G82                 23
234  6 070         MLC   BSPBKT,PX                                 7  3507  M S99 G75           23
235  6 080         MLZS  @ @,PX                                    7  3514  Y G84 G75           24
236  6 090         MLC   @0@,PX-2                                  7  3521  M G90 G73           24
237  6 100         MLC   @000@,GX                                  7  3528  M G93 G72           24
238  6 110  EXIT2  C     PX,GX                                     7  3535  C G75 G72           24
239  6 120         BE    2331                                      5  3542  B L31 S             24
240  6 130         BSP   1                                         5  3547  U %U1 B             24
241  6 140         A     @1@,GX                                    7  3552  A G94 G72           25
242  6 150         B     EXIT2                                     4  3559  B E35               25
243  6 160  EOTW   H                                               1  3563  .                   25
244  6 170         B     *-4                                       4  3564  B E63               25
245  6 180  WRITE  SBR   WRT02&3                                   4  3568  H E90               25
246  6 190         B     IORW                                      4  3572  B 343               25
247  6 200  WRT01  WT    *,*                                       8  3576  M E83 E83 W         25
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 210         DCW   EOTW                                          3  3586  E63                 26
249  6 220  WRT02  B     *                                             4  3587  B E90               26
250  6 230  SWRTN  SBR   SWRT02&3                                      4  3591  H F58               26
251  6 240         BCE   SWRT01,WMSW,T                                 8  3595  B F07 G79 T         26
252  6 250         CW    1&X1                                          4  3603  ) 0|1               26
253  7 010  SWRT01 C     GIAD,GX                                       7  3607  C G45 G72           26
254  7 020         BU    SWRT03                                        5  3614  B F30 /             26
255  7 030         MLC   @T@,WMSW                                      7  3619  M G83 G79           27
256  7 040         B     SWRT02                                        4  3626  B F55               27
257  7 050  SWRT03 MLC   @F@,WMSW                                      7  3630  M G95 G79           27
258  7 060         MLC   GX,X1                                         7  3637  M G72 089           27
259  7 070         MLC   GX,SWSV                                       7  3644  M G72 G78           27
260  7 080         SW    1&X1                                          4  3651  , 0|1               27
261  7 090  SWRT02 B     *                                             4  3655  B F58               28
262  7 100  SETMVS SBR   SETMV1&3                                      4  3659  H G33               28
263  7 110         MLZS  RZNSV,GX                                      7  3663  Y G60 G72           28
264  7 120         MLZS                                                1  3670  Y                   28
265  7 130         MLZS                                                1  3671  Y                   28
266  7 140         MLC   GBAD,X2                                       7  3672  M G42 094           28
267  7 150         MLC   PBAD,X3                                       7  3679  M G36 099           28
268  7 160         MLC   GX,MVLB05&3                                   7  3686  M G72 D12           29
269  7 170         MLZS  @ @,PX                                        7  3693  Y G84 G75           29
270  7 180         S     PL,PX                                         7  3700  S G69 G75           29
271  7 190         A     GL,PX                                         7  3707  A G66 G75           29
272  7 200         MLZS  RZNSV,PX                                      7  3714  Y G60 G75           29
273  7 210         MLZS                                                1  3721  Y                   29
274  7 220         MLZS                                                1  3722  Y                   29
275  7 230         MLC   PX,MVLB06&6                                   7  3723  M G75 D26           30
276  7 240  SETMV1 B     *                                             4  3730  B G33               30
277  7 250  PBAD   DCW   #3                                            3  3736                      30
278  8 010  PIAD   DCW   #3                                            3  3739                      30
279  8 020  GBAD   DCW   #3                                            3  3742                      30
280  8 030  GIAD   DCW   #3                                            3  3745                      30
281  8 040  GETA   DCW   #3                                            3  3748                      30
282  8 050  PUTA   DCW   #3                                            3  3751                      31
283  8 060  READAD DCW   #6                                            6  3757                      31
284  8 070         DCW   #1                                            1  3758                      31
285  8 080         DCW   #1                                            1  3759                      31
286  8 090  RZNSV  DCW   #1                                            1  3760                      31
287  8 100  ADBUCK DCW   #3                                            3  3763                      31
288  8 110  GL     DCW   #3                                            3  3766                      31
289  8 120  PL     DCW   #3                                            3  3769                      32
290  8 130  GX     DCW   #3                                            3  3772                      32
291  8 140  PX     DCW   #3                                            3  3775                      32
292  8 150  SWSV   DCW   #3                                            3  3778                      32
293  8 160  WMSW   DCW   @F@                                           1  3779                      32
294  8 170  VEOP   DCW   @.EP@                                         3  3782                      32
295  8 180         LTORG                                                          3783
                   DCW   @T@                                           1  3783              LIT     32
                         @ @                                           1  3784              LIT     33
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
					&1	1	3785	LIT	33
					&3	1	3786	LIT	33
					@ @	3	3789	LIT	33
					@0@	1	3790	LIT	33
					@000@	3	3793	LIT	33
					@1@	1	3794	LIT	33
					@F@	1	3795	LIT	34
296	8	190	GMRK	DCW	@}@ GROUP MARK	1	3796		34
297	8	200		END				/ 000 080	35

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000     JOB   1401 COBOL - J01
 102  1 020          CTL   661 11
 103  1 030          ORG   1300                                                 1300
 104  1 040  X1      EQU   89                                                   0089
 105  1 050  X2      EQU   94                                                   0094
 106  1 060  X3      EQU   99                                                   0099
 107  1 070  PUTX    EQU   363                                                  0363
 108  1 080  GETX    EQU   335                                                  0335
 109  1 090  AREA    EQU   103                                                  0103
 110  1 100  LIST    EQU   104                                                  0104
 111  1 110  ENTER   EQU   166                                                  0166
 112  1 120  TABLE   EQU   156                                                  0156
 113  1 130  END31   EQU   274                                                  0274
 114  1 140  SCRBKT  EQU   1126                                                 1126
 115  1 150  SUPER   EQU   351                                                  0351
 116  1 160  HEADER  EQU   1135                                                 1135
 117  1 170  IORW    EQU   343                                                  0343
 118  1 180  IOSBR   EQU   940                                                  0940
 119  1 190  START   EQU   2750                                                 2750
 120  1 200          B     STTA                                    4  1300  B ?00               4
 121  1 210  A15     B     READ                                    4  1304  B K37               4
 122  1 220  A14     MLC   @000@,X3                                7  1308  M O82 099           4
 123  1 230          ZA    &0,ENTER                                7  1315  ? O83 166           4
 124  1 240          MLC   BEGIN,X2                                7  1322  M N75 094           4
 125  1 250          CW    NOTIN&4,T1&4                            7  1329  ) V93 U10           4
 126  2 010          BW    B371,SWITCH                             8  1336  V T48 N76 1         5
 127  2 020  AR75    B     GETSX                                   4  1344  B Z22               5
 128  2 030  B371    CW    SWITCH                                  4  1348  ) N76               5
 129  2 040          BCE   SKIPS,SX-2,[                            8  1352  B W56 N63 [         5
 130  2 050  SS      SBR   X1,TAB                                  7  1360  H 089 O78           5
 131  2 060  S       BCE   OPT,0&X1,:                              8  1367  B U25 0|0 :         5
 132  2 070          C     0&X1,SX                                 7  1375  C 0|0 N65           6
 133  2 080          SAR   X1                                      4  1382  Q 089               6
 134  2 090          BU    S                                       5  1386  B T67 /             6
 135  2 100          MLC   0&X1,X1                                 7  1391  M 0|0 089           6
 136  2 110          B     0&X1                                    4  1398  B 0|0               6
 137  2 120  T       B     GETSX                                   4  1402  B Z22               6
 138  2 130  T1      BCE   OPT,SX-2,.                             8  1406  B U25 N63 .         6
 139  2 140  T7      SBR   X2,ENTER                                7  1414  H 094 166           7
 140  2 150          SW    T1&4                                    4  1421  , U10               7
 141  2 160  OPT     MLC   SX,0&X2                                 7  1425  M N65 0!0           7
 142  2 170          C     X2,&END31                               7  1432  C 094 O86           7
 143  2 180          BE    A14                                     5  1439  B T08 S             7
 144  2 190          A     @3@,X2                                  7  1444  A O87 094           7
 145  2 200          C     SX,@.MC@                                7  1451  C N65 O90           8
 146  2 210          BU    T                                       5  1458  B U02 /             8
 147  2 220          SBR   X2,LIST                                 7  1463  H 094 104           8
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SEQ PG LIN  LABEL   OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  X301    BCE   XX301R,0&X2,$                       8  1470  B W38 0!0 $          8
149  2 240         BCE   A14,0&X2,0                          8  1478  B T08 0!0 0          8
150  2 250         C     2&X2,@.MC@                          7  1486  C 0!2 O90            9
151  3 010         BE    A14                                 5  1493  B T08 S              9
152  3 020         SBR   X1,STT                              7  1498  H 089 N96            9
153  3 030  XAK    BCE   NOTIN,0&X1,                        8  1505  B V89 0|0            9
154  3 040         SW    1&X2                                4  1513  , 0!1                9
155  3 050         C     0&X1,2&X2                           7  1517  C 0|0 0!2            9
156  3 060         SAR   X1                                  4  1524  Q 089               10
157  3 070         CW    1&X2                                4  1528  ) 0!1               10
158  3 080         BL    NON                                 5  1532  B V53 T             10
159  3 090         BE    NON                                 5  1537  B V53 S             10
160 31 00   ZAX1    MA    @920@,X3                            7  1542  # O93 099           10
161  3 110         B     XAK                                 4  1549  B V05               10
162  3 120  NON    MLC   START&X3,START&X3                   7  1553  M PE0 PE0           10
163  3 130         SBR   X3                                  4  1560  H 099               11
164  3 140         C     2&X2,2&X3                           7  1564  C 0!2 0?2           11
165  3 150         SBR   MINE                                4  1571  H N72               11
166  3 160         BH    GO1X                                5  1575  B Y25 U             11
167  3 170         BE    XX8X                                5  1580  B Z55 S             11
168  3 180         B     SEARCH                              4  1585  B X02               11
169  3 190  NOTIN   BEF   XX301R                             5  1589  B W38 K             11
170  3 200         SW    NOTIN&4,SWT1                        7  1594  , V93 N69           12
171  3 210         SBR   X3,AREA                            7  1601  H 099 103           12
172  3 220  ONE    MLC   0&X3,SX1                           7  1608  M 0?0 N99           12
173  3 230         B     PUTSX1                              4  1615  B K10               12
174  3 240         A     @3@,X3                              7  1619  A O87 099           12
175  3 250         C     SX1,@.MC@                           7  1626  C N99 O90           12
176  4 010         BU    ONE                                 5  1633  B W08 /             13
177  4 020  XX301R A     @3@,X2                              7  1638  A O87 094           13
178  4 030         MLC   @000@,X3                           7  1645  M O82 099           13
179  4 040         B     X301                                4  1652  B U70               13
180  4 050  SKIPS  MLC   @.MC@,HOLD                         7  1656  M O90 N68           13
181  4 060         B     D66                                 4  1663  B W74               13
182  4 070  SKIPS1 MLC   SX,HOLD                            7  1667  M N65 N68           14
183  4 080  D66    B     PUTSX                               4  1674  B Z40               14
184  4 090         B     GETSX                               4  1678  B Z22               14
185  4 100         C     SX,HOLD                             7  1682  C N65 N68           14
186  4 110         BU    D66                                 5  1689  B W74 /             14
187  4 120  PASS   B     PUTSX                               4  1694  B Z40               14
188  4 130         B     AR75                                4  1698  B T44               14
189  4 140  SEARCH MLC   102&X3,102&X3                       7  1702  M 1?2 1?2           15
190  4 150         SBR   X3                                  4  1709  H 099               15
191  4 160         C     2&X2,2&X3                           7  1713  C 0!2 0?2           15
192  4 170         BL    SEARCH                              5  1720  B X02 T             15
193  4 180         BE    FOUND                               5  1725  B Z62 S             15
194  4 190  LOOKUP MLC   0&X3,0&X3                           7  1730  M 0?0 0?0           15
195  4 200         SBR   X3                                  4  1737  H 099               15
196  4 210         C     2&X2,2&X3                           7  1741  C 0!2 0?2           16
197  4 220         SBR   X3                                  4  1748  H 099               16
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         BE    FOUND                                      5  1752  B Z62 S             16
199  4 240         BL    RRR                                        5  1757  B X92 T             16
200  4 250         B     LOOKUP                                     4  1762  B X30               16
201  5 010  EOP    B     PUTSX                                      4  1766  B Z40               16
202  5 020         BW    READ1,SWT1                                 8  1770  V Y03 N69 1         16
203  5 030         MLCWA 3,188                                      7  1778  L 003 188           17
204  5 040         B     SUPER                                      4  1785  B 351               17
205  5 050         DCW   @JA7@                                      3  1791                      17
206  5 060  RRR    B     PUTX                                       4  1792  B 363               17
207  5 070         DCW   @0!2@                                     3  1798                      17
208  5 080         B     END                                        4  1799  B J81               17
209  5 090  READ1  MLC   @N@,T7                                     7  1803  M O94 U14           17
210  5 100         SBR   BEGIN,AREA                                 7  1810  H N75 103           18
211 51 05   CLSW   NOP   SWT1                                       4  1817  N N69               18
212  5 110         B     A15                                        4  1821  B T04               18
213  5 120  GO1X   BW    CBC1,SWITCH                                8  1825  V Y43 N76 1         18
214  5 130         B     GETX                                       4  1833  B 335               18
215  5 140         DCW   SX                                         3  1839  N65                 18
216  5 150         DCW   X701                                       3  1842  Y75                 18
217  5 160  CBC1   BCE   CBC,SX-2,[                                8  1843  B Y55 N63 [         19
218  5 170         B     X701                                       4  1851  B Y75               19
219  5 180  CBC    SW    SX-1                                       4  1855  , N64               19
220  5 190         C     2&X2,SX                                    7  1859  C 0!2 N65           19
221  5 200         CW    SX-1                                       4  1866  ) N64               19
222  5 210         BE    OUTPUX                                     5  1870  B Y83 S             19
223  5 220  X701   SW    SWITCH                                     4  1875  , N76               19
224  5 230         B     SEARCH                                     4  1879  B X02               20
225  5 240  OUTPUX MLC   @$@,0&X2                                  7  1883  M O95 0!0           20
226  5 250  OUTPT1 B     PUTSX                                      4  1890  B Z40               20
227  6 010         C     SX,@.MC@                                   7  1894  C N65 O90           20
228  6 020         BE    DXR                                        5  1901  B Z14 S             20
229  6 030         B     GETSX                                      4  1906  B Z22               20
230  6 040         B     OUTPT1                                     4  1910  B Y90               20
231  6 050  DXR    CW    SWITCH                                     4  1914  ) N76               21
232  6 060         B     XX301R                                     4  1918  B W38               21
233  6 070  GETSX  SBR   EXIT&3                                     4  1922  H Z39               21
234  6 080         B     GETX                                       4  1926  B 335               21
235  6 090         DCW   SX                                         3  1932  N65                 21
236  6 100         DCW   EOP                                        3  1935  X66                 21
237  6 110  EXIT   B     *                                          4  1936  B Z39               21
238  6 120  PUTSX  SBR   EXIT3&3                                    4  1940  H Z54               22
239  6 130         B     PUTX                                       4  1944  B 363               22
240  6 140         DCW   SX                                         3  1950  N65                 22
241  6 150  EXIT3  B     *                                          4  1951  B Z54               22
242  6 160  XX8X   MLC   MINE,X3                                    7  1955  M N72 099           22
243  6 170  FOUND  MLC   @$@,0&X2                                  7  1962  M O95 0!0           22
244  6 180         MLC   2&X3,SX1                                  7  1969  M 0?2 N99           22
245  6 190         MLC   @[@                                        4  1976  M O96               23
246  6 200         SBR   X3,3&X3                                    7  1980  H 099 0?3           23
247  6 220  OUTPUT B     PUTSX1                                     4  1987  B K10               23
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230  XX8    MLC   @   @,SX1                                 7  1991  M O99 N99           23
249  6 240         BCE   OP,0&X3,)                                 8  1998  B !72 0?0 )         23
250  6 250         BCE   CONST,0&X3,@                             8  2006  B J34 0?0 @         23
251  7 010         BCE   LAB3,0&X3,$                              8  2014  B J59 0?0 $         24
252  7 020         BCE   END,0&X3,%                               8  2022  B J81 0?0 %         24
253  7 030         BCE   PER,0&X3,.                               8  2030  B J92 0?0 .         24
254  7 040         BCE   SUB,0&X3,:                               8  2038  B J41 0?0 :         24
255  7 050         SW    SX1                                     4  2046  , N99               24
256  7 060         MLC   0&X3,SX1                                7  2050  M 0?0 N99           25
257  7 070         CW    SX1                                     4  2057  ) N99               25
258  7 080         SBR   X3,1&X3                                 7  2061  H 099 0?1           25
259  7 100         B     OUTPUT                                  4  2068  B Z87               25
260  7 110  OP     B     PUTX                                    4  2072  B 363               25
261  7 120         DCW   &@.LC@                                  3  2078  P02                 25
262  7 130         MLC   2&X3,SX1-1                              7  2079  M 0?2 N98           25
263  7 140         B     PUTSX1                                  4  2086  B K10               26
264  7 150         B     PUTX                                    4  2090  B 363               26
265  7 160         DCW   &@.OP@                                  3  2096  P05                 26
266  7 170         BCE   NOTE,1&X3,*                             8  2097  B J16 0?1 *         26
267  7 180         SBR   X3,3&X3                                 7  2105  H 099 0?3           26
268  7 200         B     XX8                                     4  2112  B Z91               26
269  7 210  NOTE   MLC   5&X3,SX1                                7  2116  M 0?5 N99           26
270  7 220         SBR   X3,6&X3                                 7  2123  H 099 0?6           27
271  7 240         B     OUTPUT                                  4  2130  B Z87               27
272  7 250  CONST  B     PUTX                                    4  2134  B 363               27
273  8 010         DCW   &@  @@                                  3  2140  P08                 27
274  8 020  SUB    MLC   3&X3,SX1                                7  2141  M 0?3 N99           27
275  8 030  CONST1 SBR   X3,4&X3                                 7  2148  H 099 0?4           27
276  8 050         B     OUTPUT                                  4  2155  B Z87               27
277  8 060  LAB3   MLC   3&X3,SX1                                7  2159  M 0?3 N99           28
278  8 070         B     PUTSX1                                  4  2166  B K10               28
279  8 080         MLC   LAB,SX1                                7  2170  M 103 N99           28
280  8 090         B     CONST1                                  4  2177  B J48               28
281  8 100  END    B     PUTX                                    4  2181  B 363               28
282  8 130         DCW   &@.MC@                                  3  2187  O90                 28
283  8 140         B     XX301R                                  4  2188  B W38               28
284  8 150  PER    MLC   3&X3,X1                                 7  2192  M 0?3 089           29
285  8 160         MLC   TABLE&X1,SX1                            7  2199  M 1V6 N99           29
286  8 170         B     CONST1                                  4  2206  B J48               29
287  8 180  PUTSX1 SBR   PUTT&3                                  4  2210  H K24               29
288  8 190         B     PUTX                                    4  2214  B 363               29
289  8 200         DCW   SX1                                     3  2220  N99                 29
290  8 210  PUTT   B     *                                       4  2221  B K24               29
291  8 220  NOTTS  B     PUTSX                                   4  2225  B Z40               30
292  8 230         B     GETSX                                   4  2229  B Z22               30
293  8 240         B     PASS                                    4  2233  B W94               30
294  8 250  READ   SBR   DONE&3                                  4  2237  H L90               30
295  9 010         MLC   665,X1                                  7  2241  M 665 089           30
296  9 020         CW    0&X1                                    4  2248  ) 0|0               30
297  9 030         SAR   X1                                      4  2252  Q 089               30
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  9 040          SW    2800                                       4  2256  , Q00              31
299  9 050  REAL    CS    0&X1                                       4  2260  / 0|0              31
300  9 060          SBR   X1                                         4  2264  H 089              31
301  9 070          BW    REAL,2800                                  8  2268  V K60 Q00 1        31
302  9 080          SBR   AK&6,STT                                   7  2276  H L19 N96          31
303  9 090          MLC   @ @,STT                                   7  2283  M P09 N96          31
304  9 100          MLC   STT                                        4  2290  M N96              31
305  9 110  READ2   B     IORW                                       4  2294  B 343              32
306  9 120          RTW   1,HEADER                                   8  2298  L %U1 /35 R        32
307  9 130          DCW   *                                          3  2308  L08                32
308  9 140          SW    HEADER&1                                   4  2309  , /36              32
309  9 150  AK      MLC   HEADER&2,STT                               7  2313  M /37 N96          32
310  9 160          SBR   AK&6                                       4  2320  H L19              32
311  9 170          CW    HEADER&1                                   4  2324  ) /36              32
312  9 180          B     IORW                                       4  2328  B 343              33
313  9 190  R       RTW   1,START                                    8  2332  L %U1 P50 R        33
314  9 200          DCW   *                                          3  2342  L42                33
315  9 210          S     @2@,1299                                   7  2343  S P10 S99          33
316  9 220          MLC   IOSBR,R&6                                  7  2350  M 940 L38          33
317  9 230          C     HEADER,SUBSC                               7  2357  C /35 O79          33
318  9 240  R41     BE    R3                                         5  2364  B L73 S            34
319  9 250          B     READ2                                      4  2369  B K94              34
320 10 010  R3      SBR   R&6,START                                  7  2373  H L38 P50          34
321 10 020          MLC   @6@,SUBSC                                 7  2380  M P11 O79          34
322 10 030  DONE    B     *                                          4  2387  B L90              34
323 10 040  COBOL   BCE   COPYS,HEADER&4,T                          8  2391  B M31 /39 T        34
324 10 050  DIOCS   CW    SWT1                                       4  2399  ) N69              34
325 10 060  DIOCSS  B     PUTSX                                      4  2403  B Z40              35
326 10 070          B     A14                                        4  2407  B T08              35
327 10 080  DTF     BCE   COPYR,HEADER&4,I                          8  2411  B M23 /39 I        35
328 10 090  DTF1    B     DIOCS                                      4  2419  B L99              35
329 10 100  COPYR   BCE   READR,HEADER,6                           8  2423  B M89 /35 6        35
330 10 110  COPYS   BCE   READS,HEADER,6                           8  2431  B M82 /35 6        35
331 10 120          BW    COPY,SWT1                                  8  2439  V M75 N69 1        36
332 10 130          SW    R41&4                                      4  2447  , L68              36
333 10 140  SPINSS  B     READ                                       4  2451  B K37              36
334 10 150          BCE   SPINS2,HEADER,6                          8  2455  B M67 /35 6        36
335 10 160          B     SPINSS                                     4  2463  B M51              36
336 10 170  SPINS2  CW    R41&4                                      4  2467  ) L68              36
337 10 180          B     SS                                         4  2471  B T60              36
338 10 190  COPY    B     SUPER                                      4  2475  B 351              37
339 10 200          DCW   @SP3@                                      3  2481                     37
340 10 210  READS   SBR   DTF1&3,DIOCSS                            7  2482  H M22 M03          37
341 10 220  READR   SBR   SXX1,DIOCSS                              7  2489  H O51 M03          37
342 10 230          SBR   BEGIN,AREA&3                            7  2496  H N75 106          37
343 10 240          MLC   SCRBKT,SUBSC                            7  2503  M /26 O79          37
344 10 250          MLC   @H@,T7                                   7  2510  M P12 U14          38
345 11 010          B     READ                                       4  2517  B K37              38
346 11 020          B     DIOCSS                                     4  2521  B M03              38
347 11 030  LC      B     GETSX                                      4  2525  B Z22              38
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 11 040          B     GETSX                                      4  2529  B Z22               38
349 11 050  ST      A     @1@,AREA                                   7  2533  A P13 103           38
350 11 051          BCE   OUTFIX,AREA-2,|                          8  2540  B N52 101 |         38
351 11 060          B     AR75                                       4  2548  B T44               39
352 11 061  OUTFIX MLC   @J00@,AREA                                 7  2552  M P16 103           39
353 11 062          B     AR75                                       4  2559  B T44               39
354 11 070  SX      DCW   #3                                        3  2565                      39
355 11 080  HOLD    DCW   #3                                        3  2568                      39
356 11 090  SWT1    DC    #1                                        1  2569                      39
357 11 100  MINE    DCW   #3                                        3  2572                      39
358 11 110  BEGIN   DCW   &AREA&3                                   3  2575  106                 39
359 11 120  SWITCH DC    #1                                        1  2576                      40
360 11 130  LAB     EQU   AREA                                        0103
361 11 140          DCW   #2                                        2  2578                      40
362 11 150          DC    #2                                        2  2580                      40
363 11 160          DC    #2                                        2  2582                      40
364 11 170          DC    #2                                        2  2584                      40
365 11 180          DC    #2                                        2  2586                      40
366 11 190          DC    #2                                        2  2588                      40
367 11 200          DC    #2                                        2  2590                      40
368 11 210          DC    #2                                        2  2592                      40
369 11 220          DC    #2                                        2  2594                      40
370 11 230  STT     DC    #2                                        2  2596                      40
371 11 240  SX1     DCW   #3                                        3  2599                      40
372 11 250          DCW   @:@                                       1  2600                      40
373 12 010          DCW   &NOTTS                                    3  2603  K25                 40
374 12 020          DCW   @***@                                     3  2606                      41
375 12 030          DCW   &AR75                                     3  2609  T44                 41
376 12 040          DCW   @.MC@                                     3  2612                      41
377 12 050          DCW   &SKIPS1                                   3  2615  W67                 41
378 12 060          DCW   @#DC@                                     3  2618                      41
379 12 070          DCW   &PASS                                     3  2621  W94                 41
380 12 080          DCW   @.SE@                                     3  2624                      41
381 12 090          DCW   &PASS                                     3  2627  W94                 42
382 12 100          DCW   @.DY@                                     3  2630                      42
383 12 110          DCW   &SKIPS1                                   3  2633  W67                 42
384 12 120          DCW   @*24@                                     3  2636                      42
385 12 130          DCW   &EOP                                      3  2639  X66                 42
386 12 140          DCW   @.EP@                                     3  2642                      42
387 12 150          DCW   &DTF                                      3  2645  M11                 42
388 12 160          DCW   @.DT@                                     3  2648                      43
389 12 170  SXX1    DCW   &DIOCS                                    3  2651  L99                 43
390 12 180          DCW   @.DI@                                     3  2654                      43
391 12 190          DCW   &COBOL                                    3  2657  L91                 43
392 12 200          DCW   @.EE@                                     3  2660                      43
393 12 210          DCW   &ST                                       3  2663  N33                 43
394 12 220          DCW   @.ST@                                     3  2666                      43
395 12 230          DCW   &LC                                       3  2669  N25                 44
396 12 240          DCW   @.LC@                                     3  2672                      44
397 12 250          DCW   &AR75                                     3  2675  T44                 44
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 13 010         DCW   @.FS@                                      3  2678                      44
399 13 020  TAB    EQU   *                                           2678
400 13 030  SUBSC  DCW   #1                                        1  2679                      44
401 13 040         LTORG                                                2680
                   DCW   @000@                                      3  2682            LIT       44
                         &0                                         1  2683            LIT       44
       142               &END31                                     3  2686  274       ADCON     45
                         @3@                                        1  2687            LIT       45
                         @.MC@                                      3  2690            LIT       45
                         @920@                                      3  2693            LIT       45
                         @N@                                        1  2694            LIT       45
                         @$@                                        1  2695            LIT       45
                         @[@                                        1  2696            LIT       45
                         @   @                                      3  2699            LIT       46
                         @.LC@                                      3  2702            LIT       46
                         @.OP@                                      3  2705            LIT       46
                         @  @@                                      3  2708            LIT       46
                         @ @                                        1  2709            LIT       46
                         @2@                                        1  2710            LIT       46
                         @6@                                        1  2711            LIT       46
                         @H@                                        1  2712            LIT       47
                         @1@                                        1  2713            LIT       47
                         @J00@                                      3  2716            LIT       47
402 13 050         ORG   3000                                            3000
403 13 060  STTA   SBR   358,959                                    7  3000  H 358 959           48
404 13 070         MLCWA @50@,1299                                  7  3007  L A49 S99           48
405 13 080         CS    299                                        4  3014  / 299               48
406 13 090         CS                                               1  3018  /                   48
407 13 100         MLCWA @000@,103                                  7  3019  L A52 103           48
408 13 110         SW    104                                        4  3026  , 104               48
409 13 120         BW    TESTER,86                                  8  3030  V A36 086 1         48
410 13 130  TST    B     IORW                                       4  3038  B 343               49
411 13 140         RTW   1,HEADER                                  8  3042  L %U1 /35 R         49
412 13 150         DCW   *                                          3  3052  ?52                 49
413 13 151         MLC   @)@,CLSW                                   7  3053  M A53 Y17           49
414 13 160         SW    GMM                                        4  3060  , A71               49
415 13 170         B     IORW                                       4  3064  B 343               49
416 13 180         RT    1,SKIIPS                                   8  3068  M %U1 A56 R         49
417 13 190         DCW   *                                          3  3078  ?78                 50
418 13 200         C     HEADER&5,CONSTT                            7  3079  C /40 A47           50
419 13 210         BU    TST                                        5  3086  B ?38 /             50
420 13 220  TSST   CW    GMM                                        4  3091  ) A71               50
421 13 230         BCE   SS4K,SCRBKT,4                             8  3095  B A07 /26 4         50
422 13 240         B     R4                                         4  3103  B A25               50
423 13 250  SS4K   SW    R41&4                                      4  3107  , L68               50
424 14 010         MLC   @A@,ZAX1                                   7  3111  M A54 V42           51
425 14 020         MLC   @N@,SPINS2                                 7  3118  M A55 M67           51
426 14 030  R4     MLC   SCRBKT,SUBSC                               7  3125  M /26 O79           51
427 14 040         B     A15                                        4  3132  B T04               51
428 14 050  TESTER BSS   TST,F                                      5  3136  B ?38 F             51
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

429 14 060         B     TSST                                      4  3141  B ?91               51
430 14 070  CONSTT DCW   @DT0@                                     3  3147                      51
431 14 080         LTORG                                                  3148
                   DCW   @50@                                      2  3149              LIT     52
                         @000@                                     3  3152              LIT     52
                         @)@                                       1  3153              LIT     52
                         @A@                                       1  3154              LIT     52
                         @N@                                       1  3155              LIT     52
432 14 090  SKIIPS EQU   *&1                                          3156
433 14 100         DC    #15                                      15  3170                      52
434 14 110  GMM    DC    @}@                                       1  3171                      52
435 14 120         ORG                                                    3172
436 14 130         DCW   @}@                                       1  3172                      52
437 14 140         END                                                    / 000 080           53
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - DI1 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI1					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@..)15@003%@		10	2509		4
105	1	050			@.)@006@009)17@012%@		18	2527		4
106	1	060			@.&)DC@015%@		10	2537		4
107	1	070			@.$@006@018)17@012%@		18	2555		5
108	1	080			@.*)DC@015%@		10	2565		5
109	1	090			@.-@006@021)17@012%@		18	2583		6
110	1	100			@./)DC@024%@		10	2593		6
111	1	110			@.%)15@027%@		10	2603		6
112	1	120			@.#)15.010.013%@		14	2617		7
113	1	130			@.@)DC@030%@		10	2627		7
114	1	140			@.?@006@033)07@006@036&@039%@		27	2654		8
115	1	150			@.A)SW@006@042@030%@		18	2672		9
116	1	160			@.B)CW@006@045,@006@048%@		23	2695		10
117	1	170			@.C)B @006@051%@		14	2709		10
118	1	180			@.D)07@006@036&@039%@		19	2728		11
119	1	190			@.E)SW@006@048@030%@		18	2746		11
120	1	200			@.F)CW@006@042,@006@045%@		23	2769		12
121	1	210			@.G)B @006@051%@		14	2783		12
122	1	220			@.H$)8L)BW$)2L,@006@045%@		23	2806		13
123	1	230			@.I)B $)8M%@		10	2816		13
124	1	240			@.!@006@054)07@006@036&@039%@		27	2843		14
125	1	250			@.J)SW@006@045@030%@		18	2861		15
126	2	010			@.K)CW@006@042,@006@048%@		23	2884		16
127	2	020			@.L)B @006@051%@		14	2898		16
128	2	030			@.M$)0J)01@006@021,@006@057@060%@		31	2929		17
129	2	040			@.N)29$)8L,@006@063,@066%@		24	2953		18
130	2	050			@.O)B $)8L%@		10	2963		18
131	2	060			@.P)29$)0K,@006@063,@069%@		24	2987		19
132	2	070			@.Q)29$)0M,@006@063,@072%@		24	3011		20
133	2	080			@.R)B @006@075%@		14	3025		20
134	2	090			@.|$)0K)19@078&@081%@		19	3044		21
135	2	100			@.S)07@006@084&@039,@078&@087%@		29	3073		22
136	2	110			@.T)07@078&@090,@093&@096%@		25	3098		23
137	2	120			@.U)20@006@099,@006@021%@		23	3121		24
138	2	130			@.V)B @024%@		10	3131		24
139	2	140			@.W)01@006@057,@006@021%@		23	3154		25
140	2	150			@.X)01@102&@096,@006@105%@		24	3178		26
141	2	160			@.Y)B $)0N%@		10	3188		26
142	2	170			@.Z$)0M)19@078&@081%@		19	3207		27
143	2	180			@.0)SW@006@108&@081%@		19	3226		27
144	2	190			@.1)07@006@084&@039,@078&@111%@		29	3255		28
145	2	200			@.2)B @114&@096%@		15	3270		29
146	2	210			@.3)17@117@120@117%@		18	3288		29
147	2	220			@.4)17@117@120@117%@		18	3306		30

