```
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

                          FORTRAN COMPILER -- NORMAL FORMAT -- PHASE 54C                          PAGE    1

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

 101                JOB   FORTRAN COMPILER -- NORMAL FORMAT -- PHASE 54C
 102                CTL   6611
 103         *
 104         * NORMAL FORMAT ROUTINE
 105         *
 106         * FOR EACH INPUT-OUTPUT STATEMENT, AN ENTRY TO THE FORMAT
 107         * ROUTINE IS COMPILED.  FOLLOWING THIS APPEARS:
 108         * 1. A CODE INDICATING THE APPROPRIATE I/O DEVICE;
 109         *    & IS READ, - IS PUNCH, * IS PRINT, OTHERWISE DIGIT PART
 110         *    IS TAPE NUMBER AND NO ZONE IS READ TAPE, A ZONE IS WRITE
 111         *    TAPE, B ZONE IS READ INPUT TAPE, AB ZONE IS WRITE OUTPUT
 112         *    TAPE;
 113         * 2. THE ADDRESS OF A SERIES OF INSTRUCTIONS (FORMAT STRING)
 114         *    WHICH DETERMINES THE ARRANGEMENT OF THE DATA (COMPILED
 115         *    FROM THE REFERENCED FORMAT STATEMENT); AND
 116         * 3. THE ADDRESS OF THE SPECIFIED LIST OF DATA (LIST STRING).
 117         *
 118         * THE FORMAT STRING CONSISTS OF
 119         * 1. BRANCHES TO APPROPRIATE CLOSED SUBROUTINES OF THE FORMAT
 120         *    ROUTINE,
 121         * 2. PARAMETERS DESCRIBING THE DATA WHICH ARE NEEDED BY THESE
 122         *    SUBROUTINES,
 123         * 3. THE DATA ITSELF (H-CONVERSION FIELDS), AND
 124         * 4. CERTAIN REGISTER-UPDATING INSTRUCTIONS.
 125         *
 126         X1     EQU   89                                                 0089
 127         X2     EQU   94                                                 0094
 128         X3     EQU   99                                                 0099
 129         *
 130         * ADDRESS IN FORMAT LOADER
 131         *
 132         NRET   EQU   982   RETURN HERE FROM NORMAL LOAD                 0982
 133         *
 134         * ADDRESS IN FUNCTION LOADER
 135         *
 136         LISENT EQU   912  I/O LIST PROCESSING CONTINUATION ADDRESS      0912
 137         *
 138         * RUNTIME ADDRESSES
 139         *
 140         SNAPSH EQU   333  ENTRY TO SNAPSHOT ROUTIE                      0333
 141         MANWID EQU   837  MANTISSA WIDTH. IN ARITHMETIC INTERPRETER     0837
 142         *
 143                ORG   1697                                                      1697
 144  1 697  BEGINN SBR   X1                                                4  1697  H 089                4
 145  1 701         MCW   0&X1,UNIT                                         7  1701  M 0|0 J36            4
 146  1 708         MCW   *-6,TAPE  ASSUME TAPE I/O WITHOUT WORD MARKS      7  1708  M X08 D34            4
 147  1 715         SBR   RELENT&3,7&X1                                     7  1715  H J35 0|7            4
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  1 722          MCW   6&X1,LSTPOS                                       7  1722  M 0|6 Z68           4
149  1 729          ZA    *-6,A12K                                          7  1729  ? X29 L27           4
150  1 736          CW    RDFLAG    START BY ASSUMING WRITE                 4  1736  ) 23V               5
151  1 740          SW    GMWM                                              4  1740  , 27Z               5
152  1 744          MCW   3&X1,X2                                          7  1744  M 0|3 094           5
153  1 751          SBR   X3,200                                           7  1751  H 099 200           5
154  1 758          SBR   ENDREC,334                                       7  1758  H 23Y 334           5
155  1 765          BCE   READCD,0&X1,&  READ CARD                        8  1765  B E56 0|0 &         5
156  1 773          BCE   PUNCH,0&X1,-   PUNCH                           8  1773  B E25 0|0 -         6
157  1 781          BCE   CLEARP,0&X1,*  PRINT                           8  1781  B D71 0|0 *         6
158  1 789          BM    RDTAPE,0&X1    READ TAPE FORMATTED              8  1789  V C12 0|0 K         6
159  1 797          BWZ   CLEARW,0&X1,B  WRITE TAPE FORMATTED             8  1797  V C75 0|0 B         6
160  1 805          SBR   X2,GETWM                                        7  1805  H 094 Z16           6
161  1 812          CS    332                                             4  1812  / 332               7
162  1 816          CS                                                    1  1816  /                   7
163  1 817          CS                                                    1  1817  /                   7
164  1 818          SBR   X3,100                                          7  1818  H 099 100           7
165  1 825          MCW   LCA,TAPE  TAPE I/O WITH WORD MARKS              7  1825  M !79 D34           7
166  1 832          SW    0&X3                                            4  1832  , 0?0               7
167  1 836          B     1943                                            4  1836  B Z43               7
168  1 840          BWZ   RDTAPE,UNIT,2                                   8  1840  V C12 J36 2         8
169  1 848          SBR   RECPOS,100                                      7  1848  H 24/ 100           8
170            *
171            * FIND THE RIGHT-HAND (HIGHER CORE ADDRESS) OF A HOLLERITH
172            * FIELD WITH A LEFT-HAND END HAVING A WORD MARK, AS IT IS
173            * MOVED TO THE OUTPUT BUFFER.