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230              @.5)17@117@120@117%@                        18  3324                    30
149  2 240              @.6)CW@006@108&@081%@                       19  3343                    31
150  2 250              @.7)01@006@057,@006@021%@                   23  3366                    32
151  3 010              @.8)B @006@075%@                            14  3380                    32
152  3 020              @.9@006@123)07@006@036&@039%@               27  3407                    33
153  3 030              @).)CW@006@042,@006@045%@                   23  3430                    34
154  3 040              @)))CW@006@048%@                            14  3444                    34
155  3 050              @)&@006@051)01@006@021,@006@099@126%@       35  3479                    35
156  3 060         DCW  @}@                                          1  3480                    35
157  3 070         END                                                      / 000 080             36
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - DI2
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                    2500
 104  1 040         DCW   @)$)01@006@036&@039,@006@021%@                    28  2527                     4
 105  1 050               @)*)01@039&@096,@006@021%@                       24  2551                     5
 106  1 060               @)-)01@129&@096,@006@132%@                       24  2575                     6
 107  1 070               @)/)51@111%@                                     10  2585                     6
 108  1 080               @)%)06@006@135@060%@                             18  2603                     7
 109  1 090               @)#)BW$)0J,@006@045%@                            19  2622                     7
 110  1 100               @)@)BW$)0J,@006@048%@                            19  2641                     8
 111  1 110               @)?)08$)0L,@006@063,@138%@                       24  2665                     9
 112  1 120               @)A$)8M)19@078&@081%@                            19  2684                    10
 113  1 130               @)B$)0N)19@078&@081%@                            19  2703                    10
 114  1 140               @)C)MN@024&@096%@                                15  2718                    11
 115  1 150               @)D)06@006@057%@                                 14  2732                    11
 116  1 160               @)E)07@006@021%@                                 14  2746                    12
 117  1 170               @)F)29$)1L,@006@132-@072,@138%@                  29  2775                    13
 118  1 180               @)G)29$)1P,@006@132-@072,%@                      25  2800                    14
 119  1 190               @)H)01@024&@096,@006@141%@                       24  2824                    15
 120  1 200               @)I)06@006@021%@                                 14  2838                    15
 121  1 210               @)!)CW@006@144@030%@                             18  2856                    16
 122  1 220               @)J)01@024&@096,@006@147%@                       24  2880                    17
 123  1 230               @)K)06@006@021%@                                 14  2894                    17
 124  1 240               @)L)29$)1K,@006@147,%@                           20  2914                    18
 125  1 250               @)M)SW@006@144%@                                 14  2928                    18
 126  2 010               @)N$)1K)19@078&@081%@                            19  2947                    19
 127  2 020               @)O)01@024&@096,@006@150%@                       24  2971                    20
 128  2 030               @)P)01%@                                          6  2977                    20
 129  2 040               @)Q)06@006@021%@                                 14  2991                    21
 130  2 050               @)R$)1L)19@078&@081%@                            19  3010                    21
 131  2 060               @)|$)0L)19@078&@081%@                            19  3029                    22
 132  2 070               @)S$)1P)19@078&@081%@                            19  3048                    22
 133  2 080               @)T)BW$)2N,@006@042%@                            19  3067                    23
 134  2 090               @)U)BW@006@153,@006@042%@                        23  3090                    24
 135  2 100               @)V)29$)4P,@006@063,@069%@                       24  3114                    25
 136  2 110               @)W)01@006@156,$)2K&@039%@                       24  3138                    26
 137  2 120               @)X)01@117@159@117,$)2K%@                        23  3161                    27
 138  2 130               @)Y)01@006@099,@006@021%@                        23  3184                    28
 139  2 140               @)Z)29$)2K,@006@063,@081%@                       24  3208                    29
 140  2 150               @)0)29$)2K,@006@132-@072,%@                      25  3233                    30
 141  2 160               @)1)BW$)2L,@006@048%@                            19  3252                    31
 142  2 170               @)2)29$)2K,@006@132-@072,@138%@                  29  3281                    32
 143  2 180               @)3)01@117@066@117,@006@162&@165%@               32  3313                    33
 144  2 190               @)4)01@117@168@117 ,@006@162&@102%@               32  3345                    34
 145  2 200               @)5)B @006@171%@                                 14  3359                    35
 146  2 210               @)6)29$)1R,@006@132-@072,@174%@                  29  3388                    36
 147  2 220               @)7)C @006@177&@180,@006@105-@081%@              33  3421                    37
```

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230              @)8)B $)3L%@                                10  3431                      38
 149  2 240              @)9$)1R)19@078&@081%@                       19  3450                      38
 150  2 250              @&.)29$)2L,@006@177&@039,@066%@             29  3479                      39
 151  3 010              @&)$)2K)B @024%@                            14  3493                      40
 152  3 020         DCW  @}@                                          1  3494                      40
 153  3 030         END                                                       / 000 080             41
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - DI3 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI3					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@&&$)2L)19@078&@081%@		19	2518		4
105	1	050			@&$)29$)2M,@006@183,%@		20	2538		4
106	1	060			@&*)29$)8R,@006@183,@159%@		24	2562		5
107	1	070			@&-)MN@006@186,@078&@072%@		24	2586		6
108	1	080			@&/)33@024%@		10	2596		6
109	1	090			@&%)B $)2M%@		10	2606		7
110	1	100			@&#$)8R)MN@006@186,@078&@072%@		28	2634		7
111	1	110			@&@)34@024%@		10	2644		8
112	1	120			@&?$)2M)19@078&@081%@		19	2663		8
113	1	130			@&A)BW@006@153,@006@045%@		23	2686		9
114	1	140			@&B)A &@081,@006@150%@		20	2706		10
115	1	150			@&C)29$)3N,@006@189,%@		20	2726		11
116	1	160			@&D)B $)3N%@		10	2736		11
117	1	170			@&E)MN@006@186,@006@192@030%@		27	2763		12
118	1	180			@&F)MN@006@189,@006@186%@		23	2786		13
119	1	190			@&G)MN@006@192,@006@189%@		23	2809		14
120	1	200			@&H$)2N)19@078&@081%@		19	2828		15
121	1	210			@&I)08@006@153,@006@063,@138%@		28	2856		16
122	1	220			@&!)29$)2P,@006@183,%@		20	2876		17
123	1	230			@&J)MN@006@186,@078&@072%@		24	2900		18
124	1	240			@&K)33@024%@		10	2910		18
125	1	250			@&L$)2P)19@078&@081%@		19	2929		19
126	2	010			@&M$)2O)19@078&@081%@		19	2948		19
127	2	020			@&N)S @006@105%@		14	2962		20
128	2	030			@&O)29@006@153,@006@132-@072,%@		29	2991		21
129	2	040			@&P)B @006@153%@		14	3005		22
130	2	050			@&Q)29$)2Q,@006@132-@072,@138%@		29	3034		23
131	2	060			@&R)01@117@066@117,@006@162&@165%@		32	3066		24
132	2	070			@&|)01@117@168@117,@006@162&@102%@		32	3098		25
133	2	080			@&S)B @006@171%@		14	3112		26
134	2	090			@&T$)0O)01&@180,$)3O@030%@		24	3136		26
135	2	100			@&U$)4O)05@117@195@117,@006@177&@198%@		36	3172		27
136	2	110			@&V)MN@006@186,@078&@072%@		24	3196		28
137	2	120			@&W)32@024,@006@177%@		19	3215		29
138	2	130			@&X)25$)5Q%@		10	3225		29
139	2	140			@&Y$)2Q)19@078&@081%@		19	3244		30
140	2	150			@&Z)29$)3P,@006@063,@069%@		24	3268		31
141	2	160			@&0)29$)2R,@006@132-@072,@138%@		29	3297		32
142	2	170			@&1)29$)2R,@006@132-@072,@174%@		29	3326		33
143	2	180			@&2)C @006@177&@201,@006@141%@		28	3354		34
144	2	190			@&3)B $)3J%@		10	3364		34
145	2	200			@&4)29$)2R,@006@132-@072,@204%@		29	3393		35
146	2	210			@&5)C @006@177&@207,@006@210%@		28	3421		36
147	2	220			@&6)B $)3J%@		10	3431		36

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@&7)C @006@177&@213,@006@216%@		28	3459		37
149	2	240			@&8)B $)3J%@		10	3469		37
150	2	250			@&9)C @006@177&@219,@006@150%@		28	3497		38
151	3	010		DCW	@}@		1	3498		38
152	3	020		END					/ 000 080	39

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - DI4
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @$.)B $)3J%@                                        10  2509                      4
 105  1 050               @$))C @006@177&@222,@006@147%@                     28  2537                      4
 106  1 060               @$&)B $)3J%@                                       10  2547                      5
 107  1 070               @$$$)2R)19@078&@081%@                              19  2566                      5
 108  1 080               @$*)B @006@153%@                                   14  2580                      6
 109  1 090               @$-$)3J)07$)3K&@039%@                              19  2599                      6
 110  1 100               @$/)BE$)3K%@                                       10  2609                      7
 111  1 110               @$%)H $)2R%@                                       10  2619                      7
 112  1 120               @$#)B $)2N%@                                       10  2629                      7
 113  1 130               @$@$)3K)B @024%@                                   14  2643                      8
 114  1 140               @$?$)3L)07$)3M&@039%@                              19  2662                      8
 115  1 1 50               @$A)BE$)3M%@                                       10  2672                       9
 116  1 160               @$B)H $)1R%@                                       10  2682                      9
 117  1 170               @$C)09@225@024%@                                   14  2696                      9
 118  1 180               @$D)H %@                                            6  2702                     10
 119  1 190               @$E)B @078-@072%@                                  15  2717                     10
 120  1 200               @$F$)3M)B @024%@                                   14  2731                     10
 121  1 210               @$G$)3P)19@078&@081%@                              19  2750                     11
 122  1 220               @$H)29$)4L,@006@132-@072,@138%@                    29  2779                     12
 123  1 230               @$I)29@078&@165,@006@132-@180,%@                   30  2809                     13
 124  1 240               @$!)MN@006@186,@078&@072%@                         24  2833                     14
 125  1 250               @$J)33@024%@                                       10  2843                     14
 126  2 010               @$K)MN@006@186,@078&@072%@                         24  2867                     15
 127  2 020               @$L)31@024%@                                       10  2877                     15
 128  2 030               @$M)29$)4J,@006@177&@081,@159%@                    29  2906                     16
 129  2 040               @$N)S @006@228@231%@                               18  2924                     17
 130  2 050               @$O)MN@006@177&@207 ,@006@228-@081%@                33  2957                      18
 131  2 060               @$P)MN%@                                            6  2963                     18
 132  2 070               @$Q)SW@006@177&@234%@                              19  2982                     19
 133  2 080               @$R)A @006@177&@213,@006@228-@081%@                33  3015                     20
 134  2 090               @$|)CW@006@177&@234%@                              19  3034                     21
 135  2 100               @$S$)3R)C @006@228-@081,@117@024@039@102@237@117%@ 48  3082                     23
 136  2 110               @$T)BL$)4M%@                                       10  3092                     23
 137  2 120               @$U)A @006@177&@240,@006@228-@072%@                33  3125                     24
 138  2 130               @$V)C @006@228-@081,@006@243%@                     28  3153                     25
 139  2 140               @$W)BE$)4J%@                                       10  3163                     25
 140  2 150               @$X)BH$)4J%@                                       10  3173                     26
 141  2 160               @$Y)H $)4J%@                                       10  3183                     26
 142  2 170               @$Z)B $)2O%@                                       10  3193                     26
 143  2 180               @$0$)4M)SW@006@177&@246%@                          23  3216                     27
 144  2 190               @$1)S @117@039@102@237@024@117,@006@228%@          39  3255                     28
 145  2 200               @$2)A &@081,@006@177&@240%@                        25  3280                     29
 146  2 210               @$3)CW@006@177&@246%@                              19  3299                     30
 147  2 220               @$4)B $)3R%@                                       10  3309                     30
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230              @$5$)4J)B $)8P%@                            14  3323                      31
149  2 240              @$6)01@117@249@117,@006@177&@252%@          32  3355                      32
150  2 250              @$7)01@006@216%@                            14  3369                      33
151  3 010              @$8)01@117@255@117%@                        18  3387                      33
152  3 020              @$9)01@006@243%@                            14  3401                      34
153  3 030              @*.)01@006@141%@                            14  3415                      34
154  3 040              @*))01@117@249@117%@                        18  3433                      35
155  3 050              @*&)01@006@150%@                            14  3447                      35
156  3 060              @*$)01@117@255@117%@                        18  3465                      36
157  3 070              @**)BW$)4N,@006@042%@                       19  3484                      36
158  3 080         DCW  @}@                                          1  3485                      36
159  3 090         END                                                    / 000 080                 37
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI5					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@*-$)4K)01@006@147,@006@177&@222%@		32	2531		4
105	1	050			@*/)01@117@081@258@261@066@249@117,@006@177&@072%@		48	2579		6
106	1	060			@*%)01@117@069@117,@006@162&@165%@		32	2611		7
107	1	070			@*#)01@117@264@117,@006@162&@102%@		32	2643		8
108	1	080			@*@)B @006@171%@		14	2657		9
109	1	090			@*?$)4L)19@078&@081%@		19	2676		9
110	1	100			@*A)B @006@153%@		14	2690		10
111	1	110			@*B$)4N)BW$)4K,@006@144%@		23	2713		10
112	1	120			@*C)01@006@177&@180,@006@147%@		28	2741		11
113	1	130			@*D)B $)4K%@		10	2751		11
114	1	140			@*E$)4P)19@078&@081%@		19	2770		12
115	1	150			@*F)MN@006@186,@078&@072%@		24	2794		13
116	1	160			@*G)38@024%@		10	2804		13
117	1	170			@*H)29$)2L,@006@132-@072,%@		25	2829		14
118	1	180			@*I)B $)2L%@		10	2839		14
119	1	190			@*!)29$)4R,@006@132-@072,@138%@		29	2868		15
120	1	200			@*J)B $)8P%@		10	2878		15
121	1	210			@*K)01$)8Q@267,@006@177&@201%@		28	2906		16
122	1	220			@*L)01$)8Q%@		10	2916		16
123	1	230			@*M)01@006@105-@081%@		19	2935		17
124	1	240			@*N)01@117@081@270@273@066@249@117%@		34	2969		18
125	1	250			@*O)BW@078&@237,@006@045%@		24	2993		19
126	2	010			@*P)B @078&@111%@		15	3008		19
127	2	020			@*Q)01@117@276@117,@006@177&@039%@		32	3040		20
128	2	030			@*R)01@117@069@117,@006@162&@165%@		32	3072		21
129	2	040			@*|)01@117@264@117,@006@162&@102%@		32	3104		22
130	2	050			@*S)B @006@171%@		14	3118		23
131	2	060			@*T$)4R)19@078&@081%@		19	3137		23
132	2	070			@*U)MN@006@186,@078&@072%@		24	3161		24
133	2	080			@*V)38@024%@		10	3171		24
134	2	090			@*W)B $)2L%@		10	3181		25
135	2	100			@*X$)5Q)MN@006@186,@078&@072%@		28	3209		25
136	2	110			@*Y)31@024%@		10	3219		26
137	2	120			@*Z)S &@081,$)3O%@		16	3235		26
138	2	130			@*0)08$)4O,$)3O,@159%@		20	3255		27
139	2	140			@*1)09@279@282%@		14	3269		27
140	2	150			@*2)H %@		6	3275		28
141	2	160			@*3)B $)0O%@		10	3285		28
142	2	170			@*4$)8P)07$)8O&@039%@		19	3304		28
143	2	180			@*5)07$)8O-@081,@024&@096%@		25	3329		29
144	2	190			@*6)07@006@021,@006@177&@285%@		28	3357		30
145	2	200			@*7)20@006@177&@180,@006@288@291%@		32	3389		31
146	2	210			@*8$)8N)CW@024&@096%@		19	3408		32
147	2	220			@*9)20@117@249@117,@024&@096%@		28	3436		33

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@-.)07@006@021%@		14	3450		34
149	2	240			@-))C @006@021,&@006@177-@081%@		29	3479		35
150	2	250			@-&)BU$)8N%@		10	3489		35
151	3	010		DCW	@}@		1	3490		36
152	3	020		END					/ 000 080	37

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI6					
102	1	020		CTL	661 11					
103	1	030		ORG	2500			2500		
104	1	040		DCW	@-$)20@006@288,@006@177&@180%@		28	2527		4
105	1	050			@-*)07@006@021,@024%@		19	2546		5
106	1	060			@--$)8O)B @024%@		14	2560		5
107	1	070			@-/@006@153)19@078&@081%@		23	2583		6
108	1	080			@-%)BW$)5L,@006@045%@		19	2602		7
109	1	090			@-#)O8$)5O,@006@063,@138%@		24	2626		8
110	1	100			@-@)01@006@057,@006@021%@		23	2649		9
111	1	110			@-?)29$)5J,@006@132-@072,@138%@		29	2678		10
112	1	120			@-A)29$)5L,@006@132-@072,%@		25	2703		11
113	1	130			@-B)01@006@141,@024&@096%@		24	2727		12
114	1	140			@-C)51@072%@		10	2737		12
115	1	150			@-D)07@006@021%@		14	2751		13
116	1	160			@-E$)5J)19@078&@081%@		19	2770		13
117	1	170			@-F$)5L)19@078&@081%@		19	2789		14
118	1	180			@-G$)5O)19@078&@081%@		19	2808		14
119	1	190			@-H)01@006@135,@006@021%@		23	2831		15
120	1	200			@-I)01@006@132,@129&@096%@		24	2855		16
121	1	210			@-!)51@111%@		10	2865		16
122	1	220			@-J)BW@006@294,@006@042%@		23	2888		17
123	1	230			@-K)BW@006@075,@006@045%@		23	2911		18
124	1	240			@-L$)5M)01@006@099,@006@021%@		27	2938		19
125	1	250			@-M@006@036)B @024%@		18	2956		20
126	2	010			@-N@006@294)01@117@297@117,@114&@096%@		36	2992		21
127	2	020			@-O)B $)5M%@		10	3002		22
128	2	030			@-P@006@075)01@117@159@117,@114&@096%@		36	3038		23
129	2	040			@-Q)CW@006@045%@		14	3052		24
130	2	050			@-R)B $)5M%@		10	3062		24
131	2	060			@-|$)3N)09@300@282%@		18	3080		25
132	2	070			@-S)H %@		6	3086		25
133	2	080			@-T)B $)2N%@		10	3096		25
134	2	090			@-U@006@084)B @024%@		18	3114		26
135	2	100			@-V@006@171)07$)5P&@039%@		23	3137		27
136	2	110			@-W)01@006@303,@006@162%@		23	3160		28
137	2	120			@-X)05@117@195@117,@006@177&@198%@		32	3192		29
138	2	130			@-Y)MN@006@186,@006@162&@180%@		28	3220		30
139	2	140			@-Z)B @006@306%@		14	3234		31
140	2	150			@-0)09@006@162%@		14	3248		31
141	2	160			@-1)01@006@309,@078&@072%@		24	3272		32
142	2	170			@-2)MN@024%@		10	3282		32
143	2	180			@-3)CW%@		6	3288		33
144	2	190			@-4$)5P)B @024%@		14	3302		33
145	2	200			@-5@006@303)17@117@312@117%@		26	3328		34
146	2	210			@-6@006@162)17@117@312@117%@		26	3354		35
147	2	220			@-7)17@117@138@180@117%@		22	3376		36

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230			@-8)17&$)5P%@		11	3387		36
149	2	240			@-9)17@117@264@315@318@024@117%@		30	3417		37
150	2	250			@/.)DC&@006@177%@		15	3432		38
151	3	010			@/))DC@117@066@117%@		18	3450		38
152	3	020			@/&)17@291%@		10	3460		39
153	3	030			@/$@006@210)19@078%@		18	3478		39
154	3	040			@/*)17@060%@		10	3488		39
155	3	050		DCW	@}@		1	3489		39
156	3	060		END					/ 000 080	40

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - DI7 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI7					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@/-@006@216)19@078%@		18	2517		4
105	1	050			@//@006@150)17@060%@		18	2535		4
106	1	060			@/%@006@147)17@291%@		18	2553		5
107	1	070			@/#@006@141)17@267%@		18	2571		5
108	1	080			@/@@006@132)17@321%@		18	2589		6
109	1	090			@/?@006@324)17@060%@		18	2607		6
110	1	100			@/A@006@177)DA@327@024,@330,@333%@		32	2639		7
111	1	110			@/B@336)17@117@249@249@249@249@249@117%@		38	2677		8
112	1	120			@/C@006@243)19@336%@		18	2695		9
113	1	130			@/D@006@105)19@006@132-@339%@		27	2722		10
114	1	140			@/E@006@183)19@006@132-@180%@		27	2749		11
115	1	150			@/F@006@156)19@006@132-@102%@		27	2776		12
116	1	160			@/G@006@189)19@006@132-@039%@		27	2803		13
117	1	170			@/H@006@186)19@006@132-@138%@		27	2830		14
118	1	180			@/I@006@063)19@006@132-@081%@		27	2857		15
119	1	190			@/!@006@342)07@006@084&@039%@		27	2884		16
120	1	200			@/J)01@006@021,@006@099%@		23	2907		17
121	1	210			@/K)01@006@084&@039,@006@021%@		28	2935		18
122	1	220			@/L)01@039&@096,@006@021%@		24	2959		19
123	1	230			@/M)01@345&@096,@078&@111%@		25	2984		20
124	1	240			@/N)29$)7K,@117@081@204@174@117,@024%@		36	3020		21
125	1	250			@/O)51@138%@		10	3030		22
126	2	010			@/P)H @024,@348@237%@		19	3049		22
127	2	020			@/Q)B @006@084%@		14	3063		23
128	2	030			@/R$)7K)29$)7J,@024&@096,@315%@		29	3092		24
129	2	040			@/|)C @024&@096%@		15	3107		25
130	2	050			@/S)06@006@021%@		14	3121		25
131	2	060			@/T)B $)7K%@		10	3131		25
132	2	070			@/U$)7J)CS@198%@		14	3145		26
133	2	080			@/V)R %@		6	3151		26
134	2	090			@/W)C @351,@117@066@261@168@354@297@117%@		39	3190		27
135	2	100			@/X)BE$)7L%@		10	3200		28
136	2	110			@/Y)H @024,@357@081%@		19	3219		28
137	2	120			@/Z)B $)7J%@		10	3229		28
138	2	130			@/0$)7L)MN@024&@096%@		19	3248		29
139	2	140			@/1)06@006@021%@		14	3262		29
140	2	150			@/2)01@360,@024&@096%@		20	3282		30
141	2	160			@/3)07@006@021%@		14	3296		30
142	2	170			@/4)01@093,@024&@096%@		20	3316		31
143	2	180			@/5)07@006@021%@		14	3330		31
144	2	190			@/6)01@201,@024&@096%@		20	3350		32
145	2	200			@/7)07@006@021%@		14	3364		32
146	2	210			@/8)01@363,@024&@096%@		20	3384		33
147	2	220			@/9)07@006@021%@		14	3398		33

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230          @%.)01@366,@024&@096%@                          20  3418                    34
149  2 240          @%))01@006@099,@006@021%@                       23  3441                    35
150  2 250          @%&)B @006@084%@                                14  3455                    35
151  3 010          @%$@006@369)07@078&@072%@                       23  3478                    36
152  3 020          @%*)B @024%@                                    10  3488                    36
153  3 030       DCW @}@                                             1  3489                    36
154  3 040       END                                                        / 000 080            37
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - DI8 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI8				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@%-@006@372)07@078&@072%@	23	2522		4
105	1	050			@%/)B @024%@	10	2532		4
106	1	060			@%%@006@306)07@006@375&@039%@	27	2559		5
107	1	070			@%#)B @006@372%@	14	2573		6
108	1	080			@%@)B @006@369%@	14	2587		6
109	1	090			@%?)01@006@021,@006@378@126%@	27	2614		7
110	1	100			@%A)01%@	6	2620		7
111	1	110			@%B)01@006@375&@039,@006@021%@	28	2648		8
112	1	120			@%C)01@039&@096,@006@021%@	24	2672		9
113	1	130			@%D)01@165&@096,@006@381&@282%@	29	2701		10
114	1	140			@%E)01@237&@096,@006@384&@039%@	29	2730		11
115	1	150			@%F)01@237&@096,@006@387&@039%@	29	2759		12
116	1	160			@%G)01@345&@096,@006@018%@	24	2783		13
117	1	170			@%H)07@006@390&@102,@345&@393%@	29	2812		14
118	1	180			@%I@006@396)A &@081,@024&@096%@	29	2841		15
119	1	190			@%!)01@117@180@180@117,@006@399%@	31	2872		16
120	1	200			@%J)01%@	6	2878		16
121	1	210			@%K@006@381)RT@024,@024%@	23	2901		17
122	1	220			@%L)07@006@309@060%@	18	2919		18
123	1	230			@%M)07@006@402&@102%@	19	2938		18
124	1	240			@%N)29@006@405,@006@381&@282,@069%@	33	2971		19
125	1	250			@%O@006@387)24@024%@	18	2989		20
126	2	010			@%P@006@390)29@006@402,@024,@195%@	32	3021		21
127	2	020			@%Q)51@345%@	10	3031		22
128	2	030			@%R@006@405)25@006@408%@	22	3053		22
129	2	040			@%|)25@006@408%@	14	3067		23
130	2	050			@%S@006@384)24@024%@	18	3085		23
131	2	060			@%T@006@411)19@078&@081%@	23	3108		24
132	2	070			@%U)01@006@378,@006@021%@	23	3131		25
133	2	080			@%V)01%@	6	3137		25
134	2	090			@%W@006@375)B @024%@	18	3155		26
135	2	100			@%X@006@408)29@006@414,@006@399,@180%@	36	3191		27
136	2	110			@%Y@006@417)S &@081,@006@399%@	28	3219		28
137	2	120			@%Z)BM@006@420&@072,@006@399%@	28	3247		29
138	2	130			@%0)MN@006@381&@039,@078&@072%@	29	3276		30
139	2	140			@%1)31@024%@	10	3286		30
140	2	150			@%2)29@078&@180,@006@381&@282,@066%@	34	3320		31
141	2	160			@%3)29@006@423,@006@399,@333%@	28	3348		32
142	2	170			@%4)B @006@381%@	14	3362		33
143	2	180			@%5@006@414)29@006@426,@006@381&@282,@066%@	41	3403		35
144	2	190			@%6)S &@081,@138&@096%@	21	3424		35
145	2	200			@%7)BM@006@429,@138&@096%@	24	3448		36
146	2	210			@%8@006@414)S &@081,@138&@096%@	29	3477		37
147	2	220		DCW	@}@	1	3478		37

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		END					/ 000 080	38

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - DI9 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DI9					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@%9)BM@006@432,@138&@096%@		24	2523		4
105	1	050			@#.@006@414)S &@081,@138&@096%@		29	2552		5
106	1	060			@#))BM@006@429,@138&@096%@		24	2576		6
107	1	070			@#&)B @006@417%@		14	2590		6
108	1	080			@#$@006@426)S &@081,@138&@096%@		29	2619		7
109	1	090			@#*)BM@006@432,@138&@096%@		24	2643		8
110	1	100			@#-)B @006@417%@		14	2657		8
111	1	110			@#/@006@402)MN@117@180@180@117,@024%@		35	2692		9
112	1	120			@#%)MN%@		6	2698		10
113	1	130			@##)ZS&@138,@024&@096%@		21	2719		10
114	1	140			@#@)B @006@381%@		14	2733		11
115	1	150			@#?@006@423)24@006@435%@		22	2755		11
116	1	160			@#A)S &@081,@006@438%@		20	2775		12
117	1	170			@#B)BM@006@441,@006@438%@		23	2798		13
118	1	180			@#C@006@444)MN@006@381&@039,@078&@072%@		37	2835		14
119	1	190			@#D)35@024%@		10	2845		15
120	1	200			@#E)01@117@180@180@117,@006@399%@		31	2876		16
121	1	210			@#F)B @006@381%@		14	2890		17
122	1	220			@#G@006@420)19@078-@039%@		23	2913		17
123	1	230			@#H)B @006@396%@		14	2927		18
124	1	240			@#I)H @024,@447@072%@		19	2946		18
125	1	250			@#!)MN@006@381&@039,@078&@072%@		29	2975		19
126	2	010			@#J)31@024%@		10	2985		19
127	2	020			@#K)01@006@381&@102,@078&@282%@		29	3014		20
128	2	030			@#L)RT@024,@024%@		15	3029		21
129	2	040			@#M)H @024,@450@072%@		19	3048		21
130	2	050			@#N)30@006@411,@333%@		19	3067		22
131	2	060			@#O)B @006@396%@		14	3081		22
132	2	070			@#P@006@432)01@117@072@180@117,@138&@096%@		40	3121		24
133	2	080			@#Q)09@456@024%@		14	3135		24
134	2	090			@#R)H %@		6	3141		24
135	2	100			@#|)B @006@417%@		14	3155		24
136	2	110			@#S@006@429)01@117@138@180@117,@138&@096%@		40	3195		26
137	2	120			@#T)09@459@024%@		14	3209		26
138	2	130			@#U)H %@		6	3215		26
139	2	140			@#V)B @006@417%@		14	3229		26
140	2	150			@#W@006@441)01@117@180@117,@006@438%@		35	3264		27
141	2	160			@#X)09@462@024%@		14	3278		28
142	2	170			@#Y)H %@		6	3284		28
143	2	180			@#Z)B @006@444%@		14	3298		28
144	2	190			@#0@006@435)01@237&@096,@006@375&@039%@		37	3335		29
145	2	200			@#1)09@465@024%@		14	3349		30
146	2	210			@#2)H %@		6	3355		30
147	2	220			@#3)B @006@423&@237%@		19	3374		30

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230              @#4@006@438)17@117@180@117%@                26  3400                    31
 149  2 240              @#5@006@399)17@117@180@117%@                26  3426                    32
 150  2 250              @#6@006@468)DC@030%@                        18  3444                    33
 151  3 010         DCW  @}@                                          1  3445                    33
 152  3 020         END                                                    / 000 080               34
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - DT1
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @  )17@003@006@003%@                                 18  2517                      4
 105  1 050               @ .)17@003@006@003%@                                 18  2535                      4
 106  1 060         DCW   @ ))17@003.010.013@003%@                             22  2557                      5
 107  1 070         DCW   @ &)17@009%@                                         10  2567                      5
 108  1 080         DCW   @ $)17@003.010@003%@                                 18  2585                      6
 109  1 090         DCW   @ *)17@012%@                                         10  2595                      6
 110  1 100               @ -)17@003.010@003%@                                 18  2613                      7
 111  1 110               @ /)17@003@015@015@018@003%@                         26  2639                      8
 112  1 120               @ %)17@003.010.013@003%@                             22  2661                      9
 113  1 130               @ #)17@009%@                                         10  2671                      9
 114  1 140               @ @)17@003.010.013.016.019.022@003%@                 34  2705                     10
 115  1 150               @ ?)17@021%@                                         10  2715                     11
 116  1 160               @ A)17@003@024@003%@                                 18  2733                     11
 117  1 170               @ B)17&@027@027%@                                    15  2748                     12
 118  1 180               @ C)17@003@030@003%@                                 18  2766                     12
 119  1 190               @ D)17@003@033@003%@                                 18  2784                     13
 120  1 200               @ E)17@003@036@003%@                                 18  2802                     13
 121  1 210               @ F)17@003@036@036@036@003%@                         26  2828                     14
 122  1 220               @ G)17@003@036@003%@                                 18  2846                     15
 123  1 230               @ H)17@003@018@003%@                                 18  2864                     15
 124  1 240               @ I)17@003@039@003%@                                 18  2882                     16
 125  1 250               @ !)17@003@030@003%@                                 18  2900                     16
 126  2 010               @ J)17@003@036@003%@                                 18  2918                     17
 127  2 020               @ K)17@003.010@003%@                                 18  2936                     17
 128  2 030               @ L)17@003@036@003%@                                 18  2954                     18
 129  2 040               @ M)17@003.010@003%@                                 18  2972                     18
 130  2 050               @ N)17@003@036@003%@                                 18  2990                     19
 131  2 060               @ O)17@003@042@003%@                                 18  3008                     19
 132  2 070               @ P)17@003@045@003%@                                 18  3026                     20
 133  2 080               @ Q)17@003@018@003%@                                 18  3044                     20
 134  2 090               @ R)17@003@048@003%@                                 18  3062                     21
 135  2 100               @ |)17@003@051@003%@                                 18  3080                     21
 136  2 110               @ S)17@003@054@003%@                                 18  3098                     22
 137  2 120               @ T.010.013)B @057@060%@                             22  3120                     23
 138  2 130               @ U)B @006&@063%@                                    15  3135                     23
 139  2 140               @ V)B $)2M%@                                         10  3145                     24
 140  2 150               @ W)01@057@066,@057@069%@                            23  3168                     24
 141  2 160               @ X)01@057@060&@072,@057@066%@                       28  3196                     25
 142  2 170               @ Y)MN@01 5&@075%@                                    15  3211                      26
 143  2 180               @ Z)06@057@066%@                                     14  3225                     26
 144  2 190               @ 0)01@015&@075,.010.013-@078%@                      29  3254                     27
 145  2 200               @ 1)C %@                                              6  3260                     27
 146  2 210         DCW   @}@                                                   1  3261                     27
 147  2 220         END                                                                 / 000 080            28
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - DT2
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                    2500
 104  1 040         DCW   @ 2)C @01 5&@075%@                                 15  2514                      4
 105  1 050               @ 3)C %@                                            6  2520                      4
 106  1 060               @ 4)06@057@066%@                                   14  2534                      4
 107  1 070               @ 5)01@015&@075,$)1M&@081%@                        25  2559                      5
 108  1 080               @ 6)01$)2Q,@057@066%@                              19  2578                      6
 109  1 090               @ 7)29$)2L,.010.013&@075,@084%@                    29  2607                      7
 110  1 100               @ 8$)0M)02.010.013&@075,.016.019%@                 32  2639                      8
 111  1 110               @ 9)07$)2Q,.010&@075%@                             20  2659                      9
 112  1 120               @. )B $)2L%@                                       10  2669                      9
 113  1 130               @..$)0M)29@006&@087,$)1M&@081,@090%@                34  2703                     10
 114  1 140               @.)$)1M)02.010.013&@075,@015%@                     28  2731                     11
 115  1 150               @.[)07$)2Q,.010&@075%@                             20  2751                     12
 116  1 160               @.&$)7L)19@006&@018%@                              19  2770                     12
 117  1 170               @.$)02.010.013,.016.019%@                          23  2793                     13
 118  1 180               @.*)29@006&@087,$)1M&@081,@090%@                   30  2823                     14
 119  1 190               @.-$)1M)02.010.013,@015%@                          23  2846                     15
 120  1 200               @./)01@057@069,@057@066%@                          23  2869                     16
 121  1 210               @.%)B @057@060%@                                   14  2883                     16
 122  1 220               @.#)09.010.013%@                                   14  2897                     17
 123  1 230               @.@$)2Q)19@006%@                                   14  2911                     17
 124  1 240               @.?)09.010.013%@                                   14  2925                     18
 125  1 250               @.A$)4Q)19@006%@                                   14  2939                     18
 126  2 010               @.B$)2L)19@006&@018%@                              19  2958                     19
 127  2 020               @.C)MN.010.013-@072,$)1K&@093%@                    29  2987                     20
 128  2 030               @.D)B @057@096%@                                   14  3001                     21
 129  2 040               @.E)09$)1K%@                                       10  3011                     21
 130  2 050               @.F)S @057@066&@018%@                              19  3030                     22
 131  2 060               @.G)A @003@018@003,.010.013-@099%@                 32  3062                     23
 132  2 070               @.H)01@057@102,@057@066%@                          23  3085                     24
 133  2 080               @.I)MN@015&@075%@                                  15  3100                     24
 134  2 090               @.!)05@003@084@003%@                               18  3118                     25
 135  2 100               @.J)07$)2Q,@015%@                                  15  3133                     25
 136  2 110               @.K)B $)7L%@                                       10  3143                     26
 137  2 120               @.L)B $)0M%@                                       10  3153                     26
 138  2 130               @.M$)1K)17@003@105@003%@                           22  3175                     27
 139  2 140               @.N)17@003@045@093@003%@                           22  3197                     28
 140  2 150               @.O)17$)2K%@                                       10  3207                     28
 141  2 160               @.P)RT.010,.013.016&@108%@                         24  3231                     29
 142  2 170               @.Q$)2K)19@006&@018%@                              19  3250                     30
 143  2 180               @.R)01@057@069,@057@066%@                          23  3273                     31
 144  2 190         DCW   @}@                                                 1  3274                     31
 145  2 200         END                                                                / 000 080            32
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DT3					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@.|)01@057@111,@057@114%@		23	2522		4
105	1	050			@.S)01%@		6	2528		4
106	1	060			@.T)01@003@036@003,.010.013&@018&@108%@		37	2565		5
107	1	070			@.U)B @057@117%@		14	2579		6
108	1	080			@.V)09.010.013-@120%@		19	2598		6
109	1	090			@.W)07$)1K&@042,@123@093%@		24	2622		7
110	1	100			@.X)B $)2L%@		10	2632		7
111	1	110			@.Y$)2M)19@006&@018%@		19	2651		8
112	1	120			@.Z)01$)4Q,$)2Q%@		15	2666		8
113	1	130			@.0)B @057@060%@		14	2680		9
114	1	140			@.1)CW$)9M%@		10	2690		9
115	1	150			@.2)01@057@066,@057@069%@		23	2713		10
116	1	160			@.3)01@057@060&@072,@057@066%@		28	2741		11
117	1	170			@.4)MN@015&@075%@		15	2756		12
118	1	180			@.5)C %@		6	2762		12
119	1	190			@.6)C %@		6	2768		12
120	1	200			@.7)06@057@066%@		14	2782		13
121	1	210			@.8)01@015&@075,$)1M&@072%@		25	2807		13
122	1	220			@.9$)3M)19@006&@018%@		19	2826		14
123	1	230			@))01$)2Q,@057@066%@		19	2845		14
124	1	240			@).)07$)1M&@081,.010.013&@075%@		29	2874		15
125	1	250			@)))07$)5M&@081,.010.013&.016&@075%@		34	2908		16
126	2	010			@)[)07$)2Q,.010&@075%@		20	2928		17
127	2	020			@)&)01@057@069,@057@066%@		23	2951		18
128	2	030			@)$$)1M)19@006&@018%@		19	2970		19
129	2	040			@)*)02@015,@015%@		15	2985		19
130	2	050			@)-)02.010.013,@015%@		19	3004		20
131	2	060			@)/)02.010.013,.016.019%@		23	3027		21
132	2	070			@)%)29@006&@087,$)1M&@072,@090%@		30	3057		22
133	2	080			@)#$)1M)02@015,.010.013%@		23	3080		23
134	2	090			@)@$)5M)29$)2L,@015,@084%@		24	3104		24
135	2	100			@)?)B $)2L%@		10	3114		24
136	2	110			@)A)BW$)3M,$)9M@126%@		19	3133		25
137	2	120			@)B$)2P)19@006&@018%@		19	3152		25
138	2	130			@)C)B @057@060%@		14	3166		26
139	2	140			@)D$)2Q)17@027%@		14	3180		26
140	2	150			@)E$)2L)19@006&@018%@		19	3199		27
141	2	160			@)F)CW$)9M%@		10	3209		27
142	2	170			@)G)A @003@018@003,.010.013-@099%@		32	3241		28
143	2	180			@)H)MN.010.013-@072,$)1K&@093%@		29	3270		29
144	2	190		DCW	@}@		1	3271		29
145	2	200		END					/ 000 080	30

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - DT4
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @)I)B @057@096%@                                  14  2513                      4
 105  1 050               @)!)09$)1K%@                                    10  2523                      4
 106  1 060               @)J$)3L)19@006&@018%@                           19  2542                      5
 107  1 070               @)K)07$)2Q,@015%@                               15  2557                      5
 108  1 080               @)L)B $)2P%@                                    10  2567                      6
 109  1 090               @)M$)1K)17@003@105@003%@                        22  2589                      6
 110  1 100               @)N)17@003@042@093@003%@                        22  2611                      7
 111  1 110               @)O)17$)2K%@                                    10  2621                      7
 112  1 120               @)P)WT.010,.013.016&@108%@                      24  2645                      8
 113  1 130               @)Q$)2K)19@006&@018%@                           19  2664                      9
 114  1 140               @)R)01@057@069,@057@066%@                       23  2687                     10
 115  1 150               @)|)01@057@111,@057@114%@                       23  2710                     11
 116  1 160               @)S)01%@                                         6  2716                     11
 117  1 170               @)T)B @057@117%@                                14  2730                     12
 118  1 180               @)U)09.010.013-@120%@                           19  2749                     12
 119  1 190               @)V)07$)1K&@042,@129@093%@                      24  2773                     13
 120  1 200               @)W)B $)3L%@                                    10  2783                     13
 121  1 210               @)X$)2M)19@006&@018%@                           19  2802                     14
 122  1 220               @)Y)B @057@060%@                                14  2816                     14
 123  1 230               @)Z)C $)2Q,@003@015@015@015@003%@               31  2847                     15
 124  1 240               @)0)BE@057@060%@                                14  2861                     16
 125  1 250               @)1)01@057@066,@057@069%@                       23  2884                     16
 126  2 010               @)2)07@057@066,.010.013-@018%@                  28  2912                     17
 127  2 020               @)3)07@057@066,.010.013&@108%@                  28  2940                     18
 128  2 030               @)4)MA$)2Q,@057@066%@                           19  2959                     19
 129  2 040               @)5)07$)1M&@072,@015&@075%@                     25  2984                     20
 130  2 050               @)6)MN@015&@075%@                               15  2999                     21
 131  2 060               @)7)06$)2R@012%@                                14  3013                     21
 132  2 070               @)8)01.010.013-@081,.016-@042&@075%@            34  3047                     22
 133  2 080               @)9)01.010.013-@081,.016-@018&@075%@            34  3081                     23
 134  2 090               @[ )07@057@066%@                                14  3095                     24
 135  2 100               @[.$)3P)01.010.013-@081,@015&@075%@             33  3128                     25
 136  2 110               @[))07@057@066%@                                14  3142                     26
 137  2 120               @[[)C @057@066,$)2R%@                           19  3161                     26
 138  2 130               @[&)C @057@066,&.010.013-@018%@                 29  3190                     27
 139  2 140               @[$)BU$)3P%@                                    10  3200                     27
 140  2 150               @[*)SW$)9M%@                                    10  3210                     28
 141  2 160               @[-)B $)3M%@                                    10  3220                     28
 142  2 170               @[/)01@057@066,@057@069%@                       23  3243                     29
 143  2 180               @[%)01@057@060&@072,@057@066%@                  28  3271                     30
 144  2 190         DCW   @}@                                              1  3272                     30
 145  2 200         END                                                                / 000 080           31
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

1401 COBOL - DT5 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DT5					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@[#)MN@015&@075%@		15	2514		4
105	1	050			@[@)06@057@066%@		14	2528		4
106	1	060			@[?)01@015&@075,.010.013-@078%@		29	2557		5
107	1	070			@[A)C %@		6	2563		5
108	1	080			@[B)C @015&@075%@		15	2578		6
109	1	090			@[C)C %@		6	2584		6
110	1	100			@[D)06@057@066%@		14	2598		6
111	1	110			@[E)01@015&@075,$)1M&@081%@		25	2623		7
112	1	120			@[F)BW$)2L,$)9L@126%@		19	2642		8
113	1	130			@[G)C .010.013&@072,&@027@045%@		29	2671		9
114	1	140			@[H)BE$)2L%@		10	2681		9
115	1	150			@[I$)7L)01$)2Q,@057@066%@		23	2704		10
116	1	160			@[!)02.010.013&@075,.016.019%@		28	2732		11
117	1	170			@[J)MA.010.013&.016-@018,$)2Q%@		29	2761		12
118	1	180			@[K)S .010.013&.016-@018,.019.022&@072%@		38	2799		13
119	1	190			@[L)29@006&@087,$)1M&@081,@090%@		30	2829		14
120	1	200			@[M$)1M)02.010.013&@075,@015%@		28	2857		15
121	1	210			@[N)MA.010.013&.016-@018&@075,$)2Q%@		34	2891		16
122	1	220			@[O)S .010.013&.016-@018&@075,.019.022&@072%@		43	2934		18
123	1	230			@[P)01@057@069,@057@066%@		23	2957		18
124	1	240			@[Q)B @057@060%@		14	2971		19
125	1	250			@[R$)2Q)17@132%@		14	2985		19
126	2	010			@[|$)2L)19@006&@018%@		19	3004		20
127	2	020			@[S)MN.010.013-@072,$)1K&@093%@		29	3033		21
128	2	030			@[T)B @057@096%@		14	3047		22
129	2	040			@[U)09$)1K%@		10	3057		22
130	2	050			@[V)CW$)9L%@		10	3067		22
131	2	060			@[W)07$)2Q,@045%@		15	3082		23
132	2	070			@[X)A @003@018@003,.010.013-@099%@		32	3114		24
133	2	080			@[Y)B $)7L%@		10	3124		25
134	2	090			@[Z$)1K)17@003@105@003%@		22	3146		25
135	2	100			@[0)17@003@045@093@003%@		22	3168		26
136	2	110			@[1)17$)2K%@		10	3178		26
137	2	120			@[2)RT.010,.013.016&@108%@		24	3202		27
138	2	130			@[3$)2K)01@057@069,@057@066%@		27	3229		28
139	2	140			@[4)01@057@111,@057@114%@		23	3252		29
140	2	150			@[5)01%@		6	3258		29
141	2	160			@[6)01@003@036@003,.010.013&@018&@108%@		37	3295		30
142	2	170		DCW	@}@		1	3296		30
143	2	180		END					/ 000 080	31

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - DT6
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @[7)B @057@117%@                                    14  2513                      4
 105  1 050               @[8)09.010.013-@120%@                               19  2532                      4
 106  1 060               @[9)07$)1K&@042,@123@093%@                          24  2556                      5
 107  1 070               @& )B $)2L%@                                        10  2566                      5
 108  1 080               @&.$)2M)01&@027@045,.010.013&@072%@                  33  2599                      6
 109  1 090               @&))B @057@060%@                                    14  2613                      7
 110  1 100               @&[)SW$)9J%@                                        10  2623                      7
 111  1 110               @&&)01@057@066,@057@069%@                           23  2646                      8
 112  1 120               @&$)07$)8J&@081,@015&@135%@                         25  2671                      9
 113  1 130               @&*)01@057@060&@072,@057@066%@                      28  2699                     10
 114  1 140               @&-)MN@015&@075%@                                   15  2714                     11
 115  1 150               @&/)C %@                                             6  2720                     11
 116  1 160               @&%)C %@                                             6  2726                     11
 117  1 170               @&#)06@057@066%@                                    14  2740                     12
 118  1 180               @&@)01@015&@075,@057@114%@                          24  2764                     12
 119  1 190               @&?)29$)9R,@057@114,@090%@                          24  2788                     13
 120  1 200               @&A $)7L)A .010.013&.016-@018,$)4Q%@                  33  2821                     14
 121  1 210               @&B$)7L)A .010-@018&@135,$)4Q%@                     29  2850                     15
 122  1 220               @&C)01$)2Q,@057@066%@                               19  2869                     16
 123  1 230               @&D)C $)5Q,$)4Q%@                                   15  2884                     16
 124  1 240               @&E)BH$)2L%@                                        10  2894                     17
 125  1 250               @&F)A .010.013&.016-@018,.019.022&@072%@            38  2932                     18
 126  2 010               @&G)A .010-@018&@135,.013.016&@072%@                34  2966                     19
 127  2 020               @&H)02.010.013,.016.019&@075%@                      28  2994                     20
 128  2 030               @&I)02@015&@135,.010.013&@075%@                     29  3023                     21
 129  2 040               @&!)MA.010.013&.016-@018,$)2Q%@                     29  3052                     22
 130  2 050               @&J)MA.010-@018&@135,$)2Q%@                         25  3077                     23
 131  2 060               @&K)01@057@069,@057@066%@                           23  3100                     24
 132  2 070               @&L$)8J)07@057@114,@015%@                           23  3123                     25
 133  2 080               @&M)B @057@060%@                                    14  3137                     25
 134  2 090               @&N$)2L)05@003@084@003,.010.013&@075%@               36  3173                     26
 135  2 100               @&O)A &@045,.010.013&@072%@                         25  3198                     27
 136  2 110               @&P)07$)3K&@072,.010.013&@075%@                     29  3227                     28
 137  2 120         DCW   @}@                                                  1  3228                     28
 138  2 130         END                                                                 / 000 080             29
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - DT7
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @&Q)MZ@003@138@003,.010.013&@072%@                  32  2531                      4
 105  1 050               @&R)A @003@018@003,.010.013-@099%@                  32  2563                      5
 106  1 060               @&|)MN.010.013-@072,$)1K&@093%@                     29  2592                      6
 107  1 070               @&S)B @057@096%@                                    14  2606                      7
 108  1 080               @&T)09$)1K%@                                        10  2616                      7
 109  1 090               @&U$)3K)CW@015%@                                    14  2630                      7
 110  1 100               @&V)ZA&@045,$)4Q%@                                  16  2646                      8
 111  1 110               @&W)07$)2Q,@045%@                                   15  2661                      8
 112  1 120               @&X)S .010.013&@072%@                               19  2680                      9
 113  1 130               @&Y)BW$)7L,$)9J%@                                   15  2695                      9
 114  1 140               @&Z)B $)9K%@                                        10  2705                     10
 115  1 150               @&0$)9R)H @015,@141@093%@                           23  2728                     10
 116  1 160               @&1)B $)9R%@                                        10  2738                     11
 117  1 170               @&2$)2Q)17@132%@                                    14  2752                     11
 118  1 180               @&3$)4Q)17&@027@045%@                               19  2771                     12
 119  1 190               @&4$)5Q)17&.010.013%@                               19  2790                     12
 120  1 200               @&5$)1K)17@003@105@003%@                            22  2812                     13
 121  1 210               @&6)17@003@042@093@003%@                            22  2834                     14
 122  1 220               @&7)17$)2K%@                                        10  2844                     14
 123  1 230               @&8)WT.010,.013.016&@108%@                          24  2868                     15
 124  1 240               @&9$)2K)01@057@069,@057@066%@                       27  2895                     16
 125  1 250               @$ )01@057@111,@057@114%@                           23  2918                     17
 126  2 010               @$.)01%@                                             6  2924                     17
 127  2 020               @$))B @057@117%@                                    14  2938                     18
 128  2 030               @$[)09.010.013-@120%@                               19  2957                     18
 129  2 040               @$&)07$)1K&@042,@129@093%@                          24  2981                     19
 130  2 050               @$$)B $)3K%@                                        10  2991                     19
 131  2 060               @$*$)2M)C $)2Q,@003@015@015@045@003%@               35  3026                     20
 132  2 070               @$-)BE@057@060%@                                    14  3040                     21
 133  2 080               @$/)01@057@066,@057@069%@                           23  3063                     21
 134  2 090               @$%)01$)2Q,@057@066%@                               19  3082                     22
 135  2 100               @$#)CW$)9J@126%@                                    14  3096                     22
 136  2 110               @$@)B $)2L%@                                        10  3106                     23
 137  2 120               @$?$)9K)01@057@069,@057@066%@                       27  3133                     23
 138  2 130               @$A)B @057@060%@                                    14  3147                     24
 139  2 140               @$B$)0N)09$)5Q%@                                    14  3161                     24
 140  2 150               @$C)01@057@066,@057@069%@                           23  3184                     25
 141  2 160               @$D)01@057@060&@072,@057@066%@                      28  3212                     26
 142  2 170               @$E)MN@015&@075%@                                   15  3227                     27
 143  2 180               @$F)06@057@066%@                                    14  3241                     27
 144  2 190               @$G)01@015&@075,.010.013-@078%@                     29  3270                     28
 145  2 200         DCW   @}@                                                  1  3271                     28
 146  2 210         END                                                                / 000 080              29
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - DT8
 102  1 020         CTL   661 11
 103  1 030         ORG   2500                                                  2500
 104  1 040         DCW   @$H)C @015&@075%@                             15  2514                      4
 105  1 050               @$I)06@057@066%@                              14  2528                      4
 106  1 060               @$!)01@015&@075,$)2R%@                        20  2548                      5
 107  1 070               @$J)C @015&@075%@                             15  2563                      5
 108  1 080               @$K)06@057@066%@                              14  2577                      6
 109  1 090               @$L)01@015&@075,$)3R&@081%@                   25  2602                      6
 110  1 100               @$M)20@057@069,@057@066%@                     23  2625                      7
 111  1 110               @$N)BW$)0R,$)0K@126%@                         19  2644                      8
 112  1 120               @$O)BW$)0M,@057@144%@                         19  2663                      8
 113  1 130               @$P$)0R)CW$)0K%@                              14  2677                      9
 114  1 140               @$Q)B @057@147%@                              14  2691                      9
 115  1 150               @$R)R %@                                       6  2697                      9
 116  1 160               @$|)01@003@150@003,$)4J%@                     23  2720                     10
 117  1 170               @$S$)0R)R %@                                  10  2730                     10
 118  1 180               @$T$)0M)19@006&@018%@                         19  2749                     11
 119  1 190               @$U)26$)0J,@153%@                             15  2764                     11
 120  1 200               @$V)SS.010%@                                  10  2774                     12
 121  1 210               @$W$)2R)17@003@150@015@003%@                  26  2800                     12
 122  1 220               @$X)02@018,.010.013%@                         19  2819                     13
 123  1 230               @$Y)29@006&@087,@006&@078,@090%@              30  2849                     14
 124  1 240               @$Z$)3R)02@018,@015%@                         19  2868                     15
 125  1 250               @$0)27$)0P%@                                  10  2878                     15
 126  2 010               @$1$)4J)09$)0L%@                              14  2892                     16
 127  2 020               @$2)12%@                                       6  2898                     16
 128  2 030               @$3$)0L)19@006&@018%@                         19  2917                     16
 129  2 040               @$4)CW@057@144%@                              14  2931                     17
 130  2 050               @$5$)2M)B @057@060%@                          18  2949                     17
 131  2 060               @$6$)0J)H @015,@156@018%@                     23  2972                     18
 132  2 070               @$7)B $)0R%@                                  10  2982                     18
 133  2 080               @$8$)0P)01@003@033@003,$)0N%@                 27  3009                     19
 134  2 090               @$9)SW@057@144%@                              14  3023                     20
 135  2 100               @* )B $)0L%@                                  10  3033                     20
 136  2 110               @*.$)5Q)20@003@150@003,$)0N%@                 27  3060                     21
 137  2 120               @*))B @057@117%@                              14  3074                     22
 138  2 130               @*[)09.010.013-@120%@                         19  3093                     22
 139  2 140               @*&@057@159)07$)6Q&@072%@                     23  3116                     23
 140  2 150               @*$)BW$)6Q,@057@144@126%@                     23  3139                     24
 141  2 160               @**)B @057@147%@                              14  3153                     24
 142  2 170               @*-)27$)7Q%@                                  10  3163                     25
 143  2 180               @*/)R %@                                       6  3169                     25
 144  2 190               @*%)SS.010%@                                  10  3179                     25
 145  2 200               @*#$)7Q)01@003@033@003,$)4J%@                 27  3206                     26
 146  2 210               @*@)SW@057@144%@                              14  3220                     27
 147  2 220               @*?$)6Q)B @015%@                              14  3234                     27
```

```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 230          @*A@162)17@003@165@003%@                        22  3256                      28
 149  2 240       DCW @}@                                             1  3257                      28
 150  2 250       END                                                          / 000 080           29
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```


SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DT9				
102	1	020		CTL	661 11				
103	1	030		ORG	2500			2500	
104	1	040		DCW	@*B)01@138@168@171,@057@069%@	27	2526		4
105	1	050			@*C)01@057@060&@072,@057@066%@	28	2554		5
106	1	060			@*D)MN@015&@075%@	15	2569		6
107	1	070			@*E)C %@	6	2575		6
108	1	080			@*F)06@057@066%@	14	2589		6
109	1	090			@*G)20@015&@075,$)2R%@	20	2609		7
110	1	100			@*H)MN@015&@075%@	15	2624		7
111	1	110			@*I)06@057@066%@	14	2638		8
112	1	120			@*!)01@015&@075,$)1M&@072%@	25	2663		8
113	1	130			@*J)B @057@159%@	14	2677		9
114	1	140			@*K)20@057@069,@057@066%@	23	2700		9
115	1	150			@*L$)1L)19@006&@018%@	19	2719		10
116	1	160			@*M)02.010.013,@174%@	19	2738		10
117	1	170			@*N)29@006&@087,$)1M&@072,@090%@	30	2768		11
118	1	180			@*O$)1M)02@015,@174%@	19	2787		12
119	1	190			@*P@057@177)09@180@087%@	22	2809		13
120	1	200			@*Q)DC@003@015@003%@	18	2827		14
121	1	210			@*R)P %@	6	2833		14
122	1	220			@*|)BW@006&@063,$)4K%@	20	2853		15
123	1	230			@*S)B $)5K%@	10	2863		15
124	1	240			@*T$)5L)19@006&@018%@	19	2882		16
125	1	250			@*U)SW$)4K@126%@	14	2896		16
126	2	010			@*V)26$)0K,@183%@	15	2911		17
127	2	020			@*W)02@174,$)1Q%@	15	2926		17
128	2	030			@*X)BW@006&@072,@057@177&@018%@	29	2955		18
129	2	040			@*Y)BW@006&@045,@057@177&@018%@	29	2984		19
130	2	050			@*Z)SS.010%@	10	2994		19
131	2	060			@*0)BW@006&@099,@057@177&@018%@	29	3023		20
132	2	070			@*1)29@006&@072,$)2R,@090%@	25	3048		21
133	2	080			@*2$)2R)17@003@105@015@003%@	26	3074		22
134	2	090			@*3)13%@	6	3080		22
135	2	100			@*4)20$)2R,$)3R%@	15	3095		23
136	2	110			@*5)CW@057@186%@	14	3109		23
137	2	120			@*6$)2M)B @057@060%@	18	3127		24
138	2	130			@*7$)0K)02$)1Q,@174%@	19	3146		24
139	2	140			@*8)P %@	6	3152		25
140	2	150			@*9)26@006&@018,@183%@	20	3172		25
141	2	160			@-)SS.010%@	10	3182		25
142	2	170			@-.)29@006&@072,$)3R,@090%@	25	3207		26
143	2	180			@-)$)3R)17@003@105@015@003%@	26	3233		27
144	2	190			@-[)A @003@018@003,$)0M@189%@	27	3260		28
145	2	200			@-&)29$)0N,$)0M-@018,@018%@	25	3285		29
146	2	210			@-$)B $)1L%@	10	3295		29
147	2	220			@-*$)2N)BW$)1L,$)4K%@	19	3314		30

```
SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230              @--)B $)3J%@                             10  3324                      30
149  2 240              @-/$)0N)S $)0M%@                         14  3338                      31
150  2 250              @-%)H @015,@192@045%@                    19  3357                      31
151  3 010              @-#)B $)1L%@                             10  3367                      32
152  3 020              @-@)B $)2N%@                             10  3377                      32
153  3 030         DCW  @}@                                       1  3378                      32
154  3 040         END                                                    / 000 080            33
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - DT0					
102	1	020		CTL	661 11					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@-?$)5K)26@006&@018,@183%@		24	2523		4
105	1	050			@-A)B $)5L%@		10	2533		4
106	1	060			@-B$)1Q)DA@195@015,@198%@		23	2556		5
107	1	070			@-C)17@003@165@003%@		18	2574		6
108	1	080			@-D@057@147)07$)3J&@078%@		23	2597		7
109	1	090			@-E)BW$)3J,@057@186@126%@		23	2620		8
110	1	100			@-F)P %@		6	2626		8
111	1	110			@-G)CW$)4K%@		10	2636		8
112	1	120			@-H)26$)0K,@183%@		15	2651		9
113	1	130			@-I$)3J)SW@057@186%@		18	2669		9
114	1	140			@-!)B @015%@		10	2679		10
115	1	150			@-J@201)17@003@165@003%@		22	2701		10
116	1	160			@-K)01@057@066,@057@069%@		23	2724		11
117	1	170			@-L)01@057@060&@072,@057@066%@		28	2752		12
118	1	180			@-M)MN@015&@075%@		15	2767		13
119	1	190			@-N)06@057@066%@		14	2781		13
120	1	200			@-O)01@015&@075,$)1L&@018%@		25	2806		14
121	1	210			@-P)06@057@066%@		14	2820		14
122	1	220			@-Q)01@015&@075,$)2L%@		20	2840		15
123	1	230			@-R)06@057@066%@		14	2854		15
124	1	240			@-|)01@015&@075,$)1M&@072%@		25	2879		16
125	1	250			@-S)20@057@069,@057@066%@		23	2902		17
126	2	010			@-T)B @057@159%@		14	2916		17
127	2	020			@-U)B @057@147%@		14	2930		18
128	2	030			@-V)26$)0K,@165%@		15	2945		18
129	2	040			@-W$)0L)19@006&@018%@		19	2964		19
130	2	050			@-X)29@006&@072,$)2L,@090%@		25	2989		20
131	2	060			@-Y$)2L)17@003@204@015@003%@		26	3015		21
132	2	070			@-Z)29@006&@072,$)1L&@018,@090%@		30	3045		22
133	2	080			@-0$)1L)CC@015%@		14	3059		23
134	2	090			@-1)02.010.013,@207%@		19	3078		23
135	2	100			@-2)29@006&@087,$)1M&@072,@090%@		30	3108		24
136	2	110			@-3$)1M)02@015,@207%@		19	3127		25
137	2	120			@-4)W %@		6	3133		25
138	2	130			@-5)B @057@060%@		14	3147		25
139	2	140			@-6$)0K)H @015,@210@042%@		23	3170		26
140	2	150			@-7)B $)0L%@		10	3180		26
141	2	160		DCW	@-8$)2M)B @057@060%@		18	3198		27
142	2	170		DCW	@}@		1	3199		27
143	2	180		END					/ 000 080	28

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - JE2 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - JE2					
102	1	020		CTL	661111					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@A0)SW.010-.016@003,.055-.061@003%@		33	2532		4
105	1	050		DCW	@A1)SW.010-.016@003%@		19	2551		5
106	1	060		DCW	@A2)SW.055-.061@003%@		19	2570		5
107	1	070		DCW	@A3)ZA@006,@009@012%@		19	2589		6
108	1	080		DCW	@A4)A .010&.097,.076&.019%@		25	2614		7
109	1	090		DCW	@A5)A .055&.100,.076&.064%@		25	2639		8
110	1	100		DCW	@A6)MZ.076&.064,.076&.019%@		25	2664		9
111	1	110		DCW	@A7)MZ.076&.019,.076&.064%@		25	2689		10
112	1	120		DCW	@A8)A .010&.097,@009&.019%@		25	2714		11
113	1	130		DCW	@A9)ZA.055&.100,.076%@		20	2734		12
114	1	140		DCW	@B0)A .055&.100,@009&.064%@		25	2759		13
115	1	150		DCW	@B1)ZA.010&.097,.076%@		20	2779		14
116	1	160		DCW	@B2)A .055&.100,.076%@		20	2799		15
117	1	170		DCW	@B3)S .055&.100,.076&.064%@		25	2824		16
118	1	180		DCW	@B4)MZ.055&.100,.055&.019%@		25	2849		17
119	1	190		DCW	@B5)S .055&.100,@009&.019%@		25	2874		18
120	1	200		DCW	@B6)S .055&.100,.076%@		20	2894		19
121	1	202		DCW	@B7)ZA.055,@015%@		15	2909		19
122	1	210		DCW	@B8)A .010&.097,.055&.100%@		25	2934		20
123	1	220		DCW	@B9)A .010&.097,.055&.019%@		25	2959		21
124	1	230		DCW	@C0)MZ.010&.097,.010&.100%@		25	2984		22
125	1	240		DCW	@C1)A .010&.100,.055&.100%@		25	3009		23
126	1	250		DCW	@C2)MZ.055&.019,.055&.100%@		25	3034		24
127	2	010		DCW	@C4)S .010&.097,.055&.100%@		25	3059		25
128	2	020		DCW	@C5)MZ.055&.100,.055&.019%@		25	3084		26
129	2	030		DCW	@C6)S .010&.097,.055&.019%@		25	3109		27
130	2	040		DCW	@C7)MZ.010&.097,.010&.100%@		25	3134		28
131	2	050		DCW	@C8)S .010&.100,.055&.100%@		25	3159		29
132	2	060		DCW	@C9)A .010&.097,@01 5&.019%@		25	3184		30
133	2	070		DCW	@D0:ZAX.022.013%@		15	3199		31
134	2	080		DCW	@D1)M .055&.100,@018-.091%@		25	3224		32
135	2	090		DCW	@D2)ZA@018-.091,.076%@		20	3244		33
136	2	100		DCW	@D3)A @018-.091,.076&.019&.064%@		30	3274		34
137	2	110		DCW	@D4)ZA@006,.076@012%@		19	3293		35
138	2	120		DCW	@D5)SW@018-.085%@		15	3308		35
139	2	130		DCW	@D6)ZA.010&.097,@018-.088%@		25	3333		36
140	2	140		DCW	@D7)D .055&.100,@018-.091%@		25	3358		37
141	2	150		DCW	@D8)ZA@018-.094,.076%@		20	3378		38
142	2	160		DCW	@D9)CW@018-.085%@		15	3393		38
143	2	170		DCW	@E0)A @018-.094,.076&.019@003%@		29	3422		39
144	2	180		DCW	@E1:XMN.010.013.016.022.025.028.019%@		35	3457		40
145	2	190		DCW	@E2) G@084.010,@123%@		19	3476		41
146	2	200		DCW	@E4)B @027%@		10	3486		41
147	2	210		DCW	@E5)H @090,@021%@		15	3501		42

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 220         DCW   @E6)B @144@147%@                            14  3515                    42
 149  2 230         DCW   @F0$L02) B@027%@                           14  3529                    43
 150  2 240         DCW   @}@                                         1  3530                    43
 151  2 250         END                                                     / 000 080             44
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - JE3
 102  1 020         CTL   661111
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @F1)A .055&.019,.010%@                              20  2519                      4
 105  1 050         DCW   @F2)SW.076-.082@003%@                              19  2538                      4
 106  1 060         DCW   @F3)CW.076-.082@003%@                              19  2557                      5
 107  1 070         DCW   @F4)CW.010-.016@003,.055-.061@003%@                 33  2590                      6
 108  1 080         DCW   @F5)CW.010-.016@003%@                              19  2609                      7
 109  1 090         DCW   @F6)CW.055-.061@003%@                              19  2628                      7
 110  1 100         DCW   @F7) C.010&.097,@030%@                             20  2648                      8
 111  1 110         DCW   @F8) C.055&.100,@030%@                             20  2668                      9
 112  1 120         DCW   @F9) C@015,@030%@                                  15  2683                      9
 113  1 130         DCW   @G0) D$L03@033,.010-.016&.061%@                    29  2712                     10
 114  1 140         DCW   @G1:XXJ.055.061.076.085.088%@                      27  2739                     11
 115  1 150         DCW   @G2:XXK.055.061.067.076.079.085.088%@              35  2774                     12
 116  1 160         DCW   @G3:XXL.055.061.067.073.076.079.082.085.088%@     43  2817                     14
 117  1 170         DCW   @G4:YFM.010.082.016.055.082.061.088.106.079%@     43  2860                     16
 118  1 180         DCW   @G5:YCL.010.082.016.055.082.061.088.106.079%@     43  2903                     18
 119  1 190         DCW   @G6:YAQ.010.082.016.055.082.061.088.106%@         39  2942                     19
 120  1 200         DCW   @G7:YNQ.010.082.016.055.082.061.088.106%@         39  2981                     20
 121  1 210         DCW   @G8:YIP.010.082.016.106.079%@                     27  3008                     21
 122  1 220         DCW   @G9:ZFZ.010.097.103.019.055.100.103.064.076.016@  46  3054                     23
 123  1 230         DC    @.061%@                                            5  3059                     23
 124  1 240         DCW   @H0:ZML.010.082.016.055.061%@                     27  3086                     23
 125  1 250         DCW   @H1:ZMR.010.082.016.055.082.061.076%@             35  3121                     24
 126  2 010         DCW   @H2:ZET.076.082.043.046.049.010.082.016.061%@     43  3164                     26
 127  2 020         DCW   @H3) F.106,@030,@036%@                            20  3184                     26
 128  2 030         DCW   @H4) F$LO2,@030,@036%@                            20  3204                     27
 129  2 040         DCW   @H5) G.055,@015@039&.016%@                         24  3228                     28
 130  2 050         DCW   @H6) G@015@039&.016%@                              19  3247                     29
 131  2 060         DCW   @H7)C .010,.055%@                                  15  3262                     29
 132  2 070         DCW   @H8)BM$LO2,.010&.097%@                            20  3282                     30
 133  2 080         DCW   @H9)BM.106,.055&.100%@                            20  3302                     31
 134  2 090         DCW   @I0)BM.106,.010&.097%@                            20  3322                     32
 135  2 100         DCW   @I1)BM$LO2,.055&.100%@                           20  3342                     33
 136  2 110         DCW   @I2)BM$L02,@015%@                                 15  3357                     33
 137  2 120         DCW   @I3)BM.106,@015%@                                 15  3372                     34
 138  2 130         DCW   @I4)BU.106%@                                      10  3382                     34
 139  2 140         DCW   @I5)B .106%@                                      10  3392                     34
 140  2 150         DCW   @I6) /.103.106%@                                  14  3406                     35
 141  2 160         DCW   @I8)A @120,.055&.100-.064&.019@003%@              34  3440                     36
 142  2 170         DCW   @I9) 1.055-.061@003,.010-.016@003%@              33  3473                     37
 143  2 180         DCW   @J0)ZA.010&.097,@015%@                            20  3493                     38
 144  2 190         DCW   @J1)S .055&.100,@015%@                            20  3513                     39
 145  2 200         DCW   @}@                                                1  3514                     39
 146  2 210         END                                                                / 000 080           40
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - JE4
 102  1 020         CTL   661111
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @J2)ZA@006,@015%@                                  15  2514                      4
 105  1 050         DCW   @J3)A .010&.097,@015-.064&.019%@                    30  2544                      5
 106  1 060         DCW   @J4)MZ.010&.097,@015%@                             20  2564                      6
 107  1 070         DCW   @J5)A .055&.100,@015-.019&.064%@                    30  2594                      7
 108  1 080         DCW   @J6)MZ.055&.100,@015%@                             20  2614                      8
 109  1 090         DCW   @J7)S .010&.097,@015%@                             20  2634                      9
 110  1 100         DCW   @J8)BU$L02%@                                       10  2644                      9
 111  1 110         DCW   @J9)BL$L02%@                                       10  2654                     10
 112  1 120         DCW   @K0)BH$L02%@                                       10  2664                     10
 113  1 130         DCW   @K1)BU$L03%@                                       10  2674                     10
 114  1 140         DCW   @K2) G@045,@015%@                                  15  2689                     11
 115  1 150         DCW   @K3) G@015%@                                       10  2699                     11
 116  1 160         DCW   @K4)C .010-.016&.061,.055%@                        25  2724                     12
 117  1 170         DCW   @K5)C .010,.055-.061&.016%@                        25  2749                     13
 118  1 180         DCW   @K6) D$L03@033,.055-.061&.016%@                    29  2778                     14
 119  1 190         DCW   @K7) G@048.016@048,@051%@                          23  2801                     15
 120  1 200         DCW   @K8)S @048.061@048,@051%@                          23  2824                     16
 121  1 210         DCW   @K9$L03)MA@048@054@048,$L03@033%@                  31  2855                     17
 122  1 220         DCW   @L0)C .010-.016&.061,@045%@                        25  2880                     18
 123  1 230         DCW   @L1)S @003,@051%@                                  15  2895                     19
 124  1 240         DCW   @L2)C @051,@048@093@138%@                         23  2918                     19
 125  1 250         DCW   @L3) G@048.061@048,@051%@                         23  2941                     20
 126  2 010         DCW   @L4)S @048.016@048,@051%@                         23  2964                     21
 127  2 020         DCW   @L5)C .055-.061&.016,@045%@                        25  2989                     22
 128  2 030         DCW   @L6) G.055,@015@039&.061%@                         24  3013                     23
 129  2 040         DCW   @L7)C .010,@015@039&.016%@                         24  3037                     24
 130  2 050         DCW   @L8) G.010,@015@039&.016%@                         24  3061                     25
 131  2 060         DCW   @L9)C @015@039&.061,.055%@                         24  3085                     26
 132  2 070         DCW   @M0) G.010,@015@039&.061%@                         24  3109                     27
 133  2 080         DCW   @M1) G@015@039&.061%@                              19  3128                     28
 134  2 090         DCW   @M2) 4$L02,.010,@060%@                             20  3148                     28
 135  2 100         DCW   @M3)C .010,@045%@                                  15  3163                     29
 136  2 110         DCW   @M4)BL.106%@                                       10  3173                     29
 137  2 120         DCW   @M5:YIN.010.082.016.106.079%@                      27  3200                     30
 138  2 130         DCW   @M6) 4.106,.010,@060%@                             20  3220                     31
 139  2 140         DCW   @M7) F.106,.010,@063%@                             20  3240                     32
 140  2 150         DCW   @M8) F.106,.010,@066%@                             20  3260                     33
 141  2 160         DCW   @M9)C .010,@075%@                                  15  327 5                     33
 142  2 170         DCW   @N1) F$L02,.010,@063%@                             20  3295                     34
 143  2 180         DCW   @N2) F$L02,.010,@066%@                             20  3315                     35
 144  2 190         DCW   @N3)C .010,@072%@                                  15  3330                     35
 145  2 200         DCW   @N4)C @075,.010%@                                  15  3345                     36
 146  2 210         DCW   @N5)ZA@006,@030%@                                  15  3360                     36
 147  2 220         DCW   @N6)C @015,.055-.085%@                             20  3380                     37
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
148	2	230		DCW	@N7) F@078,@030,@036%@		20	3400		38
149	2	240		DCW	@N8) G@048@135@048,.010@003%@		27	3427		39
150	2	250		DCW	@N9) G@045,.010%@		15	3442		40
151	3	010		DCW	@O0) G.010%@		10	3452		40
152	3	020		DCW	@O1) G.055,.010%@		15	3467		41
153	3	030		DCW	@O3) G.055-.061&.016,.010%@		25	3492		42
154	3	040		DCW	@O4) G.055-.061&.082,.010%@		25	3517		43
155	3	050		DCW	@}@		1	3518		43
156	3	060		END					/ 000 080	44