174            *
175  1 855  CHARS  MCW   0&X1,0&X3                                         7  1855  M 0|0 0?0           8
176  1 862          SAR   X2                                              4  1862  Q 094               8
177  1 866          B     INCX3                                           4  1866  B J37               8
178  1 870          BW    *&5,1&X2                                        8  1870  V Y82 0!1 1         8
179  1 878          B     CHARS                                           4  1878  B Y55               9
180  1 882          B     CHKLEN                                          4  1882  B Q08               9
181  1 886          SBR   2222,REDOIO                                     7  1886  H K22 C84           9
182  1 893          B     1832                                            4  1893  B Y32               9
183            *
184            * MOVE A FIELD TO THE OUTPUT BUFFER
185            *
186  1 897  GOTWM  B     CHKLEN                                          4  1897  B Q08               9
187  1 901          LCA   0&X3,0&X1                                       7  1901  L 0?0 0|0           9
188  1 908          B     1943                                            4  1908  B Z43               9
189  1 912  GETWML B     INCX3      GET X3 UP TO                         4  1912  B J37              10
190  1 916  GETWM  BW    GOTWM,1&X3   ONE BELOW NEXT WM                  8  1916  V Y97 0?1 1        10
191  1 924          B     GETWML                                          4  1924  B Z12              10
192            *
193  1 928          SBR   2222                                            4  1928  H K22              10
194  1 932          MCW   X3,RECPOS                                       7  1932  M 099 24/          10
195  1 939          B     0&X2                                            4  1939  B 0!0              10
196            *
197  1 943          SBR   2006                                            4  1943  H !06              10
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 947          MCW   X2,SX2&6                                          7  1947  M 094 !02           11
199  1 954          BW    2031,FLAG                                         8  1954  V !31 23U 1         11
200  1 965             T  LISENT                                            4  1962  T 912               11
201  1 968  LSTPOS  DCW   #3  POSITION IN I/O LIST                          3  1968                      11
202  1 969          SBR   X2                                               4  1969  H 094               11
203  1 973          MZ    NOZONE,X1-1                                       7  1973  Y B62 088           11
204  1 980          BCE   2046,X1,.                                         8  1980  B !46 089 .         12
205  1 988          BCE   2007,X1,                                          8  1988  B !07 089           12
206  1 996  SX2     SBR   X2,0                                              7  1996  H 094 000           12
207  2 003          B     0                                                 4  2003  B 000               12
208          *
209  2 007          BW    RELENT,RDFLAG                                     8  2007  V J32 23V 1         12
210  2 015          C     RECPOS,X3                                         7  2015  C 24/ 099           13
211  2 022          BU    2208                                              5  2022  B K08 /             13
212  2 027          B     RELENT                                            4  2027  B J32               13
213  2 031          CW    FLAG                                              4  2031  ) 23U               13
214  2 035          MCW   SX1,X1                                           7  2035  M 24Z 089           13
215  2 042          B     1973                                              4  2042  B Z73               13
216          *
217  2 046          MCW   2&X2,X3                                          7  2046  M 0!2 099           13
218  2 053          MCW   5&X2,X1                                          7  2053  M 0!5 089           14
219  2 060          MCW   1&X1,CH                                          7  2060  M 0|1 24S           14
220  2 067          BW    LCA,1&X1                                          8  2067  V !79 0|1 1         14
221  2 075          CW    WMFLAG                                            4  2075  ) 24T               14
222  2 079  LCA     LCA   GMWM,1&X1                                        7  2079  L 27Z 0|1           14
223  2 086          B     INCX3                                             4  2086  B J37               14
224  2 090          SBR   X2,*&13                                          7  2090  H 094 J09           15
225  2 097          BWZ   RDTAPE,UNIT,2                                     8  2097  V C12 J36 2         15
226  2 105          B     REDOIO                                            4  2105  B C84               15
227  2 109          MCW   CH,1&X1                                          7  2109  M 24S 0|1           15
228  2 116          BW    RELENT,WMFLAG                                     8  2116  V J32 24T 1         15
229  2 124          CW    1&X1                                              4  2124  ) 0|1               15
230  2 128          SW    WMFLAG                                            4  2128  , 24T               16
231  2 132  RELENT  B     0   ENTER HERE FROM RELOCATABLE FUNCTION TABLE    4  2132  B 000               16
232  2 136  UNIT    DCW   #1  TAPE UNIT NUMBER                             1  2136                      16
233          *
234          * INCREMENT X3 BY 1.