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - JE5					
102	1	020		CTL	661111					
103	1	030		ORG	2500				2500	
104	1	040		DCW	@O5) G.055,.010-.082%@		20	2519		4
105	1	050		DCW	@O6)BW@081,.010-.082-.061@003%@		29	2548		5
106	1	060		DCW	@O7) G.010-.082,.010-.082-.061%@		30	2578		6
107	1	070		DCW	@O8)ZA.055&.100,.010%@		20	2598		7
108	1	080		DCW	@O9)MZ.055&.100,.010%@		20	2618		8
109	1	090		DCW	@P0)ZA.055&.100-.064&.019,.010%@		30	2648		9
110	1	100		DCW	@P1)ZA@006,.010%@		15	2663		10
111	1	110		DCW	@P2)A .055&.100,.010-.019&.064%@		30	2693		11
112				DCW	@P3) 3.040,.010%@		15	2708		12
113	1	130		DCW	@P4) I.055&.100,.010%@		20	2728		12
114	1	140		DCW	@P5) G.055,@015%@		15	2743		13
115	1	150		DCW	@P6)ZA.055&.019,.010%@		20	2763		13
116	1	160		DCW	@P7) G@084@015,@027@087%@		23	2786		14
117	1	170		DCW	@P8)ZA.055&.100-.064&.019,@015%@		30	2816		15
118	1	180		DCW	@Q0)* I0B%@		9	2825		15
119	1	190		DCW	@Q1:ZDY.019.022.010%@		19	2844		16
120	1	200		DCW	@Q2:ZGP.010.013.019%@		19	2863		16
121	1	210		DCW	@Q3) G.055,.010-.016&.061%@		25	2888		17
122	1	220		DCW	@Q4)* I00%@		9	2897		17
123	1	230		DCW	@Q5)* I01%@		9	2906		18
124	1	240		DCW	@Q6:ZXZ.010.097.103.019.055.100.103.064.076@		42	2948		20
125	1	250		DC	@.016.061%@		9	2957		20
126	2	010		DCW	@Q7)* I0C%@		9	2966		20
127	2	020		DCW	@Q8)* I0E%@		9	2975		20
128	2	030		DCW	@Q9)* I0F%@		9	2984		20
129	2	040		DCW	@R0)* I0G%@		9	2993		21
130	2	050		DCW	@R1)* I0H%@		9	3002		21
131	2	060		DCW	@R2)* I09%@		9	3011		21
132	2	070		DCW	@R3)S .055&.100,@009&.064%@		25	3036		22
133	2	080		DCW	@R4)* I11%@		9	3045		22
134	2	090		DCW	@R5)* I12%@		9	3054		23
135	2	100		DCW	@R6)* I13%@		9	3063		23
136	2	110		DCW	@R7)* I13%@		9	3072		23
137	2	120		DCW	@R8)* I15%@		9	3081		23
138	2	130		DCW	@S0)ZS.055&.100,.076%@		20	3101		24
139	2	140		DCW	@S1)S .010&.097,@009&.019%@		25	3126		25
140	2	150		DCW	@S2)ZA@006,.076%@		15	3141		26
141	2	160		DCW	@S3)BH.106%@		10	3151		26
142	2	170		DCW	@S4.010) B@027%@		14	3165		26
143	2	180		DCW	@S5)B .013%@		10	3175		27
144	2	190		DCW	@S6)B .010%@		10	3185		27
145	2	200		DCW	@S7.010) 5.013%@		14	3199		27
146	2	210		DCW	@S8.010)B @093%@		14	3213		28
147	2	220		DCW	@S9) G@096,.010%@		15	3228		28

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         DCW   @T0) G@084.013,.010@099%@                   23  3251                    29
149  2 240         DCW   @T1.016) G@102,.013%@                      19  3270                    30
150  2 250         DCW   @T2.010) B.013%@                           14  3284                    30
151  3 010         DCW   @T3) G@102,.016%@                          15  3299                    31
152  3 020         DCW   @T4.019) B.028%@                           14  3313                    31
153  3 030         DCW   @T5.025) B.022%@                           14  3327                    32
154  3 040         DCW   @T6)B .025@105%@                           14  3341                    32
155  3 050         DCW   @T7.034) G@102,.016%@                      19  3360                    33
156  3 060         DCW   @T8.028) B.022%@                           14  3374                    33
157  3 070         DCW   @T9.019) B.031%@                           14  3388                    34
158  3 080         DCW   @U0.019) G@102,.022%@                      19  3407                    34
159  3 090         DCW   @U1.013) B.016%@                           14  3421                    35
160  3 100         DCW   @U2)B .016%@                               10  3431                    35
161  3 110         DCW   @U3.010) G@084.019,.013@099%@              27  3458                    36
162  3 120         DCW   @U4.016)B .010%@                           14  3472                    37
163  3 130         DCW   @U5) G@096,.016%@                          15  3487                    37
164  3 140         DCW   @U6)B .013%@                               10  3497                    37
165  3 150         DCW   @U7.019) B@027%@                           14  3511                    38
166  3 160         DCW   @}@                                         1  3512                    38
167  3 170         END                                                     / 000 080             39
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - JE6
 102  1 020         CTL   661111
 103  1 030         ORG   2500                                                      2500
 104  1 040         DCW   @U8)ZA.010,$L01%@                                  15  2514                       4
 105  1 050         DCW   @U9.043)S @003,$L01%@                              19  2533                       4
 106  1 060         DCW   @V0)BM$L02,$L01%@                                  15  2548                       5
 107  1 070         DCW   @V1$L01) 6@108%@                                   14  2562                       5
 108  1 080         DCW   @V2$L02) G@102,.040%@                              19  2581                       6
 109  1 090         DCW   @V3) G@102,.016%@                                  15  2596                       6
 110  1 091         DCW   @V4) I@015,.010%@                                  15  2611                       7
 111  1 100         DCW   @V7)CW.055&.100-.052@003%@                         24  2635                       7
 112  1 110         DCW   @V9)ZA.076,@009&.100%@                             20  2655                       8
 113  1 120         DCW   @W0)A @120,@009&.019@003%@                         24  2679                       9
 114  1 130         DCW   @W1)MZ@045,@015-.019&.064%@                        25  2704                      10
 115  1 140         DCW   @W2) D@150@153@099,@027@147@156)B @132.010@        41  2745                      12
 116  1 150         DC    @@156) 8@165.010@156) 6@159@156) 6@159%@           38  2783                      13
 117  1 160         DCW   @W3) D@150@153@099,@027@087@156)B @114.010@156@    45  2828                      15
 118  1 170         DC    @) 6@159@156) 6@162@048@156) 6.013%@               34  2862                      16
 119  1 180         DCW   @W4)* I17%@                                         9  2871                      17
 120  1 190         DCW   @W5)* I18%@                                         9  2880                      17
 121  1 200         DCW   @W6$L02)H %@                                       10  2890                      17
 122  1 210         DCW   @W7)ZA@018-.094,.076@012%@                         24  2914                      18
 123  1 220         DCW   @W8)H @027,.010%@                                  15  2929                      18
 124  1 230         DCW   @W9)B $L02%@                                       10  2939                      19
 125  1 240         DCW   @X0)A .055,.010-.019&.064%@                        25  2964                      19
 126  1 250         DCW   @X1)ZA.055,.010%@                                  15  2979                      20
 127  2 010         DCW   @X2)MZ.055,.010%@                                  15  2994                      20
 128  2 020         DCW   @X3)MZ@018-.091,.076@012%@                         24  3018                      21
 129  2 030         DCW   @X5)H @129%@                                       10  3028                      21
 130  2 040         DCW   @X6)B @027%@                                       10  3038                      22
 131  2 050         DCW   @X7)B .010@105%@                                   14  3052                      22
 132  2 060         DCW   @X8)B .037%@                                       10  3062                      22
 133  2 070         DCW   @X9)* I1I%@                                         9  3071                      23
 134  2 080         DCW   @Y0)SW.034-.040@003%@                              19  3090                      23
 135  2 090         DCW   @Y1)CW.034-.040@003%@                              19  3109                      24
 136  2 100         DCW   @Y2)MZ@045,.010-.019&.064%@                        25  3134                      25
 137  2 110         DCW   @Y3)ZA.055-.064&.019,.010%@                        25  3159                      26
 138  2 120         DCW   @Y4)MZ@015&.019,@015&.100%@                        25  3184                      27
 139  2 130         DCW   @Y5)S @015&.100,.055&.100%@                        25  3209                      28
 140  2 140         DCW   @Y6)* I2?%@                                         9  3218                      28
 141  2 150         DCW   @Y7)* I1?%@                                         9  3227                      29
 142  2 160         DCW   @Y8)ZA@006,@018%@                                 15  3242                      29
 143  2 170         DCW   @Y9)MZ@018-.088,@018%@                            20  3262                      30
 144  2 180         DCW   @Z0)MZ@045,@018-.088%@                            20  3282                      31
 145  2 190         DCW   @Z1)B @150@168@156) 5@114.010@171%@               33  3315                      32
 146  2 200         DCW   @Z2)B @150@174@156) 5@114.010@171%@               33  3348                      33
 147  2 210         DCW   @Z3)A @015&.100,.055&.100%@                        25  3373                      34
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148  2 220         DCW   @Z4)* I2A%@                                 9  3382                      34
 149  2 230         DCW   @Z5)SW.010-.016@003,.022-.028@003%@        33  3415                      35
 150  2 240         DCW   @Z6)CW.010-.016@003,.022-.028@003%@        33  3448                      36
 151  2 250         DCW   @Z7)SW@015-.052@003%@                      19  3467                      37
 152  3 010         DCW   @Z8)CW@015-.052@003%@                      19  3486                      37
 153  3 020         DCW   @Z9)SW.055&.100-.052@003%@                 24  3510                      38
 154  3 030         DCW   @}@                                        1  3511                      38
 155  3 040         END                                                     / 000 080               39
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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - SP3
 102  1 020         CTL   661 11
 103  1 030  SUPER  EQU   351                                             0351
 104  1 040  X1     EQU   89                                              0089
 105  1 050  X2     EQU   94                                              0094
 106  1 060  X3     EQU   99                                              0099
 107  1 070  IORW   EQU   343                                             0343
 108  1 080  PUTX   EQU   363                                             0363
 109  1 090  BSPBKT EQU   1299                                            1299
 110  1 100         ORG   2730                                                  2730
 111  1 110  INIT   MLC   564,PBAD                                  7  2730  M 564 F69           4
 112  1 120         MLC   448,PIAD                                  7  2737  M 448 F72           4
 113  1 130         MLC   570,GBAD                                  7  2744  M 570 F75           4
 114  1 140         MLC   665,GIAD                                  7  2751  M 665 F78           4
 115  1 145         MLC   GIAD,X1                                   7  2758  M F78 089           4
 116  2 171         SW    0&X1                                      4  2765  , 0|0               4
 117  1 150         MLC   628,GETA                                  7  2769  M 628 F81           5
 118  1 160         C     573,GETA                                  7  2776  C 573 F81           5
 119  1 170         BU    INIT1                                     5  2783  B P95 /             5
 120  1 180         MLC   @T@,WMSW                                  7  2788  M G16 G12           5
 121  1 190  INIT1  MLC   394,PUTA                                   7  2795  M 394 F84           5
 122  1 200         MLC   662,READAD-3                              7  2802  M 662 F87           6
 123  1 210         MLC   GIAD,READAD                               7  2809  M F78 F90           6
 124  1 220         MLC   READAD,RTR01&6                            7  2816  M F90 A85           6
 125  1 230         MLC   READAD,RTR03&6                            7  2823  M F90 C37           6
 126  1 240         MLC   READAD,RTR04&6                            7  2830  M F90 C70           6
 127  1 250         MLC   445,READAD-3                              7  2837  M 445 F87           7
 128  2 010         MLC   READAD,WRTG01&6                           7  2844  M F90 B00           7
 129  2 020         MLC   PIAD,READAD                               7  2851  M F72 F90           7
 130  2 030         MLC   READAD,WRT01&6                            7  2858  M F90 E15           7
 131  2 040         MLZS  PBAD,RZNSV                                7  2865  Y F69 F93           7
 132  2 050         MLZS                                            1  2872  Y                   7
 133  2 060         MLZS                                            1  2873  Y                   7
 134  2 070         MLZS  @ @,PIAD                                  7  2874  Y G17 F72           8
 135  2 080         S     &1,PIAD                                   7  2881  S G18 F72           8
 136  2 090         MLZS  RZNSV,PIAD                                7  2888  Y F93 F72           8
 137  2 100         MLZS                                            1  2895  Y                   8
 138  2 110         MLZS                                            1  2896  Y                   8
 139  2 120         MLZS  @ @,GIAD                                  7  2897  Y G17 F78           8
 140  2 130         S     &1,GIAD                                   7  2904  S G18 F78           8
 141  2 140         MLZS  RZNSV,GIAD                                7  2911  Y F93 F78           9
 142  2 150         MLZS                                            1  2918  Y                   9
 143  2 160         MLZS                                            1  2919  Y                   9
 144  2 170         MLC   GBAD,X1                                   7  2920  M F75 089           9
 145  2 180  INIT2  C     0&X1                                      4  2927  C 0|0               9
 146  2 190         SAR   X1                                        4  2931  Q 089               9
 147  2 200         C     X1,GIAD                                   7  2935  C 089 F78           9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 210         BE    INIT3                                          5  2942  B R55 S             10
149  2 220         CW    1&X1                                           4  2947  ) 0|1               10
150  2 230         B     INIT2                                          4  2951  B R27               10
151  2 240  INIT3  MLC   PBAD,X1                                        7  2955  M F69 089           10
152  2 250  INIT4  C     0&X1                                           4  2962  C 0|0               10
153  3 010         SAR   X1                                             4  2966  Q 089               10
154  3 020         C     X1,PIAD                                        7  2970  C 089 F72           10
155  3 030         BE    INIT5                                          5  2977  B R90 S             11
156  3 040         CW    1&X1                                           4  2982  ) 0|1               11
157  3 050         B     INIT4                                          4  2986  B R62               11
158  3 060  INIT5  MLZS  @ @,GETA                                       7  2990  Y G17 F81           11
159  3 070         MLZS  @ @,PUTA                                       7  2997  Y G17 F84           11
160  3 080  ADCALC MLC   GBAD,ADBUCK                                    7  3004  M F75 F96           11
161  3 090         MLZS  @ @,ADBUCK                                     7  3011  Y G17 F96           12
162  3 100         S     GETA,ADBUCK                                    7  3018  S F81 F96           12
163  3 110         MLC   ADBUCK,GL                                      7  3025  M F96 F99           12
164  3 120         A     &3,GL                                          7  3032  A G19 F99           12
165  3 130         MLZS  @ @,GL                                         7  3039  Y G17 F99           12
166  3 140         MLC   PBAD,ADBUCK                                    7  3046  M F69 F96           13
167  3 150         MLZS  @ @,ADBUCK                                     7  3053  Y G17 F96           13
168  3 160         S     PUTA,ADBUCK                                    7  3060  S F84 F96           13
169  3 170         A     &3,ADBUCK                                      7  3067  A G19 F96           13
170  3 180         MLC   ADBUCK,PL                                      7  3074  M F96 G02           13
171  3 190         MLZS  @ @,PL                                         7  3081  Y G17 G02           14
172  3 200         MLZS  RZNSV,GETA                                     7  3088  Y F93 F81           14
173  3 210         MLC   GETA,X1                                        7  3095  M F81 089           14
174  3 220         C     @   @,0&X1                                     7  3102  C G22 0|0           14
175  3 230         SBR   X1                                             4  3109  H 089               14
176  3 240         SBR   SWSV                                           4  3113  H G11               14
177  3 250         SW    1&X1                                           4  3117  , 0|1               15
178  4 010  ADCL01 C     PL,GL                                          7  3121  C G02 F99           15
179  4 020         BH    GRTRNR                                         5  3128  B B09 U             15
180  4 030         BL    LSTRNR                                         5  3133  B B70 T             15
181  4 040  EQTRNR MLC   GBAD,X2                                        7  3138  M F75 094           15
182  4 050         MLC   PBAD,X3                                        7  3145  M F69 099           15
183  4 060         MLC   0&X2,0&X3                                      7  3152  M 0!0 0?0           16
184  4 070         BCE   EQTR02,WMSW,T                                  8  3159  B A71 G12 T         16
185  4 080         CW    1&X1                                           4  3167  ) 0|1               16
186  4 090  EQTR02 B     WRITE                                          4  3171  B E01               16
187  4 100  EQTR01 B     IORW                                           4  3175  B 343               16
188  4 110  RTR01  RT    *,*                                            8  3179  M A86 A86 R         16
189  4 120         DCW   EXIT                                           3  3189  C83                 16
190  4 130         B     IORW                                           4  3190  B 343               17
191  4 140  WRTG01 WT    *,*                                            8  3194  M B01 B01 W         17
192  4 150         DCW   EOTW                                           3  3204  D96                 17
193  4 160         B     EQTR01                                         4  3205  B A75               17
194  4 170  GRTRNR MLC   GETA,GX                                        7  3209  M F81 G05           17
195  4 180         MLZS  @ @,GX                                         7  3216  Y G17 G05           17
196  4 190         S     &3,GX                                          7  3223  S G19 G05           18
197  4 200         A     PL,GX                                          7  3230  A G02 G05           18
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 210         MLC   PIAD,PX                                   7  3237  M F72 G08           18
199  4 220         B     SETMVS                                    4  3244  B E92               18
200  4 230         MLC   GX,MVLB01&3                               7  3248  M G05 B58           18
201  4 240  MVLB01 MLC   *,0&X3                                    7  3255  M B61 0?0           18
202  4 250         B     SWRTN                                     4  3262  B E24               19
203  5 010         B     LSTR01                                    4  3266  B C49               19
204  5 020  LSTRNR MLC   PBAD,PX                                   7  3270  M F69 G08           19
205  5 030         MLC   GIAD,GX                                   7  3277  M F78 G05           19
206  5 040         MLZS  @ @,GX                                    7  3284  Y G17 G05           19
207  5 050         A     PL,GX                                     7  3291  A G02 G05           19
208  5 060         S     GL,GX                                     7  3298  S F99 G05           20
209  5 070         B     SETMVS                                    4  3305  B E92               20
210  5 080         MLC   PX,MVLB04&6                               7  3309  M G08 C22           20
211  5 090  MVLB04 MLC   0&X2,*                                    7  3316  M 0!0 C22           20
212  5 100         B     SWRTN                                     4  3323  B E24               20
213  5 110         B     IORW                                      4  3327  B 343               20
214  5 120  RTR03  RT    *,*                                       8  3331  M C38 C38 R         21
215  5 130         DCW   EOTW1                                     3  3341  C79                 21
216  5 140  MVLB05 MLC   *,0&X3                                    7  3342  M C48 0?0           21
217  5 150  LSTR01 B     WRITE                                     4  3349  B E01               21
218  5 160  MVLB06 MLC   0&X2,*                                    7  3353  M 0!0 C59           21
219  5 170         B     IORW                                      4  3360  B 343               21
220  5 180  RTR04  RT    *,*                                       8  3364  M C71 C71 R         22
221  5 190         DCW   EOTW1                                     3  3374  C79                 22
222  5 200         B     MVLB05                                    4  3375  B C42               22
223  5 210  EOTW1  B     WRITE                                     4  3379  B E01               22
224  5 220  EXIT   MLC   GBAD,628                                  7  3383  M F75 628           22
225  5 230         MLC   701,*&4                                   7  3390  M 701 D00           22
226  5 240         RWD   1                                         5  3397  U %U1 R             22
227  5 250  TMRKXT MLNS  445,TMR01&3                              7  3402  D 445 D12           23
228  6 010  TMR01  WTM   1                                         5  3409  U %U1 M             23
229  6 020         BCE   EXIT1,WMSW,T                             8  3414  B D33 G12 T         23
230  6 030         MLC   SWSV,X1                                   7  3422  M G11 089           23
231  6 040         CW    1&X1                                      4  3429  ) 0|1               23
232  6 050  EXIT1  B     PUTX                                      4  3433  B 363               23
233  6 060         DCW   VEOP                                      3  3439  G15                 23
234  6 070         MLC   BSPBKT,PX                                 7  3440  M S99 G08           24
235  6 080         MLZS  @ @,PX                                    7  3447  Y G17 G08           24
236  6 090         MLC   @0@,PX-2                                 7  3454  M G23 G06           24
237  6 100         MLC   @000@,GX                                  7  3461  M G26 G05           24
238  6 110  EXIT2  C     PX,GX                                     7  3468  C G08 G05           24
239  6 120         BE    1770                                      5  3475  B X70 S             25
240  6 130         BSP   1                                         5  3480  U %U1 B             25
241  6 140         A     @1@,GX                                    7  3485  A G27 G05           25
242  6 150         B     EXIT2                                     4  3492  B D68               25
243  6 160  EOTW   H                                               1  3496  .                   25
244  6 170         B     *-4                                       4  3497  B D96               25
245  6 180  WRITE  SBR   WRT02&3                                   4  3501  H E23               25
246  6 190         B     IORW                                      4  3505  B 343               26
247  6 200  WRT01  WT    *,*                                       8  3509  M E16 E16 W         26
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 210          DCW   EOTW                                      3  3519  D96                 26
249  6 220  WRT02   B     *                                         4  3520  B E23               26
250  6 230  SWRTN   SBR   SWRT02&3                                 4  3524  H E91               26
251  6 240          BCE   SWRT01,WMSW,T                           8  3528  B E40 G12 T         26
252  6 250          CW    1&X1                                      4  3536  ) 0|1               26
253  7 010  SWRT01  C     GIAD,GX                                   7  3540  C F78 G05           27
254  7 020          BU    SWRT03                                    5  3547  B E63 /             27
255  7 030          MLC   @T@,WMSW                                 7  3552  M G16 G12           27
256  7 040          B     SWRT02                                    4  3559  B E88               27
257  7 050  SWRT03  MLC   @F@,WMSW                                 7  3563  M G28 G12           27
258  7 060          MLC   GX,X1                                    7  3570  M G05 089           27
259  7 070          MLC   GX,SWSV                                  7  3577  M G05 G11           28
260  7 080          SW    1&X1                                      4  3584  , 0|1               28
261  7 090  SWRT02  B     *                                         4  3588  B E91               28
262  7 100  SETMVS  SBR   SETMV1&3                                 4  3592  H F66               28
263  7 110          MLZS  RZNSV,GX                                  7  3596  Y F93 G05           28
264  7 120          MLZS                                          1  3603  Y                   28
265  7 130          MLZS                                          1  3604  Y                   28
266  7 140          MLC   GBAD,X2                                 7  3605  M F75 094           29
267  7 150          MLC   PBAD,X3                                 7  3612  M F69 099           29
268  7 160          MLC   GX,MVLB05&3                             7  3619  M G05 C45           29
269  7 170          MLZS  @ @,PX                                  7  3626  Y G17 G08           29
270  7 180          S     PL,PX                                   7  3633  S G02 G08           29
271  7 190          A     GL,PX                                   7  3640  A F99 G08           30
272  7 200          MLZS  RZNSV,PX                                7  3647  Y F93 G08           30
273  7 210          MLZS                                          1  3654  Y                   30
274  7 220          MLZS                                          1  3655  Y                   30
275  7 230          MLC   PX,MVLB06&6                             7  3656  M G08 C59           30
276  7 240  SETMV1  B     *                                         4  3663  B F66               30
277  7 250  PBAD    DCW   #3                                       3  3669                      30
278  8 010  PIAD    DCW   #3                                       3  3672                      31
279  8 020  GBAD    DCW   #3                                       3  3675                      31
280  8 030  GIAD    DCW   #3                                       3  3678                      31
281  8 040  GETA    DCW   #3                                       3  3681                      31
282  8 050  PUTA    DCW   #3                                       3  3684                      31
283  8 060  READAD  DCW   #6                                       6  3690                      31
284  8 070          DCW   #1                                       1  3691                      31
285  8 080          DCW   #1                                       1  3692                      32
286  8 090  RZNSV   DCW   #1                                       1  3693                      32
287  8 100  ADBUCK  DCW   #3                                       3  3696                      32
288  8 110  GL      DCW   #3                                       3  3699                      32
289  8 120  PL      DCW   #3                                       3  3702                      32
290  8 130  GX      DCW   #3                                       3  3705                      32
291  8 140  PX      DCW   #3                                       3  3708                      32
292  8 150  SWSV    DCW   #3                                       3  3711                      33
293  8 160  WMSW    DCW   @F@                                      1  3712                      33
294  8 170  VEOP    DCW   @.EP@                                    3  3715                      33
295  8 180          LTORG                                                   3716
                     DCW   @T@                                      1  3716          LIT     33
                           @ @                                      1  3717          LIT     33
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
					&1		1	3718		LIT	33
					&3		1	3719		LIT	33
					@ @		3	3722		LIT	34
					@0@		1	3723		LIT	34
					@000@		3	3726		LIT	34
					@1@		1	3727		LIT	34
					@F@		1	3728		LIT	34
296	8	190	GMRK	DCW	@}@ GROUP MARK		1	3729			34
297	8	200		END					/ 000 080		35

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - JA7
 102  1 020         CTL   661 11
 103  1 030         ORG   1300                                                 1300
 104  1 040  X1     EQU   89                                                  0089
 105  1 050  X2     EQU   94                                                  0094
 106  1 060  X3     EQU   99                                                  0099
 107  1 070  PUTX   EQU   363                                                 0363
 108  1 080  GETX   EQU   335                                                 0335
 109  1 090  SUPER  EQU   351                                                 0351
 110  1 100  START  BW    IOCC,86                                    8  1300  V T15 086 1          4
 111  1 110  BACK   B     SUPER                                      4  1308  B 351                4
 112  1 120         DCW   @J07@                                      3  1314                       4
 113  1 130  IOCC   BSS   BACK,F                                     5  1315  B T08 F              4
 114  1 140  IOCS   B     GETSX                                      4  1320  B V19                4
 115  1 150         BCE   IOCS,SX-2,[                               8  1324  B T20 Y11 [          4
 116  1 160         C     SX,@  @@                                   7  1332  C Y13 P48            4
 117  1 170         BE    SUB                                        5  1339  B U30 S              5
 118  1 180         BCE   TEST,SX-2,                                8  1344  B U71 Y11            5
 119  1 190         C     SX,@.DI@                                   7  1352  C Y13 P51            5
 120  1 200         BE    DIOCS                                      5  1359  B U08 S              5
 121  1 210         C     SX,@.DT@                                   7  1364  C Y13 P54            5
 122  1 220         BE    DTF                                        5  1371  B U19 S              5
 123  1 230         C     SX,@.EE@                                   7  1376  C Y13 P57            6
 124  1 240         BE    COBOL                                      5  1383  B X01 S              6
 125  1 250         C     SX,@.LC@                                   7  1388  C Y13 P60            6
 126  2 010         BE    OPCODE                                     5  1395  B V48 S              6
 127  2 020  IOCS2  B     PUTSX                                      4  1400  B V04                6
 128  2 030         B     IOCS                                       4  1404  B T20                6
 129  2 040  DIOCS  MLC   &TABLE1&X2,AZ&3                           7  1408  M P63 U43            6
 130  2 050         B     IOCS                                       4  1415  B T20                7
 131  2 060  DTF    MLC   &TABLE2&X2,AZ&3                           7  1419  M P66 U43            7
 132  2 070         B     IOCS                                       4  1426  B T20                7
 133  2 080  SUB    B     GETX                                       4  1430  B 335                7
 134  2 090         DCW   X2                                         3  1436  094                  7
 135  2 100         DCW   BACK                                       3  1439  T08                  7
 136  2 110  AZ     MLC   *,SX                                       7  1440  M U46 Y13            7
 137  2 120         C     SX,@  }@                                   7  1447  C Y13 P69            8
 138  2 130         BE    GM                                         5  1454  B V37 S              8
 139  2 140         BCE   TEST,SX-2,                                8  1459  B U71 Y11            8
 140  2 150         B     IOCS2                                      4  1467  B U00                8
 141  2 160  TEST   BCE   IOCS2,SX-1,                               8  1471  B U00 Y12            8
 142  2 170         MLC   SX-1,BUCK                                  7  1479  M Y12 Y10            8
 143  2 180         B     PUTX                                       4  1486  B 363                9
 144  2 190         DCW   BUCK                                       3  1492  Y10                  9
 145  2 200         MLC   @ @,SX-1                                   7  1493  M P70 Y12            9
 146  2 210         B     IOCS2                                      4  1 500  B U00                9
 147  2 220  PUTSX  SBR   LEAVE&3                                    4  1504  H V18                9
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         B     PUTX                                          4  1508  B 363                9
149  2 240         DCW   SX                                            3  1514  Y13                  9
150  2 250  LEAVE  B     *                                             4  1515  B V18               10
151  3 010  GETSX  SBR   EXIT&3                                        4  1519  H V36               10
152  3 020         B     GETX                                          4  1523  B 335               10
153  3 030         DCW   SX                                            3  1529  Y13                 10
154  3 040         DCW   BACK                                          3  1532  T08                 10
155  3 050  EXIT   B     *                                             4  1533  B V36               10
156  3 060  GM     MLC   @ GM@,SX                                      7  1537  M P73 Y13           10
157  3 070         B     IOCS2                                         4  1544  B U00               11
158  3 080  OPCODE B     PUTX                                          4  1548  B 363               11
159  3 090         DCW   &@.LC@                                        3  1554  P60                 11
160  3 100         B     GETSX                                         4  1555  B V19               11
161  3 110         BWZ   LOOK,SX-2,2                                   8  1559  V V71 Y11 2         11
162  3 120         B     IOCS2                                         4  1567  B U00               11
163  3 130  LOOK   SBR   X3,TABL                                       7  1571  H 099 P43           11
164  3 140  LOOK1  C     SX-1,2&X3                                     7  1578  C Y12 0?2           12
165  3 150         MLC   0&X3,0&X3                                     7  1585  M 0?0 0?0           12
166  3 160         SBR   X3                                            4  1592  H 099               12
167  3 170         BU    LOOK1                                         5  1596  B V78 /             12
168  3 180         BW    THREE,6&X3                                    8  1601  V W75 0?6 1         12
169  3 190         BW    FOUR,7&X3                                     8  1609  V W46 0?7 1         12
170  3 200         MLC   5&X3,SX                                       7  1617  M 0?5 Y13           13
171  3 210         B     PUTSX                                         4  1624  B V04               13
172  3 220         MLC   @   @,SX                                      7  1628  M P76 Y13           13
173  3 230         MLC   7&X3,SX-1                                     7  1635  M 0?7 Y12           13
174  3 240         B     IOCS2                                         4  1642  B U00               13
175  3 250  FOUR   MLC   5&X3,SX                                       7  1646  M 0?5 Y13           13
176  4 010         B     PUTSX                                         4  1653  B V04               14
177  4 020         MLC   @   @,SX                                      7  1657  M P76 Y13           14
178  4 030         MLC   6&X3,SX-2                                     7  1664  M 0?6 Y11           14
179  4 040         B     IOCS2                                         4  1671  B U00               14
180  4 050  THREE  MLC   5&X3,SX                                       7  1675  M 0?5 Y13           14
181  4 060         B     IOCS2                                         4  1682  B U00               14
182  4 070  BACK1  MLC   @.EE@,SX                                      7  1686  M P57 Y13           15
183  4 080         B     PUTSX                                         4  1693  B V04               15
184  4 090         B     BACK                                          4  1697  B T08               15
185  4 100  COBOL  SBR   X3,CONST                                      7  1701  H 099 Y07           15
186  4 110  COBOL1 BCE   BACK1,0&X3,|                                  8  1708  B W86 0?0 |         15
187  4 120         MLC   0&X3,SX                                       7  1716  M 0?0 Y13           15
188  4 130         SAR   X3                                            4  1723  Q 099               16
189  4 140         B     PUTSX                                         4  1727  B V04               16
190  4 150         B     COBOL1                                        4  1731  B X08               16
191  4 160         DCW   @|@                                           1  1735                      16
192  4 170         DCW   @.MC@                                         3  1738                      16
193  4 180         DCW   @END@                                         3  1741                      16
194  4 190         DCW   @IOC@                                         3  1744                      16
195  4 200         DCW   @.OP@                                         3  1747                      17
196  4 210         DCW   @ORG@                                         3  1750                      17
197  4 220         DCW   @.LC@                                         3  1753                      17
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
198	4	230		DCW	@.MC@	3	1756		17
199	4	240		DCW	@*&1@	3	1759		17
200	4	250		DCW	@.OP@	3	1762		17
201	5	010		DCW	@EQU@	3	1765		17
202	5	020		DCW	@.LC@	3	1768		18
203	5	030		DCW	@END@	3	1771		18
204	5	040		DCW	@IOC@	3	1774		18
205	5	050		DCW	@.MC@	3	1777		18
206	5	060		DCW	@ *@	3	1780		18
207	5	070		DCW	@.OP@	3	1783		18
208	5	080		DCW	@RG @	3	1786		18
209	5	090		DCW	@LTO@	3	1789		19
210	5	100		DCW	@.LC@	3	1792		19
211	5	110		DCW	@.MC@	3	1795		19
212	5	120		DCW	@#1 @	3	1798		19
213	5	130		DCW	@.OP@	3	1801		19
214	5	140		DCW	@DCW@	3	1804		19
215	5	150	CONST	DCW	@.LC@	3	1807		19
216	5	160	BUCK	DCW	#3	3	1810		20
217	5	170	SX	DCW	#3	3	1813		20
218	5	180	TABLE1	EQU	*		1813		
219	5	190		DCW	@ 87@	3	1816		20
220	5	200			@IOC@	3	1819		20
221	5	210			@XR1@	3	1822		20
222	5	220			@000@	3	1825		20
223	5	230			@ 00@	3	1828		20
224	5	240			@XR2@	3	1831		21
225	5	250			@XR3@	3	1834		21
226	6	010			@ 0@	3	1837		21
227	6	020			@333@	3	1840		21
228	6	030			@ #1@	3	1843		21
229	6	040			@OPN@	3	1846		21
230	6	050			@QUT@	3	1849		21
231	6	060			@ 3@	3	1852		22
232	6	070			@OPS@	3	1855		22
233	6	080			@LOS@	3	1858		22
234	6	090			@FES@	3	1861		22
235	6	100			@ENT@	3	1864		22
236	6	110			@LOZ@	3	1867		22
237	6	120			@SV3@	3	1870		22
238	6	130			@ #3@	3	1873		23
239	6	140			@TYP@	3	1876		23
240	6	150			@ R@	3	1879		23
241	6	160			@ W@	3	1882		23
242	6	170			@ 4@	3	1885		23
243	6	180			@DAC@	3	1888		23
244	6	190			@ *@	3	1891		23
245	6	200			@ 1@	3	1894		24
246	6	210			@UXT@	3	1897		24
247	6	220			@ 19@	3	1900		24

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
248	6	230			@ 11@	3	1903		24
249	6	240			@ 25@	3	1906		24
250	6	250			@ X3@	3	1909		24
251	7	010			@XSV@	3	1912		24
252	7	020			@ 6@	3	1915		25
253	7	030			@BLK@	3	1918		25
254	7	040			@PLC@	3	1921		25
255	7	050			@ 8@	3	1924		25
256	7	060			@ 17@	3	1927		25
257	7	070			@ @@	3	1930		25
258	7	080			@ $@	3	1933		25
259	7	090			@EOR@	3	1936		26
260	7	100			@ #8@	3	1939		26
261	7	110			@ 16@	3	1942		26
262	7	120			@PSV@	3	1945		26
263	7	130			@SVA@	3	1948		26
264	7	140			@ 2@	3	1951		26
265	7	150			@IDT@	3	1954		26
266	7	160			@FSW@	3	1957		27
267	7	170			@SER@	3	1960		27
268	7	180			@SEQ@	3	1963		27
269	7	190			@LVE@	3	1966		27
270	7	200			@EOF@	3	1969		27
271	7	210			@ B@	3	1972		27
272	7	220			@TDF@	3	1975		27
273	7	230			@ 13@	3	1978		28
274	7	240			@ L@	3	1981		28
275	7	250			@RWR@	3	1984		28
276	8	010			@ A@	3	1987		28
277	8	020			@SLB@	3	1990		28
278	8	030			@ 9@	3	1993		28
279	8	040			@RWD@	3	1996		28
280	8	050			@TAP@	3	1999		29
281	8	060			@ALT@	3	2002		29
282	8	070			@SV1@	3	2005		29
283	8	080			@ }@	3	2008		29
284	8	090			@ 80@	3	2011		29
285	8	100			@ 29@	3	2014		29
286	8	110			@ J@	3	2017		29
287	8	120			@ 34@	3	2020		30
288	8	130			@CRD@	3	2023		30
289	8	140			@ 38@	3	2026		30
290	8	150			@RCY@	3	2029		30
291	8	160			@ 18@	3	2032		30
292	8	170			@ 14@	3	2035		30
293	8	180			@380@	3	2038		30
294	8	190			@SV6@	3	2041		31
295	8	200			@ #6@	3	2044		31
296	8	210			@ 36@	3	2047		31
297	8	220			@ 5@	3	2050		31

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
298	8	230			@ 31@	3	2053		31
299	8	240			@TDY@	3	2056		31
300	8	250			@ 30@	3	2059		31
301	9	010			@ @	3	2062		32
302	9	020			@ 39@	3	2065		32
303	9	030			@ -@	3	2068		32
304	9	040			@ H@	3	2071		32
305	9	050			@ D@	3	2074		32
306	9	060			@ M@	3	2077		32
307	9	070			@#10@	3	2080		32
308	9	080			@ E@	3	2083		33
309	9	090			@ O@	3	2086		33
310	9	100			@ F@	3	2089		33
311	9	110			@377@	3	2092		33
312	9	120			@ 7@	3	2095		33
313	9	130			@ 79@	3	2098		33
314	9	140			@TSS@	3	2101		33
315	9	150			@ #5@	3	2104		34
316	9	160			@ACT@	3	2107		34
317	9	170			@ N@	3	2110		34
318	9	180			@302@	3	2113		34
319	9	190			@KOP@	3	2116		34
320	9	200			@SRW@	3	2119		34
321	9	210			@TBR@	3	2122		34
322	9	220			@ K@	3	2125		35
323	9	230			@ %@	3	2128		35
324	9	240			@ U@	3	2131		35
325	9	250			@#16@	3	2134		35
326	10	010			@SAV@	3	2137		35
327	10	020			@1X8@	3	2140		35
328	10	030			@ C@	3	2143		35
329	10	040			@ G@	3	2146		36
330	10	050			@199@	3	2149		36
331	10	060			@ 10@	3	2152		36
332	10	070			@RDL@	3	2155		36
333	10	080			@ 12@	3	2158		36
334	10	090			@334@	3	2161		36
335	10	100			@ 20@	3	2164		36
336	10	110			@ I@	3	2167		37
337	10	120			@300@	3	2170		37
338	10	130			@ 40@	3	2173		37
339	10	140			@ 49@	3	2176		37
340	10	150			@ 45@	3	2179		37
341	10	160			@PNX@	3	2182		37
342	10	170			@RDX@	3	2185		37
343	10	180			@NPR@	3	2188		38
344	10	190			@TNT@	3	2191		38
345	10	200			@TRW@	3	2194		38
346	10	210			@RCL@	3	2197		38
347	10	220			@ORC@	3	2200		38

```
SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230                @MPR@                                        3  2203                      38
349 10 240                @ X2@                                        3  2206                      38
350 10 250                @ECK@                                        3  2209                      39
351 11 010                @ERR@                                        3  2212                      39
352 11 020                @CLE@                                        3  2215                      39
353 11 030                @RKS@                                        3  2218                      39
354 11 040                @RED@                                        3  2221                      39
355 11 050                @RXR@                                        3  2224                      39
356 11 060                @DRR@                                        3  2227                      39
357 11 070                @NRR@                                        3  2230                      40
358 11 080                @LEN@                                        3  2233                      40
359 11 090                @ROW@                                        3  2236                      40
360 11 100                @TTM@                                        3  2239                      40
361 11 110                @ER2@                                        3  2242                      40
362 11 120                @ER1@                                        3  2245                      40
363 11 130                @CHE@                                        3  2248                      40
364 11 140                @ASC@                                        3  2251                      41
365 11 150                @ER3@                                        3  2254                      41
366 11 160                @RAS@                                        3  2257                      41
367 11 170                @313@                                        3  2260                      41
368 11 180                @323@                                        3  2263                      41
369 11 190                @TDE@                                        3  2266                      41
370 11 200                @305@                                        3  2269                      41
371 11 210                @303@                                        3  2272                      42
372 11 220                @301@                                        3  2275                      42
373 11 230                @390@                                        3  2278                      42
374 11 240          DCW   @DSW@                                        3  2281                      42
375 11 250  TABLE2  EQU   *                                             2281
376 12 010          DCW   @  @@                                        3  2284                      42
377 12 020                @  *@                                        3  2287                      42
378 12 030                @ # 5@                                     3  2290                      42
379 12 040                @ #3@                                        3  2293                      43
380 12 050                @  0@                                        3  2296                      43
381 12 060                @  1@                                        3  2299                      43
382 12 070                @#10@                                        3  2302                      43
383 12 080                @  %@                                        3  2305                      43
384 12 090                @000@                                        3  2308                      43
385 12 100                @  A@                                        3  2311                      43
386 12 110                @  B@                                        3  2314                      44
387 12 120                @   @                                        3  2317                      44
388 12 130                @  J@                                        3  2320                      44
389 12 140                @  2@                                        3  2323                      44
390 12 150                @  4@                                        3  2326                      44
391 12 160                @  R@                                        3  2329                      44
392 12 170                @  W@                                        3  2332                      44
393 12 180                @  M@                                        3  2335                      45
394 12 190                @IOC@                                        3  2338                      45
395 12 200                @UXT@                                        3  2341                      45
396 12 210                @  5@                                        3  2344                      45
397 12 220                @XR1@                                        3  2347                      45
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230                @SAV@                                        3  2350                      45
399 12 240                @  3@                                        3  2353                      45
400 12 250                @ X1@                                        3  2356                      46
401 13 010                @  7@                                        3  2359                      46
402 13 020                @  6@                                        3  2362                      46
403 13 030                @  }@                                        3  2365                      46
404 13 040                @  8@                                        3  2368                      46
405 13 050                @  $@                                        3  2371                      46
406 13 060                @  9@                                        3  2374                      46
407 13 070                @SRW@                                        3  2377                      47
408 13 080                @ 12@                                        3  2380                      47
409 13 090                @TBR@                                        3  2383                      47
410 13 100                @  K@                                        3  2386                      47
411 13 110                @ X0@                                        3  2389                      47
412 13 120                @TNT@                                        3  2392                      47
413 13 130                @XR3@                                        3  2395                      47
414 13 140                @EOR@                                        3  2398                      48
415 13 150                @ 17@                                        3  2401                      48
416 13 160                @224@                                        3  2404                      48
417 13 170                @ #1@                                        3  2407                      48
418 13 180                @222@                                        3  2410                      48
419 13 190                @004@                                        3  2413                      48
420 13 200                @ X3@                                        3  2416                      48
421 13 210                @  I@                                        3  2419                      49
422 13 220                @399@                                        3  2422                      49
423 13 230                @NRD@                                        3  2425                      49
424 13 240                @PNX@                                        3  2428                      49
425 13 250                @  N@                                        3  2431                      49
426 14 010                @  ?@                                        3  2434                      49
427 14 020                @311@                                        3  2437                      49
428 14 030                @RDX@                                        3  2440                      50
429 14 040                @ 81@                                        3  2443                      50
430 14 050                @  |@                                        3  2446                      50
431 14 060                @OCX@                                        3  2449                      50
432 14 070                @ R1@                                        3  2452                      50
433 14 080                @101@                                        3  2455                      50
434 14 090                @PLC@                                        3  2458                      50
435 14 100                @111@                                        3  2461                      51
436 14 110                @  !@                                        3  2464                      51
437 14 120                @NPN@                                        3  2467                      51
438 14 130                @ #2@                                        3  2470                      51
439 14 140                @344@                                        3  2473                      51
440 14 150                @1X8@                                        3  2476                      51
441 14 160                @  C@                                        3  2479                      51
442 14 170                @181@                                        3  2482                      52
443 14 180                @  F@                                        3  2485                      52
444 14 190                @201@                                        3  2488                      52
445 14 200                @322@                                        3  2491                      52
446 14 210         DCW    #2                                           2  2493                      52
447 14 220         DC     @MCW@                                        3  2496                      52
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 230         DCW   @01@                                        2  2498                      52
449 14 240         DC    @MCM@                                       3  2501                      52
450 14 250         DCW   @02@                                        2  2503                      52
451 15 010         DC    @MCS@                                       3  2506                      53
452 15 020         DCW   @03@                                        2  2508                      53
453 15 030         DC    @MCE@                                       3  2511                      53
454 15 040         DCW   @04@                                        2  2513                      53
455 15 050         DC    @LCA@                                       3  2516                      53
456 15 060         DCW   @05@                                        2  2518                      53
457 15 070         DC    @SAR@                                       3  2521                      53
458 15 080         DCW   @06@                                        2  2523                      53
459 15 090         DC    @SBR@                                       3  2526                      54
460 15 100         DCW   @07@                                        2  2528                      54
461 15 110         DC    @BWZ@                                       3  2531                      54
462 15 120         DCW   @08@                                        2  2533                      54
463 15 130         DC    @NOP@                                       3  2536                      54
464 15 140         DCW   @09@                                        2  2538                      54
465 15 150         DC    @BBE@                                       3  2541                      54
466 15 160         DCW   @10@                                        2  2543                      54
467 15 170         DC    @WRP@                                       3  2546                      55
468 15 180         DCW   @11@                                        2  2548                      55
469 15 190         DC    @SRF@                                       3  2551                      55
470 15 200         DCW   @12@                                        2  2553                      55
471 15 210         DC    @SPF@                                       3  2556                      55
472 15 220         DCW   @13@                                        2  2558                      55
473 15 230         DC    @CTL@                                       3  2561                      55
474 15 240         DCW   @14@                                        2  2563                      55
475 15 250         DC    @ORG@                                       3  2566                      56
476 16 010         DCW   @15@                                        2  2568                      56
477 16 020         DC    @END@                                       3  2571                      56
478 16 030         DCW   @16@                                        2  2573                      56
479 16 040         DC    @DCW@                                       3  2576                      56
480 16 050         DCW   @17@                                        2  2578                      56
481 16 060         DC    @DSA@                                       3  2581                      56
482 16 070         DCW   @18@                                        2  2583                      56
483 16 080         DC    @EQU@                                       3  2586                      57
484 16 090         DCW   @19@                                        2  2588                      57
485 16 100         DC    @MLC@                                       3  2591                      57
486 16 110         DCW   @20@                                        2  2593                      57
487 16 120         DC    @BAV@                                       3  2596                      57
488 16 1 30         DCW   @21@                                       2  2598                      57
489 16 140         DC    @BC9@                                       3  2601                      57
490 16 150         DCW   @22@                                        2  2603                      57
491 16 160         DC    @BCV@                                       3  2606                      58
492 16 170         DCW   @23@                                        2  2608                      58
493 16 180         DC    @BEF@                                       3  2611                      58
494 16 190         DCW   @24@                                        2  2613                      58
495 16 200         DC    @BER@                                       3  2616                      58
496 16 210         DCW   @25@                                        2  2618                      58
497 16 220         DC    @BIN@                                       3  2621                      58
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230         DCW   @26@                                        2  2623                      58
499 16 240         DC    @BLC@                                       3  2626                      59
500 16 250         DCW   @27@                                        2  2628                      59
501 17 010         DC    @BPB@                                       3  2631                      59
502 17 020         DCW   @28@                                        2  2633                      59
503 17 030         DC    @BCE@                                       3  2636                      59
504 17 040         DCW   @29@                                        2  2638                      59
505 17 050         DC    @BSS@                                       3  2641                      59
506 17 060         DCW   @30@                                        2  2643                      59
507 17 070         DC    @BSP@                                       3  2646                      60
508 17 080         DCW   @31@                                        2  2648                      60
509 17 090         DC    @RTW@                                       3  2651                      60
510 17 100         DCW   @32@                                        2  2653                      60
511 17 110         DC    @RWD@                                       3  2656                      60
512 17 120         DCW   @33@                                        2  2658                      60
513 17 130         DC    @RWU@                                       3  2661                      60
514 17 140         DCW   @34@                                        2  2663                      60
515 17 150         DC    @SKP@                                       3  2666                      61
516 17 160         DCW   @35@                                        2  2668                      61
517 17 170         DC    @WRF@                                       3  2671                      61
518 17 180         DCW   @36@                                        2  2673                      61
519 17 190         DC    @WRP@                                       3  2676                      61
520 17 200         DCW   @37@                                        2  2678                      61
521 17 210         DC    @WTM@                                       3  2681                      61
522 17 220         DCW   @38@                                        2  2683                      61
523 17 230         DC    @WTW@                                       3  2686                      62
524 17 240         DCW   @39@                                        2  2688                      62
525 17 250         DC    @CCB@                                       3  2691                      62
526 18 010         DCW   @40@                                        2  2693                      62
527 18 020         DC    @SSB@                                       3  2696                      62
528 18 030         DCW   @41@                                        2  2698                      62
529 18 040         DCW   @#@                                         1  2699                      62
530 18 050         DC    @MLCWA@                                     5  2704                      63
531 18 060         DCW   @50@                                        2  2706                      63
532 18 070         DC    @CHAIN@                                     5  2711                      63
533 18 080         DCW   @51@                                        2  2713                      63
534 18 090         DC    @LTORG@                                     5  2718                      63
535 18 100         DCW   @52@                                        2  2720                      63
536 18 110         DCW   @#@                                         1  2721                      63
537 18 120         DC    @MLNS@                                      4  2725                      64
538 18 130         DCW   @60@                                        2  2727                      64
539 18 140         DC    @MLZS@                                      4  2731                      64
540 18 150         DCW   @61@                                        2  2733                      64
541 18 160         DC    @MRCM@                                      4  2737                      64
542 18 170         DCW   @62@                                        2  2739                      64
543 18 180  TABL   DC    @BPCB@                                      4  2743                      64
544 18 190         DCW   @63@                                        2  2745                      64
545 18 200         LTORG                                                    2746
                   DCW   @  @@                                       3  2748            LIT       65
                         @.DI@                                       3  2751            LIT       65
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
                          @.DT@                                      3  2754              LIT     65
                          @.EE@                                      3  2757              LIT     65
                          @.LC@                                      3  2760              LIT     65
       129                &TABLE1&X2                                 3  2763  YJ3         ADCON   65
       131                &TABLE2&X2                                 3  2766  KQ1         ADCON   65
                          @  }@                                      3  2769              LIT     66
                          @ @                                        1  2770              LIT     66
                          @ GM@                                      3  2773              LIT     66
                          @   @                                      3  2776              LIT     66
546 18 210         DCW    @}@                                        1  2777                      66
547 18 220         END                                                      / 000 080           67
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```

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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - J07					
102	1	020		CTL	661111					
103	1	030		ORG	1300			1300		
104	1	040	X2	EQU	94			0094		
105	1	050	X3	EQU	99			0099		
106	1	060	PUTX	EQU	363			0363		
107	1	070	GETX	EQU	335			0335		
108	1	080	SCRBKT	EQU	1126			1126		
109	1	090	SUPER	EQU	351			0351		
110	1	100	T1	DC	#1		1	1300		4
111	1	110	T2	DC	#1		1	1301		4
112	1	120	T3	DC	#1		1	1302		4
113	1	130	T4	DC	#1		1	1303		4
114	1	140	T5	DC	#1		1	1304		4
115	1	150	T6	DC	#1		1	1305		4
116	1	160	T7	DC	#1		1	1306		4
117	1	170	T8	DC	#1		1	1307		4
118	1	180	T9	DC	#1		1	1308		4
119	1	190	T10	DC	#1		1	1309		4
120	1	200	T11	DC	#1		1	1310		4
121	1	210	T12	DC	#1		1	1311		4
122	1	220	T13	DC	#1		1	1312		4
123	1	230	T14	DC	#1		1	1313		4
124	1	240	T15	DC	#1		1	1314		4
125	1	250	T16	DC	#1		1	1315		4
126	2	010	T17	DC	#1		1	1316		4
127	2	020	T18	DC	#1		1	1317		4
128	2	030		MLC	&N1,X3		7	1318	M E06 099	4
129	2	040	A40	B	GETSX		4	1325	B B09	4
130	2	050		BCE	A40,SY-2,[		8	1329	B T25 C27 [	4
131	2	060		C	SY,@#DC@		7	1337	C C29 E09	5
132	2	070		BE	A41		5	1344	B K87 S	5
133	2	080		C	SY,@.SE@		7	1349	C C29 E12	5
134	2	090		BE	RE		5	1356	B W73 S	5
135	2	100		C	SY,@.DY@		7	1361	C C29 E15	5
136	2	110		BE	DSY		5	1368	B X16 S	5
137	2	120	S	C	SY,@*24@		7	1373	C C29 E18	6
138	2	130		BE	QQ1		5	1380	B Y87 S	6
139	2	140		BCE	SCALE,SY,-		8	1385	B B27 C29 -	6
140	2	150		BCE	SCALE1,SY,&		8	1393	B B50 C29 &	6
141	2	160		BWZ	BKB,SY-1,2		8	1401	V W49 C28 2	6
142	2	170		C	SY,@.LC@		7	1409	C C29 E21	7
143	2	180		BE	A1		5	1416	B Q82 S	7
144	2	190		C	SY,@.MC@		7	1421	C C29 E24	7
145	2	200		BE	R98		5	1428	B W65 S	7
146	2	210		C	SY,@XXJ@		7	1433	C C29 E27	7
147	2	220		BE	SUB1		5	1440	B L56 S	7

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230         C     SY,@XXK@                                   7  1445  C C29 E30           8
149  2 240         BE    SUB2                                       5  1452  B L34 S             8
150  2 250         C     SY,@XXL@                                   7  1457  C C29 E33           8
151  3 010         BE    SUB3                                       5  1464  B J77 S             8
152  3 020         C     SY,@ZET@                                   7  1469  C C29 E36           8
153  3 030         BE    KZ1                                        5  1476  B Z50 S             8
154  3 040         C     SY,@YIN@                                   7  1481  C C29 E39           9
155  3 050         BE    KZ2                                        5  1488  B Z58 S             9
156  3 060         C     SY,@ZAX@                                   7  1493  C C29 E42           9
157  3 070         BE    KZ3                                        5  1500  B Z66 S             9
158  3 080         C     SY,@YFM@                                   7  1505  C C29 E45           9
159  3 090         BE    KZ4                                        5  1512  B Z81 S             9
160  3 100         C     SY,@YAQ@                                   7  1517  C C29 E48          10
161  3 110         BE    KZ5                                        5  1524  B Z89 S            10
162  3 120         C     SY,@YNQ@                                   7  1529  C C29 E51          10
163  3 130         BE    KZ6                                        5  1536  B Z97 S            10
164  3 140         C     SY,@YIP@                                   7  1541  C C29 E54          10
165  3 150         BE    KZ7                                        5  1548  B !05 S            10
166  3 160         C     SY,@ZML@                                   7  1553  C C29 E57          11
167  3 170         BE    KZ8                                        5  1560  B !13 S            11
168  3 180         C     SY,@ZMR@                                   7  1565  C C29 E60          11
169  3 190         BE    KZ9                                        5  1572  B !21 S            11
170  3 200         C     SY,@ZDY@                                   7  1577  C C29 E63          11
171  3 210         BE    KZ10                                       5  1584  B !29 S            11
172  3 220         C     SY,@ZGP@                                   7  1589  C C29 E66          12
173  3 230         BE    KZ11                                       5  1596  B !37 S            12
174  3 240         C     SY,@YCL@                                   7  1601  C C29 E69          12
175  3 250         BE    KZ12                                       5  1608  B !45 S            12
176  4 010         C     SY,@ZFZ@                                   7  1613  C C29 E72          12
177  4 020         BE    KZ13                                       5  1620  B !53 S            12
178  4 030         C     SY,@XMN@                                   7  1625  C C29 E75          13
179  4 040         BE    KZ14                                       5  1632  B !61 S            13
180  4 050         C     SY,@ZXZ@                                   7  1637  C C29 E78          13
181  4 060         BE    KZ15                                       5  1644  B !69 S            13
182  4 070  BKB    BCE   A2,SY,@                                    8  1649  B Q61 C29 @        13
183  4 080         BWZ   A3,SY,B                                    8  1657  V M89 C29 B        14
184  4 090  R98    B     PUTSX                                      4  1665  B A94              14
185  4 100         B     A40                                        4  1669  B T25              14
186  4 110  RE     SBR   X3,N1                                      7  1673  H 099 C08          14
187  4 120         MLC   @0@,INDEX                                  7  1680  M E79 C20          14
188  4 130         CW    STK                                        4  1687  ) C17              14
189  4 140         MLC   @B@,QQQ                                    7  1691  M E80 K53          15
190  4 150         MLC   @V@,QQQ1                                   7  1698  M E81 K61          15
191  4 160         MLC   @V@,X0X                                    7  1705  M E81 Y35          15
192  4 170         B     A40                                        4  1712  B T25              15
193  4 180  DSY    MLC   @N@,QQQ                                    7  1716  M E82 K53          15
194  4 190         MLC   @N@,QQQ1                                   7  1723  M E82 K61          15
195  4 200         MLC   @N@,X0X                                    7  1730  M E82 Y35          16
196  4 210         B     A40                                        4  1737  B T25              16
197  4 220  RB1    MLC   @0@,HOLD                                   7  1741  M E79 C13          16
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  4 230         MLC   @B  @,SYM                                    7  1748  M E85 C16           16
199  4 240         B     GOR1                                       4  1755  B X82               16
200  4 250  GOR    B     GETSX                                      4  1759  B B09               16
201  5 010         C     SY,@.MC@                                   7  1763  C C29 E24           17
202  5 020         BE    XX99                                       5  1770  B Z11 S             17
203  5 030  CCD    A     @1@,HOLD                                   7  1775  A E86 C13           17
204  5 040  GOR1   B     PUTX                                       4  1782  B 363               17
205  5 050         DCW   &@.LC@                                     3  1788  E21                 17
206  5 060         B     PUTX                                       4  1789  B 363               17
207  5 070         DCW   &SYM                                       3  1795  C16                 17
208  5 080         B     PUTX                                       4  1796  B 363               18
209  5 090         DCW   &@.OP@                                     3  1802  E89                 18
210  5 100  X11    BCE   OUT,HOLD,4                                8  1803  B Y65 C13 4         18
211  5 110  X21    BCE   OUT,HOLD,5                                8  1811  B Y65 C13 5         18
212  5 120  X41    BCE   OUT,HOLD,7                                8  1819  B Y65 C13 7         18
213  5 130  X51    BCE   OUT,HOLD,8                                8  1827  B Y65 C13 8         18
214  5 140  X0X    BWZ   M0M,SY,B                                  8  1835  V J04 C29 B         19
215  5 150  M0K1   B     PUTSX                                      4  1843  B A94               19
216  5 160  XR1    B     PUTX                                       4  1847  B 363               19
217  5 170         DCW   &@.MC@                                     3  1853  E24                 19
218  5 180         MLC   @DCW@,SYM                                  7  1854  M E92 C16           19
219  5 190         B     GOR                                        4  1861  B X59               19
220  5 200  OUT    B     PUTX                                       4  1865  B 363               19
221  5 210         DCW   &@  @@                                     3  1871  E95                 20
222  5 220         B     PUTSX                                      4  1872  B A94               20
223  5 230         B     PUTX                                       4  1876  B 363               20
224  5 240         DCW   &@  @@                                     3  1882  E95                 20
225  5 250         B     XR1                                        4  1883  B Y47               20
226  6 010  QQ1    B     PUTSX                                      4  1887  B A94               20
227  6 020         B     GETSX                                      4  1891  B B09               20
228  6 030         C     SY,@*24@                                   7  1895  C C29 E18           21
229  6 040         BU    QQ1                                        5  1902  B Y87 /             21
230  6 050         B     R98                                        4  1907  B W65               21
231  6 060  XX99   MLC   @B@,X11                                   7  1911  M E80 Y03           21
232  6 070         MLC   @B@,X21                                   7  1918  M E80 Y11           21
233  6 080         MLC   @B@,X41                                   7  1925  M E80 Y19           21
234  6 090         MLC   @B@,X51                                   7  1932  M E80 Y27           22
235  6 100         MLC   @A@,CCD                                   7  1939  M E96 X75           22
236  6 110         B     A40                                        4  1946  B T25               22
237  6 120  KZ1    SW    T1                                         4  1950  , T00               22
238  6 130         B     K5                                         4  1954  B N72               22
239  6 140  KZ2    SW    T2                                         4  1958  , T01               22
240  6 150         B     K3                                         4  1962  B N65               22
241  6 160  KZ3    SW    T3                                         4  1966  , T02               23
242  6 170  KRB    MLC   @N@,CCD                                   7  1970  M E82 X75           23
243  6 180         B     RB1                                        4  1977  B X41               23
244  6 190  KZ4    SW    T4                                         4  1981  , T03               23
245  6 200         B     K1                                         4  1985  B N29               23
246  6 210  KZ5    SW    T5                                         4  1989  , T04               23
247  6 220         B     K1                                         4  1993  B N29               23
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  6 230  KZ6    SW    T6                                        4  1997  , T05               24
249  6 240         B     K1                                        4  2001  B N29               24
250  6 250  KZ7    SW    T7                                        4  2005  , T06               24
251  7 010         B     K3                                        4  2009  B N65               24
252  7 020  KZ8    SW    T8                                        4  2013  , T07               24
253  7 030         B     KRB                                       4  2017  B Z70               24
254  7 040  KZ9    SW    T9                                        4  2021  , T08               24
255  7 050         B     K1                                        4  2025  B N29               25
256  7 060  KZ10   SW    T10                                       4  2029  , T09               25
257  7 070         B     KRB                                       4  2033  B Z70               25
258  7 080  KZ11   SW    T11                                       4  2037  , T10               25
259  7 090         B     KRB                                       4  2041  B Z70               25
260  7 100  KZ12   SW    T12                                       4  2045  , T11               25
261  7 110         B     K1                                        4  2049  B N29               25
262  7 120  KZ13   SW    T16                                       4  2053  , T15               26
263  7 130         B     KRB                                       4  2057  B Z70               26
264  7 140  KZ14   SW    T17                                       4  2061  , T16               26
265  7 150         B     K5                                        4  2065  B N72               26
266  7 160  KZ15   SW    T18                                       4  2069  , T17               26
267  7 170         B     KRB                                       4  2073  B Z70               26
268  7 180  B1     B     PUTX                                      4  2077  B 363               26
269  7 190         DCW   &@***@                                    3  2083  E99                 27
270  7 200         B     G ETSX                                     4  2084  B B09               27
271  7 210         B     GETSX                                     4  2088  B B09               27
272  7 220         B     PUTSX                                     4  2092  B A94               27
273  7 230         B     GETSX                                     4  2096  B B09               27
274  7 240         B     A40                                       4  2100  B T25               27
275  7 250  M0M    C     SY,N1                                     7  2104  C C29 C08           27
276  8 010         BE    M0M1                                      5  2111  B J44 S             28
277  8 020         C     SY,N2                                     7  2116  C C29 B99           28
278  8 030         BE    M0M2                                      5  2123  B J55 S             28
279  8 040         C     SY,N3                                     7  2128  C C29 B90           28
280  8 050         BE    M0M3                                      5  2135  B J66 S             28
281  8 060         B     R98                                       4  2140  B W65               28
282  8 070  M0M1   MLC   INDX1,SY                                  7  2144  M C05 C29           29
283  8 080         B     M0KA                                      4  2151  B M78               29
284  8 090  M0M2   MLC   INDX2,SY                                  7  2155  M B96 C29           29
285  8 100         B     M0KA                                      4  2162  B M78               29
286  8 110  M0M3   MLC   INDX3,SY                                  7  2166  M B87 C29           29
287  8 120         B     M0KA                                      4  2173  B M78               29
288  8 130  SUB3   MLC   @8@,QQQ&7                                7  2177  M F00 K60           30
289  8 140         MLC   @9@,PPP&7                                7  2184  M F01 K41           30
290  8 150         SW    T15                                       4  2191  , T14               30
291  8 160  KRK    MLC   @  B@,SYM                                7  2195  M F04 C16           30
292  8 170         MLC   @0@,COUNT                                7  2202  M E79 C12           30
293  8 180  GO     B     PUTX                                      4  2209  B 363               30
294  8 190         DCW   &@.LC@                                    3  2215  E21                 30
295  8 200         B     PUTX                                      4  2216  B 363               31
296  8 210         DCW   SYM                                       3  2222  C16                 31
297  8 220         B     PUTX                                      4  2223  B 363               31
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

298  8 230         DCW   &@.OP@                                     3  2229  E89                 31
299  8 240         B     PUTSX                                      4  2230  B A94               31
300  8 250  PPP    BCE   A40,COUNT,*                                8  2234  B T25 C12 *         31
301  9 010         B     PUTX                                       4  2242  B 363               31
302  9 020         DCW   &@.MC@                                     3  2248  E24                 32
303  9 030         B     GETSX                                      4  2249  B B09               32
304  9 040  QQQ    BCE   R2,COUNT,*                                8  2253  B L78 C12 *         32
305  9 050  QQQ1   BWZ   R1,SY,B                                   8  2261  V M15 C29 B         32
306  9 060  RON    MLC   @DCW@,SYM                                  7  2269  M E92 C16           32
307  9 070         A     @1@,COUNT                                  7  2276  A E86 C12           32
308  9 080         B     GO                                         4  2283  B K09               33
309  9 090  A41    MLC   &@#DC@,XB&6                               7  2287  M F07 L20           33
310  9 100  AAA    B     GETSX                                      4  2294  B B09               33
311  9 110         C     SY,@.XF@                                   7  2298  C C29 F10           33
312  9 120         BU    XB                                         5  2305  B L14 /             33
313  9 130         SW    1283                                       4  2310  , S83               33
314  9 140  XB     C     SY,*                                       7  2314  C C29 L20           33
315  9 150         BE    A40                                        5  2321  B T25 S             34
316  9 160         B     PUTSX                                      4  2326  B A94               34
317  9 170         B     AAA                                        4  2330  B K94               34
318  9 180  SUB2   MLC   @6@,QQQ&7                                 7  2334  M F11 K60           34
319  9 190         MLC   @7@,PPP&7                                 7  2341  M F12 K41           34
320  9 200         SW    T14                                        4  2348  , T13               34
321  9 210         B     KRK                                        4  2352  B J95               34
322  9 220  SUB1   MLC   @4@,QQQ&7                                 7  2356  M F13 K60           35
323  9 230         MLC   @5@,PPP&7                                 7  2363  M F14 K41           35
324  9 240         SW    T13                                        4  2370  , T12               35
325  9 250         B     KRK                                        4  2374  B J95               35
326 10 010  R2     MLC   SY,0&X3                                   7  2378  M C29 0?0           35
327 10 020         SBR   X3                                         4  2385  H 099               35
328 10 030         B     RON                                        4  2389  B K69               35
329 10 040  RES    SBR   X3,N2                                     7  2393  H 099 B99           36
330 10 050         MLC   @1@,INDEX                                 7  2400  M E86 C20           36
331 10 060         SW    STK                                        4  2407  , C17               36
332 10 070         B     R2A                                        4  2411  B M31               36
333 10 080  R1     BCE   RES,0&X3,$                                 8  2415  B L93 0?0 $         36
334 10 090         BW    RES,STK                                    8  2423  V L93 C17 1         36
335 10 100  R2A    A     @1@,INDEX                                  7  2431  A E86 C20           37
336 10 110         MLC   SY,0&X3                                   7  2438  M C29 0?0           37
337 10 120         SBR   X3                                         4  2445  H 099               37
338 10 130         MLC   INDEX,0&X3                                7  2449  M C20 0?0           37
339 10 140         SBR   X3                                         4  2456  H 099               37
340 10 150         MLC   INDEX,SY                                   7  2460  M C20 C29           37
341 10 160         MLC   @&X@,SY-1                                 7  2467  M F16 C28           38
342 10 170         B     RON                                        4  2474  B K69               38
343 10 180  M0KA   MLC   @&X@,SY-1                                 7  2478  M F16 C28           38
344 10 190         B     M0K1                                       4  2485  B Y43               38
345 10 200  A3     C     SY,N1                                      7  2489  C C29 C08           38
346 10 210         BE    Z12                                        5  2496  B O26 S             38
347 10 220         C     SY,N2                                      7  2501  C C29 B99           39
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

348 10 230          BE    Z2                                         5  2508  B N90 S             39
349 10 240          C     SY,N3                                      7  2513  C C29 B90           39
350 10 250          BE    Z3                                         5  2520  B O08 S             39
351 11 010          B     R98                                        4  2525  B W65               39
352 11 020  K1      MLC   @N@,X51                                   7  2529  M E82 Y27           39
353 11 030  K01     MLC   @N@,X21                                   7  2536  M E82 Y11           40
354 11 040          MLC   @N@,X11                                   7  2543  M E82 Y03           40
355 11 050          B     RB1                                        4  2550  B X41               40
356 11 060  K2      MLC   @N@,X41                                   7  2554  M E82 Y19           40
357 11 070          B     K01                                        4  2561  B N36               40
358 11 080  K3      MLC   @N@,X11                                   7  2565  M E82 Y03           40
359 11 090  K5      MLC   @N@,X41                                   7  2572  M E82 Y19           41
360 11 100          MLC   @N@,X51                                   7  2579  M E82 Y27           41
361 11 110          B     RB1                                        4  2586  B X41               41
362 11 120  Z2      MLC   &INDX2,CRC&3                              7  2590  M F19 Q21           41
363 11 130          MLC   S2,TOTAL                                  7  2597  M B93 C11           41
364 11 140          B     Z1                                         4  2604  B O40               41
365 11 150  Z3      MLC   &INDX3,CRC&3                              7  2608  M F22 Q21           42
366 11 160          MLC   S3,TOTAL                                  7  2615  M B84 C11           42
367 11 170          B     Z1                                         4  2622  B O40               42
368 11 180  Z12     MLC   S1,TOTAL                                  7  2626  M C02 C11           42
369 11 190          MLC   &INDX1,CRC&3                              7  2633  M F25 Q21           42
370 11 200  Z1      B     GETSX                                      4  2640  B B09               42
371 11 210          BCE   D1,SY,@                                   8  2644  B P44 C29 @         43
372 11 220          BCE   B7,SY,,                                   8  2652  B P97 C29 ,         43
373 11 230          C     SY,@.MC@                                   7  2660  C C29 E24           43
374 11 240          BE    DONE                                       5  2667  B Q50 S             43
375 11 250          BCE   AQ1,SY,-                                  8  2672  B P33 C29 -         43
376 12 010          BCE   AQ1,SY,&                                  8  2680  B P33 C29 &         44
377 12 020          BWZ   B3,SY,2                                   8  2688  V P79 C29 2         44
378 12 030          MLZS  SY,RR1&7                                  7  2696  Y C29 P10           44
379 12 040  RR1     BCE   R7,SYM,*                                  8  2703  B P22 C16 *         44
380 12 050          MLZS  @-@,SY                                    7  2711  Y F26 C29           44
381 12 060          B     B10                                        4  2718  B P86               45
382 12 070  R7      MLZS  @&@,SY                                    7  2722  Y F27 C29           45
383 12 080          B     B10                                        4  2729  B P86               45
384 12 090  AQ1     MLC   SY,SYM                                    7  2733  M C29 C16           45
385 12 100          B     Z1                                         4  2740  B O40               45
386 12 110  D1      B     GETX                                       4  2744  B 335               45
387 12 120          DCW   X2                                         3  2750  094                 45
388 12 130          DCW   ERR                                        3  2753  B80                 46
389 12 140          MLC   TABLE&X2,SY                               7  2754  M CK9 C29           46
390 12 150          MLZS  SY-2,SY                                   7  2761  Y C27 C29           46
391 12 160          MLC   @0@,SY-2                                  7  2768  M E79 C27           46
392 12 170          B     B10                                        4  2775  B P86               46
393 12 180  B3      MLZS  SYM,SY                                    7  2779  Y C16 C29           46
394 12 190  B10     A     SY,TOTAL                                   7  2786  A C29 C11           47
395 12 200          B     Z1                                         4  2793  B O40               47
396 12 210  B7      MLC   @  ,@,CONT                                7  2797  M F30 C26           47
397 12 220  BB1     MLZS  @ @,TOTAL                                 7  2804  Y F31 C11           47
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX CT	LOCN	INSTRUCTION TYPE	CARD
398	12	230		B	PUTX	4	2811	B 363	47
399	12	240		DCW	TOTAL	3	2817	C11	47
400	12	250	CRC	MLC	*,PLACE	7	2818	M Q24 C23	47
401	13	010		MLC	@&X@,PLACE-1	7	2825	M F16 C22	48
402	13	020		B	PUTX	4	2832	B 363	48
403	13	030		DCW	PLACE	3	2838	C23	48
404	13	040		B	PUTX	4	2839	B 363	48
405	13	050		DCW	CONT	3	2845	C26	48
406	13	060		B	A40	4	2846	B T25	48
407	13	070	DONE	MLC	@.MC@,CONT	7	2850	M E24 C26	48
408	13	080		B	BB1	4	2857	B Q04	49
409	13	090	A2	B	GETX	4	2861	B 335	49
410	13	100		DCW	X2	3	2867	094	49
411	13	110		DCW	ERR	3	2870	B80	49
412	13	120		MLC	TABLE&X2,SY	7	2871	M CK9 C29	49
413	13	130		B	R98	4	2878	B W65	49
414	13	140	A1	B	GETSX	4	2882	B B09	49
415	13	150		BCE	B1,SY-2,*	8	2886	B !77 C27 *	50
416	13	160		B	PUTX	4	2894	B 363	50
417	13	170		DCW	&@.LC@	3	2900	E21	50
418	13	180		BCE	AROT,SY-1,/	8	2901	B A60 C28 /	50
419	13	190	Q1	BCE	A5,SY-1,1	8	2909	B ?17 C28 1	50
420	13	200		BCE	A8,SY-1,4	8	2917	B ?28 C28 4	50
421	13	210		BCE	A9,SY-1,5	8	2925	B ?39 C28 5	51
422	13	220		BCE	A20,SY-1,3	8	2933	B A49 C28 3	51
423	13	230		BCE	A10,SY-1,6	8	2941	B ?50 C28 6	51
424	13	240		BCE	A11,SY-1,7	8	2949	B ?61 C28 7	51
425	13	250		BCE	A12,SY-1,8	8	2957	B ?72 C28 8	52
426	14	010		BCE	A14,SY-1,B	8	2965	B ?83 C28 B	52
427	14	020		BCE	A15,SY-1,C	8	2973	B ?94 C28 C	52
428	14	030		BCE	A16,SY-1,D	8	2981	B A05 C28 D	52
429	14	040		BCE	A17,SY-1,F	8	2989	B A16 C28 F	53
430	14	050		BCE	A18,SY-1,G	8	2997	B A27 C28 G	53
431	14	060		BCE	A19,SY-1,I	8	3005	B A38 C28 I	53
432	14	070		B	R98	4	3013	B W65	53
433	14	080	A5	B	PUTX	4	3017	B 363	53
434	14	090		DCW	&@MCM@	3	3023	F34	53
435	14	100		B	A40	4	3024	B T25	53
436	14	110	A8	B	PUTX	4	3028	B 363	54
437	14	120		DCW	&@BWZ@	3	3034	F37	54
438	14	130		B	A40	4	3035	B T25	54
439	14	140	A9	B	PUTX	4	3039	B 363	54
440	14	150		DCW	&@NOP@	3	3045	F40	54
441	14	160		B	A40	4	3046	B T25	54
442	14	170	A10	B	PUTX	4	3050	B 363	54
443	14	180		DCW	&@DCW@	3	3056	E92	55
444	14	190		B	A40	4	3057	B T25	55
445	14	200	A11	B	PUTX	4	3061	B 363	55
446	14	210		DCW	&@ORG@	3	3067	F43	55
447	14	220		B	A40	4	3068	B T25	55

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
448	14	230	A12	B	PUTX		4	3072	B 363	55
449	14	240		DCW	&@DSA@		3	3078	F46	55
450	14	250		B	A40		4	3079	B T25	56
451	15	010	A14	B	PUTX		4	3083	B 363	56
452	15	020		DCW	&@EQU@		3	3089	F49	56
453	15	030		B	A40		4	3090	B T25	56
454	15	040	A15	B	PUTX		4	3094	B 363	56
455	15	050		DCW	&@MCS@		3	3100	F52	56
456	15	060		B	A40		4	3101	B T25	56
457	15	070	A16	B	PUTX		4	3105	B 363	57
458	15	080		DCW	&@SBR@		3	3111	F55	57
459	15	090		B	A40		4	3112	B T25	57
460	15	100	A17	B	PUTX		4	3116	B 363	57
461	15	110		DCW	&@BCE@		3	3122	F58	57
462	15	120		B	A40		4	3123	B T25	57
463	15	130	A18	B	PUTX		4	3127	B 363	57
464	15	140		DCW	&@MLC@		3	3133	F61	58
465	15	150		B	A40		4	3134	B T25	58
466	15	160	A19	B	PUTX		4	3138	B 363	58
467	15	170		DCW	&@MCE@		3	3144	F64	58
468	15	180		B	A40		4	3145	B T25	58
469	15	190	A20	B	PUTX		4	3149	B 363	58
470	15	200		DCW	&@LCA@		3	3155	F67	58
471	15	210		B	A40		4	3156	B T25	59
472	15	220	AROT	B	GETSX		4	3160	B B09	59
473	15	230		B	GETSX		4	3164	B B09	59
474	15	240		B	PUTSX		4	3168	B A94	59
475	15	250		B	PUTX		4	3172	B 363	59
476	16	010		DCW	&@.OP@		3	3178	E89	59
477	16	020		B	A40		4	3179	B T25	59
478	16	030	EOP	B	PUTSX		4	3183	B A94	60
479	16	040		B	SUPER		4	3187	B 351	60
480	16	050		DCW	@J08@		3	3193		60
481	16	060	PUTSX	SBR	ZZZ&3		4	3194	H B08	60
482	16	070		B	PUTX		4	3198	B 363	60
483	16	080		DCW	SY		3	3204	C29	60
484	16	090	ZZZ	B	*		4	3205	B B08	60
485	16	100	GETSX	SBR	EEE&3		4	3209	H B26	61
486	16	110		B	GETX		4	3213	B 335	61
487	16	120		DCW	SY		3	3219	C29	61
488	16	130		DCW	EOP		3	3222	A83	61
489	16	140	EEE	B	*		4	3223	B B26	61
490	16	150	SCALE	B	GETSX		4	3227	B B09	61
491	16	160		BWZ	SCC,SY,2		8	3231	V B62 C29 2	61
492	16	170	RRR	B	PUTX		4	3239	B 363	62
493	16	180		DCW	&@ &@		3	3245	F70	62
494	16	190		B	SALS		4	3246	B B69	62
495	16	200	SCALE1	B	GETSX		4	3250	B B09	62
496	16	210		BWZ	RRR,SY,2		8	3254	V B39 C29 2	62
497	16	220	SCC	B	PUTX		4	3262	B 363	62

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
498 16 230         DCW   &@  -@                                      3  3268  F73                 62
499 16 240  SALS   MLZS  @ @,SY                                     7  3269  Y F31 C29           63
500 16 250         B     R98                                       4  3276  B W65               63
501 17 010  ERR    H                                               1  3280  .                   63
502 17 020  RESET  EQU   *&1                                          3281
503 17 030         DCW   @$@                                       1  3281                      63
504 17 040  S3     DCW   #3                                        3  3284                      63
505 17 050  INDX3  DCW   #3                                        3  3287                      63
506 17 060  N3     DCW   #3                                        3  3290                      63
507 17 070  S2     DCW   #3                                        3  3293                      64
508 17 080  INDX2  DCW   #3                                        3  3296                      64
509 17 090  N2     DCW   #3                                        3  3299                      64
510 17 100  S1     DCW   #3                                        3  3302                      64
511 17 110  INDX1  DCW   #3                                        3  3305                      64
512 17 120  N1     DCW   # 3                                        3  3308                      64
513 17 130  TOTAL  DCW   @000@                                     3  3311                      64
514 17 140  COUNT  DCW   @0@                                       1  3312                      65
515 17 150  HOLD   DCW   #1                                        1  3313                      65
516 17 160  SYM    DCW   #3                                        3  3316                      65
517 17 170  STK    DC    #1                                        1  3317                      65
518 17 180  INDEX  DCW   @000@                                     3  3320                      65
519 17 190  PLACE  DCW   #3                                        3  3323                      65
520 17 200  CONT   DCW   #3                                        3  3326                      65
521 17 210  SY     DCW   #3                                        3  3329                      65
522 17 220  TABLE  EQU   *                                           3329
523 17 230         DCW   @&01@                                     3  3332                      66
524 17 240         DCW   @&00@                                     3  3335                      66
525 17 250         DCW   @GNN@                                     3  3338                      66
526 18 010         DCW   @&20@                                     3  3341                      66
527 18 020         DCW   @SHR@                                     3  3344                      66
528 18 030         DCW   @DA1@                                     3  3347                      66
529 18 040         DCW   @444@                                     3  3350                      66
530 18 050         DCW   @CNT@                                     3  3353                      67
531 18 060         DCW   @*&1@                                     3  3356                      67
532 18 070         DCW   @ACM@                                     3  3359                      67
533 18 080         DCW   @&10@                                     3  3362                      67
534 18 090         DCW   @   @                                     3  3365                      67
535 18 100         DCW   @-20@                                     3  3368                      67
536 18 110         DCW   @@E@@                                     3  3371                      67
537 18 120         DCW   @@ @@                                     3  3374                      68
538 18 130         DCW   @  @@                                     3  3377                      68
539 18 140         DCW   @CNR@                                     3  3380                      68
540 18 150         DCW   @001@                                     3  3383                      68
541 18 160         DCW   @-21@                                     3  3386                      68
542 18 170         DCW   @  S@                                     3  3389                      68
543 18 180         DCW   @  |@                                     3  3392                      68
544 18 190         DCW   @  -@                                     3  3395                      69
545 18 200         DCW   @@Z@@                                     3  3398                      69
546 18 210         DCW   @@A@@                                     3  3401                      69
547 18 220         DCW   @@0@@                                     3  3404                      69
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

548 18 230         DCW   @*&5@                                        3  3407                    69
549 18 240         DCW   @*&8@                                        3  3410                    69
550 18 250         DCW   @  &@                                        3  3413                    69
551 19 010         DCW   @  1@                                        3  3416                    70
552 19 020         DCW   @*-6@                                        3  3419                    70
553 19 030         DCW   @000@                                        3  3422                    70
554 19 040         DCW   @@B@@                                        3  3425                    70
555 19 050         DCW   @&03@                                        3  3428                    70
556 19 060         DCW   @@N@@                                        3  3431                    70
557 19 070         DCW   @&07@                                        3  3434                    70
558 19 080         DCW   @#05@                                        3  3437                    71
559 19 090         DCW   @040@                                        3  3440                    71
560 19 100         DCW   @  I@                                        3  3443                    71
561 19 110         DCW   @&80@                                        3  3446                    71
562 19 120         DCW   @&05@                                        3  3449                    71
563 19 130         DCW   @*&7@                                        3  3452                    71
564 19 140         DCW   @  *@                                        3  3455                    71
565 19 150         DCW   @*-4@                                        3  3458                    72
566 19 160         DCW   @  F@                                        3  3461                    72
567 19 170         DCW   @ GM@                                        3  3464                    72
568 19 180         DCW   @0?@@                                        3  3467                    72
569 19 190         DCW   @00A@                                        3  3470                    72
570 19 200         DCW   @*-1@                                        3  3473                    72
571 19 210         DCW   @  0@                                        3  3476                    72
572 19 220         DCW   @IOC@                                        3  3479                    73
573 19 230         DCW   @UXT@                                        3  3482                    73
574 19 240         DCW   @.MC@                                        3  3485                    73
575 19 250         DCW   @@$@@                                        3  3488                    73
576 20 010         DCW   @@NO@                                        3  3491                    73
577 20 020         DCW   @  L@                                        3  3494                    73
578 20 030         DCW   @OPN@                                        3  3497                    73
579 20 040         DCW   @-17@                                        3  3500                    74
580 20 050         DCW   @LOZ@                                        3  3503                    74
581 20 060         LTORG                                                      3504
       128         DCW   &N1                                          3  3506  C08       ADCON   74
                         @#DC@                                        3  3509            LIT     74
                         @.SE@                                        3  3512            LIT     74
                         @.DY@                                        3  3515            LIT     74
                         @*24@                                        3  3518            LIT     74
                         @.LC@                                        3  3521            LIT     75
                         @.MC@                                        3  3524            LIT     75
                         @XXJ@                                        3  3527            LIT     75
                         @XXK@                                        3  3530            LIT     75
                         @XXL@                                        3  3533            LIT     75
                         @ZET@                                        3  3536            LIT     75
                         @YIN@                                        3  3539            LIT     75
                         @ZAX@                                        3  3542            LIT     76
                         @YFM@                                        3  3545            LIT     76
                         @YAQ@                                        3  3548            LIT     76
                         @YNQ@                                        3  3551            LIT     76
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
					@YIP@		3	3554		LIT	76
					@ZML@		3	3557		LIT	76
					@ZMR@		3	3560		LIT	76
					@ZDY@		3	3563		LIT	77
					@ZGP@		3	3566		LIT	77
					@YCL@		3	3569		LIT	77
					@ZFZ@		3	3572		LIT	77
					@XMN@		3	3575		LIT	77
					@ZXZ@		3	3578		LIT	77
					@0@		1	3579		LIT	77
					@B@		1	3580		LIT	78
					@V@		1	3581		LIT	78
					@N@		1	3582		LIT	78
					@B @		3	3585		LIT	78
					@1@		1	3586		LIT	78
					@.OP@		3	3589		LIT	78
					@DCW@		3	3592		LIT	78
					@ @@		3	3595		LIT	79
					@A@		1	3596		LIT	79
					@***@		3	3599		LIT	79
					@8@		1	3600		LIT	79
					@9@		1	3601		LIT	79
					@ B@		3	3604		LIT	79
		309			&@#DC@		3	3607	E09	ADCON	79
					@.XF@		3	3610		LIT	80
					@6@		1	3611		LIT	80
					@7@		1	3612		LIT	80
					@4@		1	3613		LIT	80
					@5@		1	3614		LIT	80
					@&X@		2	3616		LIT	80
		362			&INDX2		3	3619	B96	ADCON	80
		365			&INDX3		3	3622	B87	ADCON	81
		369			&INDX1		3	3625	C05	ADCON	81
					@-@		1	3626		LIT	81
					@&@		1	3627		LIT	81
					@ ,@		3	3630		LIT	81
					@ @		1	3631		LIT	81
					@MCM@		3	3634		LIT	81
					@BWZ@		3	3637		LIT	82
					@NOP@		3	3640		LIT	82
					@ORG@		3	3643		LIT	82
					@DSA@		3	3646		LIT	82
					@EQU@		3	3649		LIT	82
					@MCS@		3	3652		LIT	82
					@SBR@		3	3655		LIT	82
					@BCE@		3	3658		LIT	83
					@MLC@		3	3661		LIT	83
					@MCE@		3	3664		LIT	83
					@LCA@		3	3667		LIT	83
					@ &@		3	3670		LIT	83

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @  -@                                          3  3673              LIT     83
 582 20 070          ORG                                                      3674
 583 20 080          DCW   @}@                                           1  3674                      83
 584 20 090          END                                                      / 000 080                 84
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - J08
 102  1 020         CTL   631 11
 103  1 030         ORG   1320                                                 1320
 104  1 040  SUPER  EQU   351                                                  0351
 105  1 050  T1     EQU   1300                                                 1300
 106  1 060  T2     EQU   T1&1                                                 1301
 107  1 070  T3     EQU   T1&2                                                 1302
 108  1 080  T4     EQU   T1&3                                                 1303
 109  1 090  T5     EQU   T1&4                                                 1304
 110  1 100  T6     EQU   T1&5                                                 1305
 111  1 110  T7     EQU   T1&6                                                 1306
 112  1 120  T8     EQU   T1&7                                                 1307
 113  1 130  T9     EQU   T1&8                                                 1308
 114  1 140  T10    EQU   T1&9                                                 1309
 115  1 150  T11    EQU   T1&10                                                1310
 116  1 160  T12    EQU   T1&11                                                1311
 117  1 170  T13    EQU   T1&12                                                1312
 118  1 180  T14    EQU   T1&13                                                1313
 119  1 190  T15    EQU   T1&14                                                1314
 120  1 200  T16    EQU   T1&15                                                1315
 121  1 210  T17    EQU   T1&16                                                1316
 122  1 220  T18    EQU   T1&17                                                1317
 123  1 230  X2     EQU   94                                                   0094
 124  1 240  GETX   EQU   335                                                  0335
 125  1 250  X1     EQU   89                                                   0089
 126  2 010  PUTX   EQU   363                                                  0363
 127  2 020  IORW   EQU   343                                                  0343
 128  2 030         BW    IOCS,86                                    8  1320  V L06 086 1          4
 129  2 040  X01    B     GETBLK                                     4  1328  B P40                4
 130  2 050         DCW   SY                                         3  1334  Q98                  4
 131  2 060         DCW   X01                                        3  1337  T28                  4
 132  2 070         C     SY,@.SN@                                   7  1338  C Q98 F56            4
 133  2 080         BE    LRXR                                       5  1345  B W63 S              4
 134  2 090  XXX5   C     SY,@.DD@                                   7  1350  C Q98 F59            4
 135  2 100  XR1    BE    X01                                        5  1357  B T28 S              5
 136  2 110         C     SY,@.IC@                                   7  1362  C Q98 F62            5
 137  2 120  XR2    BU    X01                                        5  1369  B T28 /              5
 138  2 130  X03    B     GETTP                                      4  1374  B P55                5
 139  2 140         DCW   SY                                         3  1380  Q98                  5
 140  2 150         DCW   X03                                        3  1383  T74                  5
 141  2 160         C     SY,@.DT@                                   7  1384  C Q98 F65            5
 142  2 170  XR5    BE    X06                                        5  1391  B V16 S              6
 143  2 180         C     SY,@.DI@                                   7  1396  C Q98 F68            6
 144  2 190  XR6    BE    X06                                        5  1403  B V16 S              6
 145  2 200         C     SY,@.IE@                                   7  1408  C Q98 F71            6
 146  2 210  XR7    BE    X01B                                       5  1415  B Z41 S              6
 147  2 220         C     SY,@.IS@                                   7  1420  C Q98 F74            6
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 230  XR8    BE    X01B                                         5  1427  B Z41 S             7
149  2 240         C     SY,@.ED@                                     7  1432  C Q98 F77           7
150  2 250  XR13   BE    X06                                          5  1439  B V16 S             7
151  3 010         C     SY,@.LT@                                     7  1444  C Q98 F80           7
152  3 020  XR12   BE    X07                                          5  1451  B V49 S             7
153  3 030         C     SY,@.DL@                                     7  1456  C Q98 F83           7
154  3 040  XR14   BE    X06                                          5  1463  B V16 S             8
155  3 050         C     SY,@.DA@                                     7  1468  C Q98 F86           8
156  3 060  XR3    BE    X08                                          5  1475  B V79 S             8
157  3 070         C     SY,@.LD@                                     7  1480  C Q98 F89           8
158  3 080  XR15   BE    X10                                          5  1487  B Z56 S             8
159  3 090         C     SY,@.LL@                                     7  1492  C Q98 F92           8
160  3 100  XR16   BE    X06                                          5  1499  B V16 S             9
161  3 110         C     SY,@.CC@                                     7  1504  C Q98 F95           9
162  3 120  XR9    BU    X03                                          5  1511  B T74 /             9
163  3 130  X06    B     GETTP                                        4  1516  B P55               9
164  3 140         DCW   SY                                           3  1522  Q98                 9
165  3 150         DCW   X06                                          3  1525  V16                 9
166  3 160         C     SY,@.DE@                                     7  1526  C Q98 F98           9
167  3 170         BE    X03                                          5  1533  B T74 S            10
168  3 180         B     PUTX                                         4  1538  B 363              10
169  3 190         DCW   SY                                           3  1544  Q98                10
170  3 200         B     X06                                          4  1545  B V16              10
171  3 210  X07    B     GETTP                                        4  1549  B P55              10
172  3 220         DCW   SY                                           3  1555  Q98                10
173  3 230         DCW   X07                                          3  1558  V49                10
174  3 240         C     SY,@.DE@                                     7  1559  C Q98 F98          11
175  3 250         BE    X03                                          5  1566  B T74 S            11
176  4 010         SW    SWITCH                                       4  1571  , R00              11
177  4 020         B     X03                                          4  1575  B T74              11
178  4 030  X08    B     GETTP                                        4  1579  B P55              11
179  4 040         DCW   SY                                           3  1585  Q98                11
180  4 050         DCW   X08                                          3  1588  V79                11
181  4 060         C     SY,@.DE@                                     7  1589  C Q98 F98          12
182  4 070         BE    X03                                          5  1596  B T74 S            12
183  4 080         SW    SWT11                                        4  1601  , R01              12
184  4 090         B     X03                                          4  1605  B T74              12
185  4 100  AR7    CW    XR2&4                                        4  1609  ) T73              12
186  4 110         MLC   @N@,XR1                                      7  1613  M F99 T57          12
187  4 120         MLC   @N@,XR5                                      7  1620  M F99 T91          12
188  4 130         MLC   @N@,XR6                                      7  1627  M F99 U03          13
189  4 140         SBR   XR7&3,D0X                                    7  1634  H U18 Z64          13
190  4 150         MLC   @N@,XR8                                      7  1641  M F99 U27          13
191  4 160         SBR   XR3&3,X06                                    7  1648  H U78 V16          13
192  4 170         SW    XR9&4                                        4  1655  , V15              13
193  4 180         B     X01                                          4  1659  B T28              13
194  4 190  LRXR   CW    SWW                                          4  1663  ) Q99              14
195  4 200         B     XXX5                                         4  1667  B T50              14
196  4 210  B1     SBR   X2                                           4  1671  H 094              14
197  4 220         MLC   @ZET@,INCL                                   7  1675  M G02 E24          14
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 230         B     OUTPUT                                     4  1682  B K30               14
199  4 240  B2     SBR   X2                                         4  1686  H 094               14
200  4 250         MLC   @YIN@,INCL                                7  1690  M G05 E24           14
201  5 010         B     OUTPUT                                     4  1697  B K30               15
202  5 020  B3     SBR   X2                                         4  1701  H 094               15
203  5 030         MLC   @ZAX@,INCL                                7  1705  M G08 E24           15
204  5 040         B     OUTPUT                                     4  1712  B K30               15
205  5 050  B4     SBR   X2                                         4  1716  H 094               15
206  5 060         MLC   @YFM@,INCL                                7  1720  M G11 E24           15
207  5 070         B     OUTPUT                                     4  1727  B K30               15
208  5 080  B5     SBR   X2                                         4  1731  H 094               16
209  5 090         MLC   @YAQ@,INCL                                7  1735  M G14 E24           16
210  5 100         B     OUTPUT                                     4  1742  B K30               16
211  5 110  B6     SBR   X2                                         4  1746  H 094               16
212  5 120         MLC   @YNQ@,INCL                                7  1750  M G17 E24           16
213  5 130         B     OUTPUT                                     4  1757  B K30               16
214  5 140  B7     SBR   X2                                         4  1761  H 094               16
215  5 150         MLC   @YIP@,INCL                                7  1765  M G20 E24           17
216  5 160         B     OUTPUT                                     4  1772  B K30               17
217  5 170  B8     SBR   X2                                         4  1776  H 094               17
218  5 180         MLC   @ZML@,INCL                                7  1780  M G23 E24           17
219  5 190         B     OUTPUT                                     4  1787  B K30               17
220  5 200  B9     SBR   X2                                         4  1791  H 094               17
221  5 210         MLC   @ZMR@,INCL                                7  1795  M G26 E24           17
222  5 220         B     OUTPUT                                     4  1802  B K30               18
223  5 230  B10    SBR   X2                                         4  1806  H 094               18
224  5 240         MLC   @ZDY@,INCL                                7  1810  M G29 E24           18
225  5 250         B     OUTPUT                                     4  1817  B K30               18
226  6 010  B11    SBR   X2                                         4  1821  H 094               18
227  6 020         MLC   @ZGP@,INCL                                7  1825  M G32 E24           18
228  6 030         B     OUTPUT                                     4  1832  B K30               18
229  6 040  B12    SBR   X2                                         4  1836  H 094               19
230  6 050         MLC   @YCL@,INCL                                7  1840  M G35 E24           19
231  6 060         B     OUTPUT                                     4  1847  B K30               19
232  6 070  B13    SBR   X2                                         4  1851  H 094               19
233  6 080         MLC   @XXJ@,INCL                                7  1855  M G38 E24           19
234  6 090         B     OUTPUT                                     4  1862  B K30               19
235  6 100  B14    SBR   X2                                         4  1866  H 094               19
236  6 110         MLC   @XXK@,INCL                                7  1870  M G41 E24           20
237  6 120         B     OUTPUT                                     4  1877  B K30               20
238  6 130  B15    SBR   X2                                         4  1881  H 094               20
239  6 140         MLC   @XXL@,INCL                                7  1885  M G44 E24           20
240  6 150         B     OUTPUT                                     4  1892  B K30               20
241  6 160  B16    SBR   X2                                         4  1896  H 094               20
242  6 170         MLC   @ZFZ@,INCL                                7  1900  M G47 E24           20
243  6 180         B     OUTPUT                                     4  1907  B K30               21
244  6 190  B17    SBR   X2                                         4  1911  H 094               21
245  6 200         MLC   @XMN@,INCL                                7  1915  M G50 E24           21
246  6 210         B     OUTPUT                                     4  1922  B K30               21
247  6 220  B18    SBR   X2                                         4  1926  H 094               21
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 230         MLC   @ZXZ@,INCL                                7  1930  M G53 E24           21
249  6 240         B     OUTPUT                                    4  1937  B K30               21
250  6 250  X01B   SBR   XR1&3,X03                                 7  1941  H T60 T74           22
251  7 010         SW    XR2&4                                     4  1948  , T73               22
252  7 020         B     X01                                       4  1952  B T28               22
253  7 030  X10    BW    AR7,SWT11,1                               8  1956  V W09 R01 1         22
254  7 040  D0X    BW    B17,T17                                   8  1964  V Z11 T16 1         22
255  7 050         BW    B13,T13                                   8  1972  V Y51 T12 1         22
256  7 060         BW    B14,T14                                   8  1980  V Y66 T13 1         23
257  7 070         BW    B15,T15                                   8  1988  V Y81 T14 1         23
258  7 080         BW    B5,T5                                     8  1996  V X31 T04 1         23
259  7 090         BW    B12,T12                                   8  2004  V Y36 T11 1         23
260  7 100         BW    B2,T2                                     8  2012  V W86 T01 1         24
261  7 110         BW    B7,T7                                     8  2020  V X61 T06 1         24
262  7 120         BW    B3,T3                                     8  2028  V X01 T02 1         24
263  7 130         BW    B10,T10                                   8  2036  V Y06 T09 1         24
264  7 140         BW    B1,T1                                     8  2044  V W71 T00 1         25
265  7 150         BW    B16,T16                                   8  2052  V Y96 T15 1         25
266  7 160         BW    B11,T11                                   8  2060  V Y21 T10 1         25
267  7 170         BW    B8,T8                                     8  2068  V X76 T07 1         25
268  7 180         BW    B9,T9                                     8  2076  V X91 T08 1         26
269  7 190         BW    B18,T18                                   8  2084  V Z26 T17 1         26
270  7 200         C     INCL,@   @                                7  2092  C E24 G56           26
271  7 210         BE    NXT1                                      5  2099  B J15 S             26
272  7 220         MLC   @ZZZ@,INCL                                7  2104  M G59 E24           26
273  7 230         B     OXRQ                                      4  2111  B K26               26
274  7 240  NXT1   BWZ   NXTA,85,1                                 8  2115  V J32 085 1         27
275  7 250         MLC   BAA,BEE-1                                 7  2123  M F43 F06           27
276  8 010         MLC                                             1  2130  M                   27
277  8 020         MLC                                             1  2131  M                   27
278  8 030  NXTA   SBR   OUTPUT&3,BEG1                            7  2132  H K33 E19           27
279  8 040         B     OXRQ                                      4  2139  B K26               27
280  8 050         SBR   OUTPUT&3,LIST                             7  2143  H K33 E48           27
281  8 060         B     OXRQ                                      4  2150  B K26               28
282  8 070         BWZ   K1,SWITCH,1                               8  2154  V J66 R00 1         28
283  8 080         B     XXX                                       4  2162  B O23               28
284  8 090  K1     SBR   XR1&3,X03                                 7  2166  H T60 T74           28
285  8 100         MLC   @B@,XR1                                   7  2173  M G60 T57           28
286  8 110         MLC   @N@,XR13                                  7  2180  M F99 U39           28
287  8 120         SBR   XR12&3,X06                                7  2187  H U54 V16           29
288  8 130         MLC   @N@,XR14                                  7  2194  M F99 U63           29
289  8 140         MLC   @N@,XR3                                   7  2201  M F99 U75           29
290  8 150         SBR   XR15&3,XXX                                7  2208  H U90 O23           29
291  8 160         MLC   @N@,XR16                                  7  2215  M F99 U99           29
292  8 170         B     X01                                       4  2222  B T28               29
293  8 180  OXRQ   SBR   X2                                        4  2226  H 094               30
294  8 190  OUTPUT MLC   BET,SX                                    7  2230  M E32 Q89           30
295  8 200         SAR   OUTPUT&3                                 4  2237  Q K33               30
296  8 210         BCE   DXQ,SX,.                                 8  2241  B K84 Q89 .         30
297  8 220         BCE   Q1,SX,#                                  8  2249  B K95 Q89 #         30
```

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SEQ PG LIN  LABEL  OP    OPERANDS                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 230         BCE   Q2,SX,)                          8  2257  B L59 Q89 )          30
299  8 240         BCE   Q3,SX,%                          8  2265  B L70 Q89 %          31
300  8 250  RZ     B     PUTX                             4  2273  B 363                31
301  9 010         DCW   SX                               3  2279  Q89                  31
302  9 020         B     OUTPUT                           4  2280  B K30                31
303  9 030  DXQ    SBR   OUTPUT&3,BET                     7  2284  H K33 E32            31
304  9 040         B     0&X2                             4  2291  B 0!0                31
305  9 050  Q1     MLC   @.OP@,SX                        7  2295  M G63 Q89            31
306  9 060         B     RZ                               4  2302  B K73                32
307  9 070  IOCS   BSS   X01,F                            5  2306  B T28 F              32
308  9 080         SBR   XR6&3,MERG                      7  2311  H U06 L26            32
309  9 090         SW    SWT11                            4  2318  , R01                32
310  9 100         B     X01                              4  2322  B T28                32
311  9 110  MERG   B     GETX                             4  2326  B 335                32
312  9 120         DCW   SX                               3  2332  Q89                  32
313  9 130         DCW   EOF                              3  2335  M40                  33
314  9 140         C     SX,@.EE@                         7  2336  C Q89 G66            33
315  9 150         BE    X01B                             5  2343  B Z41 S              33
316  9 160         B     PUTX                             4  2348  B 363                33
317  9 170         DCW   SX                               3  2354  Q89                  33
318  9 180         B     MERG                             4  2355  B L26                33
319  9 190  Q2     MLC   @.LC@,SX                        7  2359  M G69 Q89            33
320  9 200         B     RZ                               4  2366  B K73                34
321  9 210  Q3     MLC   @.MC@,SX                        7  2370  M G72 Q89            34
322  9 220         B     RZ                               4  2377  B K73                34
323  9 230  DONE   B     GETX                             4  2381  B 335                34
324  9 240         DCW   SY                               3  2387  Q98                  34
325  9 250         DCW   *-1                             3  2390  L89                  34
326 10 010  RRR    MLC   CONST,LONE                       7  2391  M Q92 B30            34
327 10 020         SBR   OUTPUT&3,LONE                    7  2398  H K33 B30            35
328 10 030         B     OXRQ                             4  2405  B K26                35
329 10 040         C     CONST,SY                         7  2409  C Q92 Q98            35
330 10 050         BE    XRK1                             5  2416  B O46 S              35
331 10 060         SW    CONST-1                          4  2421  , Q91                35
332 10 070         A     @1@,CONST                        7  2425  A G73 Q92            35
333 10 080         CW    CONST-1                          4  2432  ) Q91                35
334 10 090         B     RRR                              4  2436  B L91                36
335 10 100  EOF    BCE   TTT,998,                         8  2440  B M97 998            36
336 10 110  BCK1   SBR   OUTPUT&3,DEC                     7  2448  H K33 F36            36
337 10 120         MLC   SIT,DEC                          7  2455  M Q95 F36            36
338 10 130         B     OXRQ                             4  2462  B K26                36
339 10 140         C     998,SIT                          7  2466  C 998 Q95            36
340 10 150         BE    TTT                              5  2473  B M97 S              37
341 10 160         SW    SIT-1                            4  2478  , Q94                37
342 10 170         A     @1@,SIT                          7  2482  A G73 Q95            37
343 10 180         CW    SIT-1                            4  2489  ) Q94                37
344 10 190         B     BCK1                             4  2493  B M48                37
345 10 200  TTT    BW    EEE,SWW                          8  2497  V N98 Q99 1          37
346 10 210  MMN    B     GETBLK                           4  2505  B P40                37
347 10 220         DCW   SY                               3  2511  Q98                  38
```

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SEQ PG LIN  LABEL   OP    OPERANDS                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 230          DCW   MMN                           3  2514  N05                 38
349 10 240          C     SY,@.SN@                      7  2515  C Q98 F56           38
350 10 250          BU    MMN                           5  2522  B N05 /             38
351 11 010  MMM     B     GETTP                         4  2527  B P55               38
352 11 020          DCW   SY                            3  2533  Q98                 38
353 11 030          DCW   MMM                           3  2536  N27                 38
354 11 040          C     SY,@.EQ@                      7  2537  C Q98 G76           39
355 11 050          BE    LEO                           5  2544  B N65 S             39
356 11 060          C     SY,@.SN@                      7  2549  C Q98 F56           39
357 11 070          BE    EEE                           5  2556  B N98 S             39
358 11 080          B     MMM                           4  2561  B N27               39
359 11 090  LEO     B     GETTP                         4  2565  B P55               39
360 11 100          DCW   SY                            3  2571  Q98                 39
361 11 110          DCW   MMM                           3  2574  N27                 40
362 11 120          C     SY,@.DE@                      7  2575  C Q98 F98           40
363 11 130          BE    MMM                           5  2582  B N27 S             40
364 11 140          B     PUTX                          4  2587  B 363               40
365 11 150          DCW   SY                            3  2593  Q98                 40
366 11 160          B     LEO                           4  2594  B N65               40
367 11 170  EEE     SBR   OUTPUT&3,LIST1                7  2598  H K33 B43           40
368 11 180          B     OXRQ                          4  2605  B K26               41
369 11 190          B     PUTX                          4  2609  B 363               41
370 11 200          DCW   SSK1                          3  2615  R04                 41
371 11 210          B     SUPER                         4  2616  B 351               41
372 11 220          DCW   @J09@                         3  2622                      41
373 11 230  XXX     SBR   OUTPUT&3,DEG                  7  2623  H K33 E64           41
374 11 240          B     OXRQ                          4  2630  B K26               41
375 11 250          BW    XRK1,1283                     8  2634  V O46 S83 1         42
376 12 010          B     EDD                           4  2642  B P10               42
377 12 020  XRK1    B     GETX                          4  2646  B 335               42
378 12 030          DCW   SY                            3  2652  Q98                 42
379 12 040          DCW   EOF                           3  2655  M40                 42
380 12 050          C     SY,@.XF@                      7  2656  C Q98 G79           42
381 12 060          BE    OVR                           5  2663  B O91 S             42
382 12 070          C     SY,@#ZA@                      7  2668  C Q98 G82           43
383 12 080          BE    DONE                          5  2675  B L81 S             43
384 12 090          B     PUTX                          4  2680  B 363               43
385 12 100          DCW   SY                            3  2686  Q98                 43
386 12 110          B     XRK1                          4  2687  B O46               43
387 12 120  OVR     BWZ   ASSTAP,85,1                   8  2691  V P25 085 1         43
388 12 130  OVR1    SBR   OUTPUT&3,BEE                  7  2699  H K33 F07           43
389 12 140          B     OXRQ                          4  2706  B K26               44
390 12 150  EDD     SBR   OUTPUT&3,BEE1                 7  2710  H K33 F23           44
391 12 160          B     OXRQ                          4  2717  B K26               44
392 12 170          B     XRK1                          4  2721  B O46               44
393 12 180  ASSTAP  SBR   OUTPUT&3,BDA                  7  2725  H K33 F53           44
394 12 190          B     OXRQ                          4  2732  B K26               44
395 12 200          B     OVR1                          4  2736  B O99               44
396 12 210  GETBLK  SBR   X1                            4  2740  H 089               45
397 12 220          SBR   GET1&3,CMAX                   7  2744  H Q10 B07           45
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 230          B     GETT1                                      4  2751  B P59              45
399 12 240  GETTP   SBR   X1                                         4  2755  H 089              45
400 12 250  GETT1   SBR   GET3&3,6&X1                               7  2759  H Q36 0|6          45
401 13 010          MLC   2&X1,GET2&6                               7  2766  M 0|2 Q20          45
402 13 020          MLC   5&X1,GET7&3                               7  2773  M 0|5 Q86          46
403 13 030          C     GET1&3,&CMAX                              7  2780  C Q10 G85          46
404 13 040          BE    GET4                                      5  2787  B Q37 S            46
405 13 050          MA    @003@,GET1&3                                                MACRO
406                 SW    GET1&3-2                                  4  2792  , Q08       GEN    46
407                 A     @003@,GET1&3                              7  2796  A G88 Q10   GEN    46
408                 CW    GET1&3-2                                  4  2803  ) Q08       GEN    46
409 13 060  GET1    MLC   CMAX,C1                                   7  2807  M B07 R07          47
410 13 070  GET2    MLC   C1,*                                      7  2814  M R07 Q20          47
411 13 080          C     C1,@.EB@                                  7  2821  C R07 G91          47
412 13 090          BE    GET6                                      5  2828  B Q76 S            47
413 13 100  GET3    B     0                                         4  2833  B 000              47
414 13 110  GET4    SW    GETGM                                     4  2837  , B08              47
415 13 120          B     IORW                                      4  2841  B 343              47
416 13 130          RT    4,CIN1                                    8  2845  M %U4 R08 R        48
417 13 140          DCW   GET5                                      3  2855  Q67                48
418 13 150          SBR   GET1&3,CIN2                              7  2856  H Q10 R10          48
419 13 160          B     GET1                                      4  2863  B Q07              48
420 13 170  GET5    RWD   4                                         5  2867  U %U4 R            48
421 13 180          B     GET4                                      4  2872  B Q37              48
422 13 190  GET6    SBR   GET1&3,CMAX                              7  2876  H Q10 B07          48
423 13 200  GET7    B     0                                         4  2883  B 000              49
424 13 210  SX      DCW   #3                                        3  2889                     49
425 13 220  CONST   DCW   @ZA1@                                    3  2892                     49
426 13 230  SIT     DCW   @I0A@                                    3  2895                     49
427 13 240  SY      DCW   #3                                        3  2898                     49
428 13 250  SWW     DCW   #1                                        1  2899                     49
429 14 010  SWITCH  DC    #1                                        1  2900                     49
430 14 020  SWT11   DC    #1                                        1  2901                     49
431 14 030  SSK1    DCW   @.EP@                                    3  2904                     49
432 14 040  C1      DCW   #3                                        3  2907                     50
433 14 050  CIN1    DA    1X300                                        2908   3207             50
434 14 060  CIN2          1,3                                          2910             FIELD  50
435 14 070  CMAX          300                                          3207             SBFLD
436 14 080  GETGM   DC    @}@                                       1  3208                     51
437 14 090          DCW   @.@                                       1  3209                     51
438 14 100          DCW   @%@                                       1  3210                     51
439 14 110          DCW   @#20@                                     3  3213                     51
440 14 120          DCW   @#@                                       1  3214                     51
441 14 130          DCW   @DC @                                     3  3217                     52
442 14 140          DCW   @)@                                       1  3218                     52
443 14 150          DCW   @%@                                       1  3219                     52
444 14 160          DCW   @#20@                                     3  3222                     52
445 14 170          DCW   @#@                                       1  3223                     52
446 14 180          DCW   @DCW@                                     3  3226                     52
447 14 190          DCW   @)@                                       1  3227                     52
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 200  LONE   DCW   @   @                                        3  3230                      53
449 14 210         DCW   @.@                                          1  3231                      53
450 14 220         DCW   @%@                                          1  3232                      53
451 14 230         DCW   @RTS@                                        3  3235                      53
452 14 240         DCW   @STA@                                        3  3238                      53
453 14 250         DCW   @#@                                          1  3239                      53
454 15 010         DCW   @END@                                        3  3242                      53
455 15 020  LIST1  DCW   @)@                                          1  3243                      54
456 15 030         DCW   @.@                                          1  3244                      54
457 15 040         DCW   @%@                                          1  3245                      54
458 15 050         DCW   @#50@                                        3  3248                      54
459 15 060         DCW   @#@                                          1  3249                      54
460 15 070         DCW   @DC @                                        3  3252                      54
461 15 080         DCW   @)@                                          1  3253                      54
462 15 090         DCW   @DA1@                                        3  3256                      55
463 15 100         DCW   @%@                                          1  3257                      55
464 15 110         DCW   @#15@                                        3  3260                      55
465 15 120         DCW   @#@                                          1  3261                      55
466 15 130         DCW   @DCW@                                        3  3264                      55
467 15 140         DCW   @)@                                          1  3265                      55
468 15 150         DCW   @%@                                          1  3266                      55
469 15 160         DCW   @  @@                                        3  3269                      56
470 15 170         DCW   @  9@                                        3  3272                      56
471 15 180         DCW   @  @@                                        3  3275                      56
472 15 190         DCW   @#@                                          1  3276                      56
473 15 200         DCW   @DCW@                                        3  3279                      56
474 15 210         DCW   @)@                                          1  3280                      56
475 15 220         DCW   @A0J@                                        3  3283                      56
476 15 230         DCW   @%@                                          1  3284                      57
477 15 240         DCW   @  @@                                        3  3287                      57
478 15 250         DCW   @   @                                        3  3290                      57
479 16 010         DCW   @  @@                                        3  3293                      57
480 16 020         DCW   @#@                                          1  3294                      57
481 16 030         DCW   @DCW@                                        3  3297                      57
482 16 040         DCW   @)@                                          1  3298                      57
483 16 050         DCW   @A0K@                                        3  3301                      58
484 16 060         DCW   @%@                                          1  3302                      58
485 16 070         DCW   @  @@                                        3  3305                      58
486 16 080         DCW   @  @@                                        3  3308                      58
487 16 090         DCW   @  @@                                        3  3311                      58
488 16 100         DCW   @#@                                          1  3312                      58
489 16 110         DCW   @DCW@                                        3  3315                      58
490 16 120         DCW   @)@                                          1  3316                      59
491 16 130         DCW   @A0R@                                        3  3319                      59
492 16 140         DCW   @%@                                          1  3320                      59
493 16 150         DCW   @  @@                                        3  3323                      59
494 16 160         DCW   @  0@                                        3  3326                      59
495 16 170         DCW   @  @@                                        3  3329                      59
496 16 180         DCW   @#@                                          1  3330                      59
497 16 190         DCW   @DCW@                                        3  3333                      60
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
498	16	200		DCW	@)@		1	3334		60
499	16	210		DCW	@A0Q@		3	3337		60
500	16	220		DCW	@%@		1	3338		60
501	16	230		DCW	@#03@		3	3341		60
502	16	240		DCW	@#@		1	3342		60
503	16	250		DCW	@DCW@		3	3345		60
504	17	010		DCW	@)@		1	3346		61
505	17	020		DCW	@CNT@		3	3349		61
506	17	030		DCW	@%@		1	3350		61
507	17	040		DCW	@#05@		3	3353		61
508	17	050		DCW	@#@		1	3354		61
509	17	060		DCW	@DCW@		3	3357		61
510	17	070		DCW	@)@		1	3358		61
511	17	080		DCW	@CNR@		3	3361		62
512	17	090		DCW	@%@		1	3362		62
513	17	100		DCW	@#20@		3	3365		62
514	17	110		DCW	@#@		1	3366		62
515	17	120		DCW	@DC @		3	3369		62
516	17	130		DCW	@)@		1	3370		62
517	17	140		DCW	@%@		1	3371		62
518	17	150		DCW	@#20@		3	3374		63
519	17	160		DCW	@#@		1	3375		63
520	17	170		DCW	@DCW@		3	3378		63
521	17	180		DCW	@)@		1	3379		63
522	17	190		DCW	@GNN@		3	3382		63
523	17	200		DCW	@%@		1	3383		63
524	17	210		DCW	@#20@		3	3386		63
525	17	220		DCW	@#@		1	3387		64
526	17	230		DCW	@DC @		3	3390		64
527	17	240		DCW	@)@		1	3391		64
528	17	250		DCW	@ACM@		3	3394		64
529	18	010		DCW	@%@		1	3395		64
530	18	020		DCW	@#20@		3	3398		64
531	18	030		DCW	@#@		1	3399		64
532	18	040		DCW	@DCW@		3	3402		65
533	18	050		DCW	@)@		1	3403		65
534	18	060		DCW	@SHR@		3	3406		65
535	18	070		DCW	@%@		1	3407		65
536	18	080		DCW	@00 @		3	3410		65
537	18	090		DCW	@000@		3	3413		65
538	18	100		DCW	@#@		1	3414		65
539	18	110		DCW	@DCW@		3	3417		66
540	18	120		DCW	@)@		1	3418		66
541	18	130		DCW	@A05@		3	3421		66
542	18	140		DCW	@%@		1	3422		66
543	18	150		DCW	@RGX@		3	3425		66
544	18	160		DCW	@LTO@		3	3428		66
545	18	170		DCW	@#@		1	3429		66
546	18	180		DCW	@ORG@		3	3432		67
547	18	190		DCW	@)@		1	3433		67

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
548 18 200          DCW   @%@                                          1  3434                      67
549 18 210          DCW   @#03@                                        3  3437                      67
550 18 220          DCW   @#@                                          1  3438                      67
551 18 230          DCW   @DCW@                                        3  3441                      67
552 18 240          DCW   @)@                                          1  3442                      67
553 18 250          DCW   @X3 @                                        3  3445                      68
554 19 010          DCW   @%@                                          1  3446                      68
555 19 020          DCW   @#02@                                        3  3449                      68
556 19 030          DCW   @#@                                          1  3450                      68
557 19 040          DCW   @DC @                                        3  3453                      68
558 19 050          DCW   @)@                                          1  3454                      68
559 19 060          DCW   @%@                                          1  3455                      68
560 19 070          DCW   @#03@                                        3  3458                      69
561 19 080          DCW   @#@                                          1  3459                      69
562 19 090          DCW   @DCW@                                        3  3462                      69
563 19 100          DCW   @)@                                          1  3463                      69
564 19 110          DCW   @X2 @                                        3  3466                      69
565 19 120          DCW   @%@                                          1  3467                      69
566 19 130          DCW   @#02@                                        3  3470                      69
567 19 140          DCW   @#@                                          1  3471                      70
568 19 150          DCW   @DC @                                        3  3474                      70
569 19 160          DCW   @)@                                          1  3475                      70
570 19 170          DCW   @%@                                          1  3476                      70
571 19 180          DCW   @#03@                                        3  3479                      70
572 19 190          DCW   @#@                                          1  3480                      70
573 19 200          DCW   @DCW@                                        3  3483                      70
574 19 210          DCW   @)@                                          1  3484                      71
575 19 220          DCW   @X1 @                                        3  3487                      71
576 19 230          DCW   @%@                                          1  3488                      71
577 19 240          DCW   @87 @                                        3  3491                      71
578 19 250          DCW   @#@                                          1  3492                      71
579 20 010          DCW   @ORG@                                        3  3495                      71
580 20 020          DCW   @)@                                          1  3496                      71
581 20 030          DCW   @%@                                          1  3497                      72
582 20 040          DCW   @*&1@                                        3  3500                      72
583 20 050          DCW   @#@                                          1  3501                      72
584 20 060          DCW   @EQU@                                        3  3504                      72
585 20 070          DCW   @)@                                          1  3505                      72
586 20 080          DCW   @RGX@                                        3  3508                      72
587 20 090          DCW   @LTO@                                        3  3511                      72
588 20 100          DCW   @%@                                          1  3512                      73
589 20 110          DCW   @RG @                                        3  3515                      73
590 20 120          DCW   @LTO@                                        3  3518                      73
591 20 130  BEG1    DCW   @)@                                          1  3519                      73
592 20 140          DCW   @.@                                          1  3520                      73
593 20 150          DCW   @%@                                          1  3521                      73
594 20 160  INCL    DCW   @   @                                        3  3524                      73
595 20 170          DCW   @#@                                          1  3525                      74
596 20 180          DCW   @LD @                                        3  3528                      74
597 20 190          DCW   @INC@                                        3  3531                      74
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

598 20 200  BET    DCW   @)@                                         1  3532                      74
599 20 210         DCW   @.@                                         1  3533                      74
600 20 220         DCW   @%@                                         1  3534                      74
601 20 230         DCW   @*&1@                                       3  3537                      74
602 20 240         DCW   @#@                                         1  3538                      75
603 20 250         DCW   @EQU@                                       3  3541                      75
604 21 010         DCW   @)@                                         1  3542                      75
605 21 020         DCW   @LAY@                                       3  3545                      75
606 21 030  LIST   DCW   @OVR@                                       3  3548                      75
607 21 040         DCW   @.@                                         1  3549                      75
608 21 050         DCW   @%@                                         1  3550                      75
609 21 060         DCW   @*&1@                                       3  3553                      76
610 21 070         DCW   @#@                                         1  3554                      76
611 21 080         DCW   @EQU@                                       3  3557                      76
612 21 090         DCW   @)@                                         1  3558                      76
613 21 100         DCW   @OVR@                                       3  3561                      76
614 21 110  DEG    DCW   @MVE@                                       3  3564                      76
615 21 120         DCW   @.@                                         1  3565                      76
616 21 130         DCW   @%@                                         1  3566                      77
617 21 140         DCW   @LAY@                                       3  3569                      77
618 21 150         DCW   @OVR@                                       3  3572                      77
619 21 160         DCW   @#@                                         1  3573                      77
620 21 170         DCW   @ORG@                                       3  3576                      77
621 21 180         DCW   @)@                                         1  3577                      77
622 21 190         DCW   @%@                                         1  3578                      77
623 21 200         DCW   @OVR@                                       3  3581                      78
624 21 210         DCW   @MVE@                                       3  3584                      78
625 21 220         DCW   @#@                                         1  3585                      78
626 21 230         DCW   @EX @                                       3  3588                      78
627 21 240         DCW   @)@                                         1  3589                      78
628 21 250         DCW   @%@                                         1  3590                      78
629 22 010         DCW   @#01@                                       3  3593                      78
630 22 020         DCW   @#@                                         1  3594                      79
631 22 030         DCW   @DCW@                                       3  3597                      79
632 22 040         DCW   @)@                                         1  3598                      79
633 22 050         DCW   @%@                                         1  3599                      79
634 22 060         DCW   @007@                                       3  3602                      79
635 22 070         DCW   @#@                                         1  3603                      79
636 22 080         DCW   @B  @                                       3  3606                      79
637 22 090  BEE    DCW   @)@                                         1  3607                      80
638 22 100         DCW   @.@                                         1  3608                      80
639 22 110         DCW   @%@                                         1  3609                      80
640 22 120         DCW   @*&1@                                       3  3612                      80
641 22 130         DCW   @#@                                         1  3613                      80
642 22 140         DCW   @EQU@                                       3  3616                      80
643 22 150         DCW   @)@                                         1  3617                      80
644 22 160         DCW   @RTS@                                       3  3620                      81
645 22 170  BEE1   DCW   @STA@                                       3  3623                      81
646 22 180         DCW   @.@                                         1  3624                      81
647 22 190         DCW   @%@                                         1  3625                      81
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

648 22 200          DCW   @#03@                                     3  3628                      81
649 22 210          DCW   @#@                                       1  3629                      81
650 22 220          DCW   @DCW@                                     3  3632                      81
651 22 230          DCW   @)@                                       1  3633                      82
652 22 240  DEC     DCW   @   @                                     3  3636                      82
653 22 250  BAA     DCW   @040#R  @                                 7  3643                      82
654 23 010          DCW   @.@                                       1  3644                      82
655 23 020          DCW   @%@                                       1  3645                      82
656 23 030          DCW   @1,1@                                     3  3648                      82
657 23 040          DCW   @#@                                       1  3649                      82
658 23 050          DCW   @RTW@                                     3  3652                      83
659 23 060  BDA     DCW   @)@                                       1  3653                      83
660 23 070          LTORG                                                  3654
                    DCW   @.SN@                                     3  3656             LIT      83
                          @.DD@                                     3  3659             LIT      83
                          @.IC@                                     3  3662             LIT      83
                          @.DT@                                     3  3665             LIT      83
                          @.DI@                                     3  3668             LIT      83
                          @.IE@                                     3  3671             LIT      84
                          @.IS@                                     3  3674             LIT      84
                          @.ED@                                     3  3677             LIT      84
                          @.LT@                                     3  3680             LIT      84
                          @.DL@                                     3  3683             LIT      84
                          @.DA@                                     3  3686             LIT      84
                          @.LD@                                     3  3689             LIT      84
                          @.LL@                                     3  3692             LIT      85
                          @.CC@                                     3  3695             LIT      85
                          @.DE@                                     3  3698             LIT      85
                          @N@                                       1  3699             LIT      85
                          @ZET@                                     3  3702             LIT      85
                          @YIN@                                     3  3705             LIT      85
                          @ZAX@                                     3  3708             LIT      85
                          @YFM@                                     3  3711             LIT      86
                          @YAQ@                                     3  3714             LIT      86
                          @YNQ@                                     3  3717             LIT      86
                          @YIP@                                     3  3720             LIT      86
                          @ZML@                                     3  3723             LIT      86
                          @ZMR@                                     3  3726             LIT      86
                          @ZDY@                                     3  3729             LIT      86
                          @ZGP@                                     3  3732             LIT      87
                          @YCL@                                     3  3735             LIT      87
                          @XXJ@                                     3  3738             LIT      87
                          @XXK@                                     3  3741             LIT      87
                          @XXL@                                     3  3744             LIT      87
                          @ZFZ@                                     3  3747             LIT      87
                          @XMN@                                     3  3750             LIT      87
                          @ZXZ@                                     3  3753             LIT      88
                          @   @                                     3  3756             LIT      88
                          @ZZZ@                                     3  3759             LIT      88
                          @B@                                       1  3760             LIT      88
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @.OP@                                       3  3763              LIT     88
                         @.EE@                                       3  3766              LIT     88
                         @.LC@                                       3  3769              LIT     88
                         @.MC@                                       3  3772              LIT     89
                         @1@                                         1  3773              LIT     89
                         @.EQ@                                       3  3776              LIT     89
                         @.XF@                                       3  3779              LIT     89
                         @#ZA@                                       3  3782              LIT     89
       403               &CMAX                                       3  3785  B07         ADCON   89
                         @003@                                       3  3788              LIT     89
                         @.EB@                                       3  3791              LIT     90
661 23 080         ORG                                                     3792
662 23 090         DCW   @}@                                         1  3792                      90
663 23 100         END                                                     / 000 080           91
```

```
CLEAR STORAGE 1     ,008015,019026,030,034041,045,053,0570571026                                    1
CLEAR STORAGE 2     L068112,102106,113/101099/I99,027A070028)027B0010270B0261,001/001113I0          2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040          3
```



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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - J09
 102  1 020         CTL   631 11
 103  1 030         ORG   1300                                                 1300
 104  1 040  X1     EQU   89                                                  0089
 105  1 050  IORW   EQU   343                                                 0343
 106  1 060  GETX   EQU   335                                                 0335
 107  1 070  PUTX   EQU   363                                                 0363
 108  1 080  SUPER  EQU   351                                                 0351
 109  1 090  X2     EQU   94                                                  0094
 110  1 100  LOOK   EQU   3400                                                3400
 111  1 110         B     SUPER                                      4  1300  B 351               4
 112  1 120         DCW   @JT1@                                      3  1306                      4
 113  1 130  START  B     GETSX                                      4  1307  B V53               4
 114  1 140         C     SX,@***@                                   7  1311  C J89 J95           4
 115  1 150         BE    NOTE                                       5  1318  B T43 S             4
 116  1 160         C     SX,@.AC@                                   7  1323  C J89 J98           4
 117  1 170         BE    AUTO                                       5  1330  B W00 S             4
 118  1 180         B     PUTSX                                      4  1335  B V71               5
 119  1 190         B     START                                      4  1339  B T07               5
 120  1 200  NOTE   B     GETSX                                      4  1343  B V53               5
 121  1 210         BCE   READ,SX-2,D                                8  1347  B V26 J87 D         5
 122  1 220         BCE   READ1,SX-2,C                               8  1355  B U99 J87 C         5
 123  1 230         BCE   READ1,SX-2,F                               8  1363  B U99 J87 F         5
 124  1 240         BCE   READ1,SX-2,I                               8  1371  B U99 J87 I         6
 125  1 250         B     LOOKUP                                     4  1379  B U28               6
 126  2 010         B     OUTPUT                                     4  1383  B T95               6
 127  2 020  OUTT   BCE   STARTS,1&X2,|                              8  1387  B U17 0!1 |         6
 128  2 030  OUTPUT MLC   3&X2,SX                                    7  1395  M 0!3 J89           6
 129  2 040         A     @3@,X2                                     7  1402  A J99 094           6
 130  2 050         B     PUTSX                                      4  1409  B V71               7
 131  2 060         B     OUTT                                       4  1413  B T87               7
 132  2 070  STARTS B     PUTX                                       4  1417  B 363               7
 133  2 080         DCW   &@*24@                                     3  1423  K02                 7
 134  2 090         B     START                                      4  1424  B T07               7
 135  2 100  LOOKUP SBR   EXITT&3                                    4  1428  H U98               7
 136  2 110  LKK    MLC   &LOOK,X2                                   7  1432  M K05 094           7
 137  2 120  LKC1   BCE   START,0&X2,$                              8  1439  B T07 0!0 $         8
 138  2 130         MLC   0&X2,0&X2                                  7  1447  M 0!0 0!0           8
 139  2 140         SBR   X2                                         4  1454  H 094               8
 140  2 150         C     3&X2,SX                                    7  1458  C 0!3 J89           8
 141  2 160         BU    LKC1                                       5  1465  B U39 /             8
 142  2 170         B     PUTX                                       4  1470  B 363               8
 143  2 180         DCW   &@.DG@                                     3  1476  K08                 8
 144  2 190         B     PUTX                                       4  1477  B 363               9
 145  2 200         DCW   SX                                         3  1483  J89                 9
 146  2 210         MLC   0&X2,0&X2                                  7  1484  M 0!0 0!0           9
 147  2 220         SBR   X2                                         4  1491  H 094               9
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230  EXITT  B     *                                           4  1495  B U98               9
149  2 240  READ1  SBR   EXITS&3                                     4  1499  H V25               9
150  2 250         BW    EXITS,SWK                                   8  1503  V V22 J85 1         9
151  3 010         B     SUPER                                       4  1511  B 351              10
152  3 020         DCW   @JT3@                                      3  1517                     10
153  3 030         SW    SWK                                         4  1518  , J85              10
154  3 040  EXITS  B     *                                           4  1522  B V25              10
155  3 050  READ   SBR   EXX&3                                      4  1526  H V52              10
156  3 060         BW    EXX,SWK1                                    8  1530  V V49 J84 1        10
157  3 070         B     SUPER                                       4  1538  B 351              10
158  3 080         DCW   @JT2@                                      3  1544                     11
159  3 090         SW    SWK1                                        4  1545  , J84              11
160  3 100  EXX    B     *                                           4  1549  B V52              11
161  3 110  GETSX  SBR   EXTR&3                                     4  1553  H V70              11
162  3 120         B     GETX                                        4  1557  B 335              11
163  3 130         DCW   SX                                          3  1563  J89                11
164  3 140         DCW   EOP                                         3  1566  V86                11
165  3 150  EXTR   B     *                                           4  1567  B V70              12
166  3 160  PUTSX  SBR   EXB1&3                                     4  1571  H V85              12
167  3 170         B     PUTX                                        4  1575  B 363              12
168  3 180         DCW   SX                                          3  1581  J89                12
169  3 190  EXB1   B     *                                           4  1582  B V85              12
170  3 200  EOP    B     PUTX                                        4  1586  B 363              12
171  3 210         DCW   SX                                          3  1592  J89                12
172  3 220         B     SUPER                                       4  1593  B 351              13
173  3 230         DCW   @J10@                                      3  1599                     13
174  3 240  AUTO   B     GETSX                                       4  1600  B V53              13
175  3 250         BW    YYY,SWXR                                    8  1604  V W48 J86 1        13
176  4 010  XXX    B     GETBLK                                      4  1612  B X33              13
177  4 020         DCW   SY                                          3  1618  J92                13
178  4 030         DCW   XXX                                         3  1621  W12                13
179  4 040         C     SY,@.AC@                                    7  1622  C J92 J98          14
180  4 050         BU    XXX                                         5  1629  B W12 /            14
181  4 060         SW    SWXR                                        4  1634  , J86              14
182  4 070  X315   B     GETTP                                       4  1638  B X48              14
183  4 080         DCW   SY                                          3  1644  J92                14
184  4 090         DCW   X315                                        3  1647  W38                14
185  4 100  YYY    C     SX,SY                                       7  1648  C J89 J92          14
186  4 110         BE    ZZZ                                         5  1655  B W74 S            15
187  4 120  YYY1   B     GETTP                                       4  1660  B X48              15
188  4 130         DCW   SY                                          3  1666  J92                15
189  4 140         DCW   YYY1                                        3  1669  W60                15
190  4 150         B     YYY                                         4  1670  B W48              15
191  4 160  ZZZ    B     PUTX                                        4  1674  B 363              15
192  4 165         DCW   &@.AC@                                      3  1680  J98                15
193  4 167  ZZK    B     GETTP                                       4  1681  B X48              16
194  4 170         DCW   SY                                          3  1687  J92                16
195  4 180         DCW   ZZZ                                         3  1690  W74                16
196  4 190         BCE   PUT,SY-2,                                   8  1691  B X22 J90          16
197  4 200         C     SY,@.MC@                                    7  1699  C J92 K11          16
```

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SEQ PG LIN  LABEL  OP    OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 210         BE    PUT                                    5  1706  B X22 S           16
199  4 215         B     PUTX                                   4  1711  B 363             16
200  4 217         DCW   &@.AC@                                 3  1717  J98               17
201  4 220         B     START                                  4  1718  B T07             17
202  4 230  PUT    B     PUTX                                   4  1722  B 363             17
203  4 240         DCW   SY                                     3  1728  J92               17
204  4 250         B     ZZK                                    4  1729  B W81             17
205  5 010  GETBLK SBR   X1                                     4  1733  H 089             17
206  5 020         MLC   &CMAX,GET1&3                          7  1737  M K14 Y03         17
207  5 030         B     GETT1                                  4  1744  B X52             18
208  5 040  GETTP  SBR   X1                                     4  1748  H 089             18
209  5 050  GETT1  SBR   GET 3&3,6&X1                          7  1752  H Y29 0|6          18
210  5 060         MLC   2&X1,GET2&6                           7  1759  M 0|2 Y13         18
211  5 070         MLC   5&X1,GET7&3                           7  1766  M 0|5 Y79         18
212  5 080         C     GET1&3,&CMAX                           7  1773  C Y03 K17         18
213  5 090         BE    GET4                                   5  1780  B Y30 S           19
214  5 100         MA    @003@,GET1&3                                     MACRO
215                SW    GET1&3-2                               4  1785  , Y01       GEN   19
216                A     @003@,GET1&3                           7  1789  A K20 Y03   GEN   19
217                CW    GET1&3-2                               4  1796  ) Y01       GEN   19
218  5 110  GET1   MLC   CMAX,C1                               7  1800  M J82 Y82         19
219  5 120  GET2   MLC   C1,*                                  7  1807  M Y82 Y13         19
220  5 130         C     C1,@.EB@                               7  1814  C Y82 K23         20
221  5 140         BE    GET6                                   5  1821  B Y69 S           20
222  5 150  GET3   B     0                                      4  1826  B 000             20
223  5 160  GET4   SW    GETGM                                  4  1830  , J83             20
224  5 170         B     IORW                                   4  1834  B 343             20
225  5 180         RT    4,CIN1                                 8  1838  M %U4 Y83 R       20
226  5 190         DCW   GET5                                   3  1848  Y60               20
227  5 200         MLC   &CIN2,GET1&3                          7  1849  M K26 Y03         21
228  5 210         B     GET1                                   4  1856  B Y00             21
229  5 220  GET5   RWD   4                                      5  1860  U %U4 R           21
230  5 230         B     GET4                                   4  1865  B Y30             21
231  5 240  GET6   MLC   &CMAX,GET1&3                          7  1869  M K29 Y03         21
232  5 250  GET7   B     0                                      4  1876  B 000             21
233  6 010  C1     DCW   #3                                     3  1882                    21
234  6 020  CIN1   DA    1X300                                     1883   2182            22
235  6 030  CIN2         1,3                                       1885           FIELD   22
236  6 040  CMAX         300                                       2182           SBFLD
237  6 050  GETGM  DC    @}@                                 1  2183                    23
238  6 060  SWK1   DC    #1                                  1  2184                    23
239  6 070  SWK    DC    #1                                  1  2185                    23
240  6 080  SWXR   DC    #1                                  1  2186                    23
241  6 090  SX     DCW   #3                                  3  2189                    23
242  6 100  SY     DCW   #3                                  3  2192                    23
243  6 110         LTORG                                          2193
                   DCW   @***@                               3  2195           LIT     23
                         @.A C@                               3  2198            LIT     23
                         @3@                                 1  2199           LIT     24
                         @*24@                               3  2202           LIT     24
```

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
		136			&LOOK		3	2205	D00	ADCON	24
					@.DG@		3	2208		LIT	24
					@.MC@		3	2211		LIT	24
		206			&CMAX		3	2214	J82	ADCON	24
		212			&CMAX		3	2217	J82	ADCON	24
					@003@		3	2220		LIT	25
					@.EB@		3	2223		LIT	25
		227			&CIN2		3	2226	Y85	ADCON	25
		231			&CMAX		3	2229	J82	ADCON	25
244	6	120		ORG					2230		
245	6	130		DCW	@}@		1	2230			25
246	6	140		END					/ 000 080		26

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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1401 COBOL - JT1 PAGE 1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
101	1	010	000	JOB	1401 COBOL - JT1					
102	1	020		CTL	661111					
103	1	030		ORG	2400				2400	
104	1	040		DCW	@$@		1	2400		4
105	1	050		DCW	@HARDWARE DEVICE MULTI-DEFINED |@		31	2431		4
106	1	060		DCW	@E0A@		3	2434		4
107	1	070		DCW	@BLOCK SIZE MUST NOT EXCEED OBJECT-COMPUTER SIZE |@		49	2483		6
108	1	080		DCW	@E0B@		3	2486		6
109	1	090		DCW	@FORM 3 RECORDS NOT PERMITTED |@		31	2517		7
110	1	100		DCW	@E0C@		3	2520		7
111	1	110		DCW	@BLANKS IN HEADER-LABEL ID NOT PERMITTED|@		40	2560		9
112	1	120		DCW	@E04@		3	2563		9
113	1	130		DCW	@UNIT RECORD FILES MUST HAVE STANDARD RECORD SIZE@		48	2611		11
114	1	140		DC	@S |@		4	2615		11
115	1	150		DCW	@E0E@		3	2618		11
116	1	160		DCW	@FORM 4 RECORDS - BLOCK SIZE MUST BE IN CHARACTER@		48	2666		13
117	1	170		DC	@S |@		4	2670		13
118	1	180		DCW	@E0F@		3	2673		13
119	1	190		DCW	@FILE MUST BE SELECTED|@		22	2695		13
120	1	200		DCW	@E0G@		3	2698		14
121	1	210		DCW	@BLOCK SIZE MUST NOT EXCEED 4 DIGITS |@		37	2735		15
122	1	220		DCW	@E0H@		3	2738		16
123	1	230		DCW	@RECORD SIZE MUST NOT EXCEED BLOCK SIZE |@		40	2778		18
124	1	240		DCW	@E0I@		3	2781		18
125	1	250		DCW	@UNIT RECORD FILES MUST HAVE FORM 1 RECORDS|@		43	2824		20
126	2	010		DCW	@E1?@		3	2827		20
127	2	020		DCW	@UNIT RECORD FILE- LABEL RECORDS MUST BE OMITTED |@		49	2876		22
128	2	030		DCW	@E1A@		3	2879		22
129	2	040		DCW	@FILE MUST BE OPENED |@		22	2901		22
130	2	050		DCW	@E1B@		3	2904		22
131	2	060		DCW	@UNIT RECORD FILES MUST NOT RESERVE ALTERNATE @		45	2949		24
132	2	070		DC	@AREAS |@		7	2956		24
133	2	080		DCW	@E1C@		3	2959		24
134	2	090		DCW	@LOAD MODE RESTRICTED IN THIS PROCESSOR |@		40	2999		26
135	2	100		DCW	@E1D@		3	3002		26
136	2	110		DCW	@NUMBER OF FD-S UNEQUAL TO NUMBER OF OPEN-S AN@		45	3047		28
137	2	120		DC	@D/OR CLOSE-S|@		13	3060		28
138	2	130		DCW	@E15@		3	3063		28
139	2	140		LTORG					3064	
140	2	150		ORG					3064	
141	2	160		DCW	@}@		1	3064		28
142	2	170		END					/ 000 080	29

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - JT2
 102  1 020         CTL   661111
 103  1 030         ORG   2400                                                      2400
 104  1 040         DCW   @$@                                                 1  2400                        4
 105  1 050         DCW   @PICTURE EXCEEDS 30 CHARACTERS |@                  31  2431                        4
 106  1 060         DCW   @D01@                                               3  2434                        4
 107  1 070         DCW   @CONFLICTING EDITING CLAUSES|@                     28  2462                        5
 108  1 080         DCW   @D02@                                               3  2465                        5
 109  1 090         DCW   @MUST NOT SPECIFY DECIMAL AT GROUP LEVEL|@         40  2505                        7
 110  1 100         DCW   @D03@                                               3  2508                        7
 111  1 110         DCW   @MUST NOT SPECIFY EDITING AT GROUP LEVEL|@         40  2548                        9
 112  1 120         DCW   @D04@                                               3  2551                        9
 113  1 130         DCW   @CONFLICT BETWEEN PICTURE AND SIZE CLAUSE  |@      43  2594                       11
 114  1 140         DCW   @D05@                                               3  2597                       11
 115  1 150         DCW   @CONFLICT BETWEEN PICTURE AND POINT LOCATION @     44  2641                       13
 116  1 160         DC    @CLAUSE |@                                          8  2649                       13
 117  1 170         DCW   @D06@                                               3  2652                       13
 118  1 180         DCW   @CONFLICT BETWEEN PICTURE AND CLASS CLAUSE |@      43  2695                       15
 119  1 190         DCW   @D07@                                               3  2698                       15
 120  1 200         DCW   @CONFLICT BETWEEN PICTURE AND EDITING CLAUSE  |@   46  2744                       17
 121  1 210         DCW   @D08@                                               3  2747                       17
 122  1 220         DCW   @ELEMENTARY ITEM MUST HAVE SIZE OR PICTURE CLAUSE|@ 49  2796                       19
 123  1 230         DCW   @D0I@                                               3  2799                       19
 124  1 240         DCW   @I/O AREA MUST NOT EXCEED 999 CHARACTERS|@          40  2839                       21
 125  1 250         DCW   @D1A@                                               3  2842                       21
 126  2 010         DCW   @RLI MUST BE 4 CHARACTERS|@                        25  2867                       21
 127  2 020         DCW   @D1B@                                               3  2870                       21
 128  2 030         DCW   @RECORD SIZES WITHIN THIS FD MUST NOT CONFLICT|@   46  2916                       23
 129  2 040         DCW   @D13@                                               3  2919                       23
 130  2 050         DCW   @INVALID EDITING|@                                 16  2935                       23
 131  2 060         DCW   @D14@                                               3  2938                       23
 132  2 070         DCW   @PICTURE CLAUSE INVALID WITH GROUP ITEM |@         40  2978                       25
 133  2 080         DCW   @D99@                                               3  2981                       25
 134  2 090         LTORG                                                           2982
 135  2 100         ORG                                                             2982
 136  2 110         DCW   @}@                                                 1  2982                       25
 137  2 120         END                                                             / 000 080                  26
```

```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101 /I9I#071029C029056B026/B001/0991,001/001117I0?                 2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3


                         1401 COBOL - JT3                                                          PAGE    1


 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 010  000    JOB   1401 COBOL - JT3
 102  1 020         CTL   661111
 103  1 030         ORG   2400                                                                2400
 104  1 040         DCW   @$@                                                    1  2400                       4
 105  1 050         DCW   @END STATEMENTS NOT ASSOCIATED WITH THE FOLLOWING@    48  2448                       6
 106  1 060         DC    @ FILES-  |@                                          10  2458                       6
 107  1 070         DCW   @F0A@                                                  3  2461                       6
 108  1 080         DCW   @INVALID USE OF SUBSCRIPTING|@                        28  2489                       7
 109  1 090         DCW   @H0A@                                                  3  2492                       7
 110  1 100         DCW   @A-FIELD EXCEEDS B-FIELD |@                           25  2517                       8
 111  1 110         DCW   @I00@                                                  3  2520                       8
 112  1 120         DCW   @NON-NUMERIC FIELD USED IN COMPUTATION  |@            40  2560                      10
 113  1 130         DCW   @I01@                                                  3  2563                      10
 114  1 140         DCW   @EDIT MASK TOO SMALL  |@                              22  2585                      10
 115  1 150         DCW   @I0B@                                                  3  2588                      10
 116  1 160         DCW   @A-FIELD EXCEEDS 18 DIGITS  |@                        28  2616                      11
 117  1 170         DCW   @I0C@                                                  3  2619                      11
 118  1 180         DCW   @B-FIELD EXCEEDS 18 DIGITS  |@                        28  2647                      12
 119  1 190         DCW   @I0E@                                                  3  2650                      12
 120  1 200         DCW   @NON-NUMERIC FIGCON USED IN COMPUTATION |@            40  2690                      14
 121  1 210         DCW   @I0F@                                                  3  2693                      14
 122  1 220         DCW   @INVAL ID SOURCE |@                                   16  2709                      14
 123  1 230         DCW   @I0G@                                                  3  2712                      14
 124  1 240         DCW   @INTERMEDIATE RESULTS MUST NOT EXCEED 20 DIGITS  |@   49  2761                      16
 125  1 250         DCW   @I0H@                                                  3  2764                      16
 126  2 010         DCW   @ALPHANUMERIC TO NUMERIC MOVE  |@                     31  2795                      17
 127  2 020         DCW   @I09@                                                  3  2798                      17
 128  2 030         DCW   @INVALID SOURCE- IN PRECEDING STATEMENT |@            40  2838                      19
 129  2 040         DCW   @I1?@                                                  3  2841                      19
 130  2 050         DCW   @ROUNDED EXCLUDES LEFT JUSTIFY CLAUSE|@               37  2878                      20
 131  2 060         DCW   @I11@                                                  3  2881                      21
 132  2 070         DCW   @DECIMAL ALIGNMENT WILL BE IGNORED|@                  34  2915                      21
 133  2 080         DCW   @I12@                                                  3  2918                      22
 134  2 090         DCW   @GROUP ITEM MUST NOT BE USED IN COMPUTATION|@         43  2961                      24
 135  2 100         DCW   @I13@                                                  3  2964                      24
 136  2 110         DCW   @INVALID USE OF GROUP ITEM  |@                        28  2992                      24
 137  2 120         DCW   @I15@                                                  3  2995                      24
 138  2 130         DCW   @ITEM EXCEEDS 20 DIGITS  |@                           25  3020                      25
 139  2 140         DCW   @I17@                                                  3  3023                      25
 140  2 150         DCW   @CLASS CONTRADICTION  |@                              22  3045                      26
 141  2 160         DCW   @I18@                                                  3  3048                      26
 142  2 170         DCW   @INVAL ID USE OF EDITING  |@                           25  3073                      27
 143  2 180         DCW   @I1I@                                                  3  3076                      27
 144  2 190         DCW   @SIZE OF LITERAL MUST EQUAL 1  |@                     31  3107                      28
 145  2 200         DCW   @I2?@                                                  3  3110                      28
 146  2 210         DCW   @INVALID SUBSCRIPTING |@                              22  3132                      29
 147  2 220         DCW   @I2A@                                                  3  3135                      29
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

148  2 230         DCW   @CONDITION NAMES MUST NOT BE USED AS SUBJECTS |@      46  3181                    31
149  2 240         DCW   @C0A@                                               3  3184                    31
150  2 250         LTORG                                                          3185
151  3 010         ORG                                                            3185
152  3 020         DCW   @}@                                                  1  3185                    31
153  3 030         END                                                              / 000 080             32
```

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CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?                2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                3
```



```
 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 101  1 010  000    JOB   1401 COBOL - J10
 102  1 020         CTL   661111
 103  1 030         ORG   1300                                                 1300
 104  1 040  X2     EQU   94                                                  0094
 105  1 050  GETX   EQU   335                                                 0335
 106  1 060  IORW   EQU   343                                                 0343
 107  1 070  CARD   EQU   100                                                 0100
 108  1 080  OUT1   EQU   200                                                 0200
 109  1 090  PRINT  EQU   200                                                 0200
 110  1 100         CC    1                                              2  1300  F 1                 4
 111  1 110         RWD   4                                              5  1302  U %U4 R             4
 112  1 120  C1RB   B     GET X                                           4  1307  B 335               4
 113  1 130         DCW   SX                                             3  1313  A93                 4
 114  1 140         DCW   EOP                                            3  1316  P20                 4
 115  1 145         C     SX,@.AC@                                       7  1317  C A93 C53           4
 116  1 147         BE    AUTCDE                                         5  1324  B W61 S             4
 117  1 150         BWZ   REMOVE,SX-2,S                                  8  1329  V W30 A91 S         5
 118  1 160  XYZ    B     OUT                                            4  1337  B T48               5
 119  1 170         DCW   SX                                             3  1343  A93                 5
 120  1 180         B     C1RB                                           4  1344  B T07               5
 121  1 190  OUT    SBR   X2                                             4  1348  H 094               5
 122  1 200         SBR   EXIT1&3,3&X2                                   7  1352  H U99 0!3           5
 123  1 210         MLC   2&X2,*&4                                       7  1359  M 0!2 T69           5
 124  1 220         MLC   0,SYM                                          7  1366  M 000 B15           6
 125  1 230         BCE   CLEAR,SW,4                                     8  1373  B L61 A69 4         6
 126  1 240  STSW   MLC   @0@,SW                                        7  1381  M C54 A69           6
 127  1 250         C     SYM,@ GM@                                      7  1388  C B15 C57           6
 128  2 010         BE    SUB2                                           5  1395  B V23 S             6
 129  2 020         C     SYM,@ RM@                                      7  1400  C B15 C60           7
 130  2 030         BE    SUB1                                           5  1407  B V12 S             7
 131  2 040         C     SYM,@.DG@                                      7  1412  C B15 C63           7
 132  2 050         BE    DIOG                                           5  1419  B Y73 S             7
 133  2 060         C     SYM,VNOTE                                      7  1424  C B15 A57           7
 134  2 070         BE    A7                                             5  1431  B W04 S             7
 135  2 080         BCE   A4,SYM-2,.                                     8  1436  B V42 B13 .         8
 136  2 090         BCE   A1,SYM-2,                                      8  1444  B V00 B13           8
 137  2 100  C1     A     @2@,COL                                        7  1452  A C64 A68           8
 138  2 110  C2     MLC   COL,*&7                                        7  1459  M A68 U72           8
 139  2 120         MLC   SYM,0                                          7  1466  M B15 000           8
 140  2 130         CW    SYM                                            4  1473  ) B15               9
 141  2 140         C     COL,&CARD&72                                   7  1477  C A68 C67           9
 142  2 150         BL    OUTCD                                          5  1484  B K08 T             9
 143  2 160  EXIT   A     @1@,COL                                        7  1489  A C68 A68           9
 144  2 170  EXIT1  B     0                                              4  1496  B 000               9
 145  2 180  A1     BCE   A2,SYM-1,                                      8  1500  B V34 B14           9
 146  2 190         B     C1                                             4  1508  B U52               9
 147  2 200  SUB1   MLC   RM,SYM                                         7  1512  M B16 B15          10
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  2 210          B     A2                                         4  1519  B V34               10
149  2 220  SUB2    MLC   GM,SYM                                    7  1523  M B18 B15           10
150  2 230          B     A2                                         4  1530  B V34               10
151  2 240  A2      SW    SYM                                        4  1534  , B15               10
152  2 250          B     C2                                         4  1538  B U59               10
153  3 010  A4      C     SYM,@.LC@                                  7  1 542  C B15 C71          10
154  3 020          BU    A5                                         5  1549  B V65 /             11
155  3 030          MLC   &CARD&16,COL                               7  1554  M C74 A68           11
156  3 040          B     EXIT1                                      4  1561  B U96               11
157  3 050  A5      C     SYM,@.OP@                                  7  1565  C B15 C77           11
158  3 060          BU    A6                                         5  1572  B V88 /             11
159  3 070          MLC   &CARD&21,COL                               7  1577  M C80 A68           11
160  3 080          B     EXIT1                                      4  1584  B U96               11
161  3 090  A6      C     SYM,@.MC@                                  7  1588  C B15 C83           12
162  3 100          BU    C1                                         5  1595  B U52 /             12
163  3 110          B     OUTCX                                      4  1600  B X00               12
164  3 120  A7      BCE   OUTCD1,CARD&6,*                           8  1604  B X08 106 *         12
165  3 130          MLC   @*@,CARD&6                                 7  1612  M C84 106           12
166  3 140          MLC   &CARD&9,COL                                7  1619  M C87 A68           12
167  3 150          B     EXIT1                                      4  1626  B U96               13
168  3 160  REMOVE  BWZ   MVE,SX-1,2                               8  1630  V W42 A92 2         13
169  3 170          B     XYZ                                        4  1638  B T37               13
170  3 180  MVE     BCE   XYZ,CARD&6,*                             8  1642  B T37 106 *         13
171  3 190          MLZS  @ @,SX                                   7  1650  Y C88 A93           13
172  3 200          B     XYZ                                        4  1657  B T37               13
173  3 201  AUTCDE  BW    JJK,SW49                                   8  1661  V W84 W99 1         14
174  3 202          SW    SW49                                       4  1669  , W99               14
175  3 203          MLC   @N@,MRG1                                  7  1673  M C89 X22           14
176  3 204          B     C1RB                                       4  1680  B T07               14
177  3 205  JJK     MLC   @B@,MRG1                                  7  1684  M C90 X22           14
178  3 206          CW    SW49                                       4  1691  ) W99               14
179  3 207          B     C1RB                                       4  1695  B T07               14
180  3 208  SW49    DC    #1                                         1  1699                      15
181  3 210  OUTCX   BCE   CK,CARD&21,#                              8  1700  B L76 121 #          15
182  3 220  OUTCD1  A     @1@,SEQ                                    7  1708  A C68 A61           15
183  3 230          MLC   SEQ,CARD&4                                 7  1715  M A61 104           15
184  3 240  MRG1    BSS   MERG,G                                    5  1722  B N06 G             15
185  3 250  OUTB    CS    PRINT&132                                  4  1727  / 332               16
186  4 010          CS                                             1  1731  /                   16
187  4 020          SW    CARD&6,CARD&1                              7  1732  , 106 101           16
188  4 030          BCE   COMT,CARD&6,*                           8  1739  B J97 106 *         16
189  4 040          SW    CARD&21,CARD&16                            7  1747  , 121 116           16
190  4 050          MLC   CARD&80,PRINT&100                         7  1754  M 180 300           16
191  4 060          MLC   CARD&20,PRINT&38                          7  1761  M 120 238           17
192  4 070          MLC   CARD&15,PRINT&32                          7  1768  M 115 232           17
193  4 080  COM1    MLC   CARD&5,PRINT&24                           7  1775  M 105 224           17
194  4 090          BW    DIOGX,DIGG                                 8  1782  V Z05 R75 1         17
195  4 100  WRITE   NOP                                            1  1790  N                   17
196  4 110          BCV   OVFL                                       5  1791  B L56 @             17
197  4 120  OUTCD2  SW    CARD&81                                    4  1796  , 181               17
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  4 130         MLC   @N@,WRITE                                7  1800  M C89 X90           18
199  4 140         B     IORW                                     4  1807  B 343               18
200  4 150         WT    4,CARD&1                                 8  1811  M %U4 101 W         18
201  4 160         DCW   ERROR                                    3  1821  O99                 18
202  4 170         CS    CARD&80                                  4  1822  / 180               18
203  4 180         BCE   OUTCD3,SW,1                              8  1826  B K70 A69 1         18
204  4 190         BCE   OUTCD6,SW,2                              8  1834  B L24 A69 2         19
205  4 200         MLC   &CARD&6,COL                              7  1842  M C93 A68           19
206  4 210         BCE   CK9,SW,9                                 8  1849  B M60 A69 9         19
207  4 220         BCE   CK10,SW,7                                8  1857  B O02 A69 7         19
208  4 230         CW    DIGG                                     4  1865  ) R75               19
209  4 240         B     EXIT1                                    4  1869  B U96               19
210  4 250  DIOG   MLC   @*24@,SYM                               7  1873  M C96 B15           20
211  5 010         SW    DIGG                                     4  1880  , R75               20
212  5 020         B     GETX                                     4  1884  B 335               20
213  5 030         DCW   SX                                       3  1890  A93                 20
214  5 040         DCW   EOP                                      3  1893  P20                 20
215  5 050         MLC   SX,KEEX                                 7  1894  M A93 R78           20
216  5 060         B     A7                                       4  1901  B W04               20
217  5 070  DIOGX  BW    ARND,SWW                                 8  1905  V Z85 A94 1         21
218  5 080         SW    SWW                                      4  1913  , A94               21
219  5 090         MLC   PRINT&132,HOLDB                         7  1917  M 332 C50           21
220  5 100         CS    332                                      4  1924  / 332               21
221  5 110         CS                                             1  1928  /                   21
222  5 120         MLC   @*** DIAGNOSTICS ***@,OUT1&57            7  1929  M D15 257           21
223  5 130         W                                              1  1936  2                   21
224  5 140         CC    J                                        2  1937  F J                 22
225  5 150         CS    299                                      4  1939  / 299               22
226  5 160         MLC   @FLAG@,OUT1&8                           7  1943  M D19 208           22
227  5 170         MLC   @REF@,OUT1&16                           7  1950  M D22 216           22
228  5 180         MLC   @PG  LINE@,OUT1&26                      7  1957  M D30 226           22
229  5 190         MLC   @MESSAGE@,OUT1&43                      7  1964  M D37 243           22
230  5 200         W                                              1  1971  2                   22
231  5 210         CC    J                                        2  1972  F J                 23
232  5 220         CS    299                                      4  1974  / 299               23
233  5 230         MLC   HOLDB,PRINT&132                         7  1978  M C50 332           23
234  5 240  ARND   BWZ   NOZONE,KEEX,2                           8  1985  V !43 R78 2         23
235  5 250         A     @1@,HANG                                 7  1993  A C68 R81           23
236  6 010         SW    HANGER                                   4  2000  , R82               23
237  6 020         MLC   @**@,PRINT&7                            7  2004  M D39 207           23
238  6 030  DIOGY  MLZS  @ @,KEEX                               7  2011  Y C88 R78           24
239  6 040         MLC   KEEX,PRINT&16                          7  2018  M R78 216           24
240  6 050         MLC   @2@,WRITE                              7  2025  M C64 X90           24
241  6 060         MLC   @ @,OUT1&28                            7  2032  M C88 228           24
242  6 070         B     WRITE                                    4  2039  B X90               24
243  6 080  NOZONE A     @1@,NONHAG                               7  2043  A C68 R85           24
244  6 090         SW    NHANG                                    4  2050  , R86               25
245  6 100         B     DIOGY                                    4  2054  B !11               25
246  6 110  OVFLA  CCB   COMAN,1                                  5  2058  F J71 1             25
247  6 120  PUU    SBR   COMAN&3,PUNCH1                          7  2063  H J74 J05           25
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

248  6 130  PUNCH   CS    180                                        4  2070  / 180               25
249  6 140          SW    CARD&81                                    4  2074  , 181               25
250  6 150          MLC   GM,CARD&81                                 7  2078  M B18 181           25
251  6 160          B     IORW                                       4  2085  B 343               26
252  6 170          RT    4,CARD&1                                   8  2089  M %U4 101 R         26
253  6 180          DCW   ALLFIN                                     3  2099  Q82                 26
254  6 190          BSS   PRTA,D                                     5  2100  B J10 D             26
255  6 200  PUNCH1  P                                                1  2105  4                   26
256  6 210          B     PUNCH                                      4  2106  B !70               26
257  6 220  PRTA    CS    332                                        4  2110  / 332               26
258  6 230          CS                                               1  2114  /                   27
259  6 240          SW    CARD&6,CARD&1                              7  2115  , 106 101           27
260  6 250          BCE   COMTA,CARD&6,*                            8  2122  B J75 106 *         27
261  7 010          SW    CARD&21,CARD&16                            7  2130  , 121 116           27
262  7 020          MLC   CARD&80,PRINT&100                         7  2137  M 180 300           27
263  7 030          MLC   CARD&20,PRINT&38                          7  2144  M 120 238           27
264  7 040          MLC   CARD&15,PRINT&32                          7  2151  M 115 232           28
265  7 050  COM1A   MLC   CARD&5,PRINT&20                          7  2158  M 105 220           28
266  7 060          W                                                1  2165  2                   28
267  7 070          BCV   OVFLA                                     5  2166  B !58 @             28
268  7 080  COMAN   B     *                                          4  2171  B J74               28
269  7 090  COMTA   MLC   CARD&80,PRINT&95                          7  2175  M 180 295           28
270  7 100          B     COM1A                                      4  2182  B J58               28
271  7 110  PRINTK  SBR   COMAN&3,PRINTS                            7  2186  H J74 J93           29
272  7 120  PRINTS  B     PUNCH                                      4  2193  B !70               29
273  7 130  COMT    MLC   CARD&80,PRINT&102                         7  2197  M 180 302           29
274  7 140          B     COM1                                       4  2204  B X75               29
275  7 150  OUTCD   BCE   OUTCD4,CARD&6,*                           8  2208  B L09 106 *         29
276  7 160          MLC   CARD&17,SVLAB                            7  2216  M 117 A86           29
277  7 170          CS    CARD&15                                    4  2223  / 115               30
278  7 180          MLC   @1@,SW                                   7  2227  M C68 A69           30
279  7 190          SW    CARD&72                                    4  2234  , 172               30
280  7 200  OUTCD5  MLC   COL,*&4                                   7  2238  M A68 K48           30
281  7 210          MLCWA 0,SAVE                                     7  2245  L 000 A90           30
282  7 220          MLC   VAT,CARD&75                              7  2252  M A65 175           30
283  7 230          CW    CARD&72,CARD&73                            7  2259  ) 172 173           31
284  7 240          B     OUTCD1                                     4  2266  B X08               31
285  7 250  OUTCD3  MLC   SVLAB,CARD&17                            7  2270  M A86 117           31
286  8 010          MLC   VAT-3,CARD&21                            7  2277  M A62 121           31
287  8 020          A     @I50@,COL                                7  2284  A D42 A68           31
288  8 030          MLC   COL,*&7                                  7  2291  M A68 L04           31
289  8 040          MLC   SAVE,0                                   7  2298  M A90 000           32
290  8 050          B     EXIT                                       4  2305  B U89               32
291  8 060  OUTCD4  SW    CARD&73                                    4  2309  , 173               32
292  8 070          MLC   @2@,SW                                   7  2313  M C64 A69           32
293  8 080          B     OUTCD5                                     4  2320  B K38               32
294  8 090  OUTCD6  MLC   @*@,CARD&6                               7  2324  M C84 106           32
295  8 100          A     @I36@,COL                                7  2331  A D45 A68           33
296  8 110          MLC   COL,*&7                                  7  2338  M A68 L51           33
297  8 120          MLC   SAVE,0                                   7  2345  M A90 000           33
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  8 130         B     EXIT                                     4  2352  B U89              33
299  8 140  OVFL   CCB   OUTCD2,1                                 5  2356  F X96 1            33
300  8 150  CLEAR  CS    CARD&81                                  4  2361  / 181              33
301  8 160         MLC   @ }@,CA RD&81                            7  2365  M D47 181          34
302  8 170         B     STSW                                     4  2372  B T81              34
303  8 180  CK     SW    CARD&6,CARD&22                           7  2376  , 106 122          34
304  8 190         MLC   @00000@,CHECK                           7  2383  M D52 B05          34
305  8 200         MLC   CARD&11,KEEP                            7  2390  M 111 B12          34
306  8 210         MLC   COL,*&4                                 7  2397  M A68 M07          34
307  8 220         MLC   *,CHECK&1                              7  2404  M M10 B06          35
308  8 230         C     @00050@,CHECK                            7  2411  C D57 B05          35
309  8 240         BL    CK7                                      5  2418  B M49 T            35
310  8 250         BE    CK7                                      5  2423  B M49 S            35
311  9 010         MLC   BLANK,CARD&11                           7  2428  M B00 111          35
312  9 020         MLC   @50   @,CARD&26                          7  2435  M D62 126          35
313  9 030         MLC   @9@,SW                                  7  2442  M D63 A69          36
314  9 040  CK7    CW    CARD&6,CARD&22                           7  2449  ) 106 122          36
315  9 050         B     OUTCD1                                   4  2456  B X08              36
316  9 060  CK9    MLC   KEEP,CARD&11                           7  2460  M B12 111          36
317  9 070         MLC   @DS@,CARD&17                            7  2467  M D65 117          36
318  9 080         S     @50@,CHECK                               7  2474  S D67 B05          36
319  9 090         MLZS  @ @,CHECK                                7  2481  Y C88 B05          37
320  9 100         MLC   CHECK,CARD&25                           7  2488  M B05 125          37
321  9 110         MLC   @0@,SW                                  7  2495  M C54 A69          37
322  9 120         B     OUTCD1                                   4  2502  B X08              37
323  9 130  MERG   BW    MERG1,SWX1                               8  2506  V O43 R87 1        37
324  9 140         C     CARD&11,@STARTS@                         7  2514  C 111 D73          38
325  9 150         BU    OUTB                                     5  2521  B X27 /            38
326  9 160         SW    SWX1                                     4  2526  , R87              38
327  9 170         MLC   CARD&4,SAVV                            7  2530  M 104 R90          38
328  9 180         A     @1@,SAV V                                7  2537  A C68 R90          38
329  9 190         B     IORW                                     4  2544  B 343              38
330  9 200         RT    3,IN                                     8  2548  M %U3 R91 R        39
331  9 210         DCW   MGG7                                     3  2558  O25                39
332  9 220  MERGG  SW    IN&7,CARD                                7  2559  , R98 100          39
333  9 230         MLC   CARD&80,SRX                             7  2566  M 180 A54          39
334  9 240  MERG3  CS    CARD&80                                  4  2573  / 180              39
335  9 250         MLC   IN&79,CARD&80                           7  2577  M ?70 180          39
336 10 010         MLC   @*@,CARD&6                               7  2584  M C84 106          40
337 10 020         MLC   @7@,SW                                  7  2591  M D74 A69          40
338 10 030         B     OUTB                                     4  2598  B X27              40
339 10 040  CK10   B     IORW                                     4  2602  B 343              40
340 10 050         RT    3,IN                                     8  2606  M %U3 R91 R        40
341 10 060         DCW   MGG7                                     3  2616  O25                40
342 10 070         BCE   MERG3,IN&7,                              8  2617  B N73 R98          41
343 10 080  MGG7   MLC   SRX,CARD&80                            7  2625  M A54 180          41
344 10 090         MLC   @0@,SW                                  7  2632  M C54 A69          41
345 10 100         B     OUTB                                     4  2639  B X27              41
346 10 110  MERG1  BCE   OUTB,CARD&6,*                           8  2643  B X27 106 *        41
347 10 120         BWZ   MERG7,CARD&6,K                          8  2651  V O63 106 K        42
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
348 10 130          B     OUTB                                             4  2659  B X27               42
349 10 140  MERG7   BCE   MERGG1,CARD&9,                                   8  2663  B O75 109           42
350 10 150          B     OUTB                                             4  2671  B X27               42
351 10 160  MERGG1  C     CARD&4,SAVV                                      7  2675  C 104 R90           42
352 10 170          BE    OUTB                                             5  2682  B X27 S             42
353 10 180          BWZ   MERGG,CARD&7,2                                  8  2687  V N59 107 2         43
354 10 190          B     OUTB                                             4  2695  B X27               43
355 10 200  ERROR   CS    332                                              4  2699  / 332               43
356 10 210          CS                                                     1  2703  /                   43
357 10 220          MLC   @END OF REEL@,250                                7  2704  M D85 250           43
358 10 230          CC    J                                                2  2711  F J                 43
359 10 240          W                                                      1  2713  2                   43
360 10 250          CC    1                                                2  2714  F 1                 44
361 11 010          H     *-3                                              4  2716  . P16               44
362 11 020  EOP     CC    K                                                2  2720  F K                 44
363 11 030          BW    HH1,HANGER                                       8  2722  V Q91 R82 1         44
364 11 040          BW    HH2,NHANG                                        8  2730  V R24 R86 1         44
365 11 050  AFTN    CC    1                                                2  2738  F 1                 44
366 11 060          CS    332                                              4  2740  / 332               44
367 11 070          CS                                                     1  2744  /                   45
368 11 080          MLC   @IF EXTRA OUTPUT DESIRED@,247                   7  2745  M E08 247           45
369 11 090          W                                                      1  2752  2                   45
370 11 100          CC    K                                                2  2753  F K                 45
371 11 110          CS    299                                              4  2755  / 299               45
372 11 120          MLC   @B ON FOR PUNCHED AUTOCODER@,250                7  2759  M E34 250           45
373 11 130          W                                                      1  2766  2                   45
374 11 140          CS    299                                              4  2767  / 299               46
375 11 150          MLC   @D ON FOR PRINTED LISTING@,248                  7  2771  M E58 248           46
376 11 160          W                                                      1  2778  2                   46
377 11 170          CC    K                                                2  2779  F K                 46
378 11 180          CS    299                                              4  2781  / 299               46
379 11 190          MLC   @AND PRESS START@,238                           7  2785  M E73 238           46
380 11 200          W                                                      1  2792  2                   46
381 11 210          CS    299                                              4  2793  / 299               47
382 11 220          MLC   @IF NO EXTRA OUTPUT DESIRED, PRESS START@,263    7  2797  M F12 263           47
383 11 230          W                                                      1  2804  2                   47
384 11 240          CC    1                                                2  2805  F 1                 47
385 11 250          WTM   4                                                5  2807  U %U4 M             47
386 12 010          RWD   4                                                5  2812  U %U4 R             47
387 12 020          H                                                      1  2817  .                   47
388 12 030          BSS   PUU,B                                            5  2818  B !63 B             48
389 12 040          BSS   PRINTK,D                                         5  2823  B J86 D             48
390 12 050          CS    332                                              4  2828  / 332               48
391 12 060          CS                                                     1  2832  /                   48
392 12 070          MLC   @END OF COMPILATION-AUTOCODER ON TAPE UNIT 4@,280 7  2833  M F55 280           48
393 12 080          CC    1                                                2  2840  F 1                 48
394 12 090          W                                                      1  2842  2                   48
395 12 100          CC    1                                                2  2843  F 1                 49
396 12 110          RWD   1                                                5  2845  U %U1 R             49
397 12 120          RWD   5                                                5  2850  U %U5 R             49
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
398 12 130          RWD   6                                             5  2855  U %U6 R             49
399 12 140          RWD   4                                             5  2860  U %U4 R             49
400 12 150          H     *-3                                           4  2865  . Q65               49
401 12 160          B     *-7                                           4  2869  B Q65               49
402 12 170  PKT     CS    180                                           4  2873  / 180               50
403 12 180          P                                                   1  2877  4                   50
404 12 190          B     AFTN                                          4  2878  B P38               50
405 12 200  ALLFIN BSS   PKT,B                                         5  2882  B Q73 B             50
406 12 210          B     AFTN                                          4  2887  B P38               50
407 12 220  HH1     SBR   EXI&3                                         4  2891  H R23               50
408 12 230  HHH     CS    332                                           4  2895  / 332               50
409 12 240          CS                                                  1  2899  /                   51
410 12 250          MLC   @NUMBER OF ERRORS NEEDING CORRECTION-@,275    7  2900  M F91 275           51
411 13 010          MCS   HANG,280                                      7  2907  Z R81 280           51
412 13 020          W                                                   1  2914  2                   51
413 13 030          BCV   OVV                                           5  2915  B R64 @             51
414 13 040  EXI     B     *                                             4  2920  B R23               51
415 13 050  HH2     SBR   EXRI&3                                        4  2924  H R63               51
416 13 060          CS    332                                           4  2928  / 332               52
417 13 070          CS                                                  1  2932  /                   52
418 13 080          MLC   @TOTAL NUMBER OF DIAGNOSTICS-@,267           7  2933  M G19 267           52
419 13 090          A     NONHAG,HANG                                   7  2940  A R85 R81           52
420 13 100          MCS   HANG,272                                      7  2947  Z R81 272           52
421 13 110          W                                                   1  2954  2                   52
422 13 120          BCV   OVK                                           5  2955  B R69 @             52
423 13 130  EXRI    B     *                                             4  2960  B R63               53
424 13 140  OVV     CCB   EXI,1                                         5  2964  F R20 1             53
425 13 150  OVK     CCB   EXRI,1                                        5  2969  F R60 1             53
426 13 160          H                                                   1  2974  .                   53
427 13 170  DIGG    DC    #1                                            1  2975                      53
428 13 180  KEEX    DCW   #3                                            3  2978                      53
429 13 190  HANG    DCW   @000@                                         3  2981                      53
430 13 200  HANGER DC    #1                                            1  2982                      53
431 13 210  NONHAG DCW   @000@                                         3  2985                      53
432 13 220  NHANG  DC    #1                                            1  2986                      54
433 13 230  SWX1   DC    #1                                            1  2987                      54
434 13 240  SAVV   DCW   #3                                            3  2990                      54
435 13 250  IN     DA    1X82                                             2991   3072               54
436 14 010          DA    1X82                                             3073   3154               54
437 14 020  SRX     EQU   *                                                3154
438 14 030  VNOTE  DCW   @*24@                                          3  3157                      55
439 14 040  SEQ    DCW   @0100@                                        4  3161                      55
440 14 050  VAT    DCW   @@   @                                        4  3165                      55
441 14 060  COL    DCW   CARD&6                                        3  3168  106                 55
442 14 070  SW     DCW   @4@                                           1  3169                      55
443 14 080  SVLAB  DCW   #17                                          17  3186                      55
444 14 090  SAVE   DCW   #4                                            4  3190                      55
445 14 100  SX     DCW   #3                                            3  3193                      56
446 14 110  SWW    DC    #1                                            1  3194                      56
447 14 120  BLANK  DCW   #6                                            6  3200                      56
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

448 14 130  CHECK  DCW   #5                                        5  3205                      56
449 14 140         DC    #1                                        1  3206                      56
450 14 150  KEEP   DCW   #6                                        6  3212                      56
451 14 160  SYM    DCW   #3                                        3  3215                      56
452 14 170  RM     DCW   @|@                                       1  3216                      56
453 14 180  GM     DCW   @ }@                                      2  3218                      56
454 14 190         DA    1X132                                        3219   3350               57
455 14 200  HOLDB  EQU   *                                            3350
456 14 210         LTORG                                                    3351
                   DCW   @.AC@                                     3  3353            LIT     57
                         @0@                                       1  3354            LIT     57
                         @ GM@                                     3  3357            LIT     57
                         @ RM@                                     3  3360            LIT     57
                         @.DG@                                     3  3363            LIT     57
                         @2@                                       1  3364            LIT     57
       141               &CARD&72                                  3  3367  172       ADCON   58
                         @1@                                       1  3368            LIT     58
                         @.LC@                                     3  3371            LIT     58
       155               &CARD&16                                  3  3374  116       ADCON   58
                         @.OP@                                     3  3377            LIT     58
       159               &CARD&21                                  3  3380  121       ADCON   58
                         @.MC@                                     3  3383            LIT     58
                         @*@                                       1  3384            LIT     59
       166               &CARD&9                                   3  3387  109       ADCON   59
                         @ @                                       1  3388            LIT     59
                         @N@                                       1  3389            LIT     59
                         @B@                                       1  3390            LIT     59
       205               &CARD&6                                   3  3393  106       ADCON   59
                         @*24@                                     3  3396            LIT     59
       222               @*** DIAGNOSTICS ***@                    19  3415            LIT     60
                         @FLAG@                                    4  3419            LIT     60
                         @REF@                                     3  3422            LIT     60
       228               @PG  LINE@                                8  3430            LIT     60
       229               @MESSAGE@                                 7  3437            LIT     61
                         @**@                                      2  3439            LIT     61
                         @I50@                                     3  3442            LIT     61
                         @I36@                                     3  3445            LIT     61
                         @ }@                                      2  3447            LIT     61
       304               @00000@                                   5  3452            LIT     61
       308               @00050@                                   5  3457            LIT     61
       312               @50   @                                   5  3462            LIT     62
                         @9@                                       1  3463            LIT     62
                         @DS@                                      2  3465            LIT     62
                         @50@                                      2  3467            LIT     62
       324               @STARTS@                                  6  3473            LIT     62
                         @7@                                       1  3474            LIT     62
       357               @END OF REEL@                            11  3485            LIT     62
       368               @IF EXTRA OUTPUT DESIRED@                23  3508            LIT     63
       372               @B ON FOR PUNCHED AUTOCODER@             26  3534            LIT     64
       375               @D ON FOR PRINTED LISTING@               24  3558            LIT     65
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

       379              @AND PRESS START@                                     15  3573              LIT     65
       382              @IF NO EXTRA OUTPUT DESIRED, PRESS START@             39  3612              LIT     66
       392              @END OF COMPILATION-AUTOCODER ON TAPE UNIT 4@         43  3655              LIT     68
       410              @NUMBER OF ERRORS NEEDING CORRECTION-@                36  3691              LIT     69
       418              @TOTAL NUMBER OF DIAGNOSTICS-@                        28  3719              LIT     70
457 14 220         ORG                                                                  3720
458 14 230         DCW   @}@                                                  1  3720                      70
459 14 240         END                                                                  / 000 080           71
```