235          *
236  2 137  INCX3   SBR   INCX3X&3                                         4  2137  H J51               16
237  2 141          SBR   X3,1&X3                                         7  2141  H 099 0?1           16
238  2 148  INCX3X  B     0                                               4  2148  B 000               16
239          *
240  2 152          SBR   X2                                              4  2152  H 094               16
241  2 156          MN    0&X2                                            4  2156  D 0!0               17
242  2 160          MN                                                    1  2160  D                   17
243  2 161          MN                                                    1  2161  D                   17
244  2 162          MN                                                    1  2162  D                   17
245  2 163          SAR   2309                                            4  2163  Q L09               17
246  2 167          MCW   2&X2,COUNT                                      7  2167  M 0!2 24W           17
247  2 174          SBR   2207,3&X2                                       7  2174  H K07 0!3           17
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  2 181          B     *&5                                          4  2181  B J89               18
249  2 185          SBR   X2                                           4  2185  H 094               18
250  2 189          S     K1,COUNT                                     7  2189  S E74 24W           18
251  2 196          BM    0&X2,COUNT                                   8  2196  V 0!0 24W K         18
252  2 204          B     0                                            4  2204  B 000               18
253          *
254  2 208          SBR   X2                                           4  2208  H 094               18
255  2 212          MCW   RECPOS,X3                                    7  2212  M 24/ 099           18
256  2 219          B     0                                            4  2219  B 000               19
257          *
258  2 223          BW    *&13,RDFLAG                                  8  2223  V K43 23V 1         19
259  2 231          C     RECPOS,X3                                    7  2231  C 24/ 099           19
260  2 238          BU    2208                                         5  2238  B K08 /             19
261  2 243          MCW   LSTPOS,*&7                                   7  2243  M Z68 K56           19
262  2 250          BCE   2298,0,,                                     8  2250  B K98 000 ,         19
263  2 258          MCW   LSTPOS,LISTP2                               7  2258  M Z68 K71           20
264  2 268             T  LISENT                                       4  2265  T 912               20
265  2 271  LISTP2  DCW   #3                                           3  2271                      20
266  2 272          BCE   RELENT,X1,                                   8  2272  B J32 089           20
267  2 280          MCW   LISTP2,LSTPOS                               7  2280  M K71 Z68           20
268  2 287          MCW   X1,SX1                                      7  2287  M 089 24Z           20
269  2 294          SW    FLAG                                         4  2294  , 23U               21
270  2 298          BW    2208,RDFLAG                                  8  2298  V K08 23V 1         21
271  2 306          B     0                                            4  2306  B 000               21
272          *
273  2 310          SBR   X2                                           4  2310  H 094               21
274  2 314          ZA    2&X2,A12K                                    7  2314  ? 0!2 L27           21
275  2 321          B     3&X2                                         4  2321  B 0!3               21
276          *
277  2 327  A12K    DSA   12000                                        3  2327  00?                 21
278          *
279          * COPY THE ARGUMENT TO THE OUTPUT BUFFER
280          *
281  2 328          SBR   X2                                           4  2328  H 094               22
282  2 332  CPARGL  BW    *&8,RDFLAG                                   8  2332  V L47 23V 1         22
283  2 340          MCW   0&X2,0&X3                                    7  2340  M 0!0 0?0           22
284  2 347          MCW   0&X3,0&X2  WHY?                             7  2347  M 0?0 0!0           22
285  2 354          B     INCX3                                        4  2354  B J37               22
286  2 358          SBR   X2,1&X2                                      7  2358  H 094 0!1           22
287  2 365          BW    *&5,0&X2                                     8  2365  V L77 0!0 1         23
288  2 373          B     CPARGL                                       4  2373  B L32               23
289  2 377          B     CHKLEN                                       4  2377  B Q08               23
290  2 381          B     0&X2                                         4  2381  B 0!0               23
291          *
292  2 385          SBR   X2                                           4  2385  H 094               23
293  2 389          MCW   3&X2,COUNT2                                  7  2389  M 0!3 25S           23
294  2 396  DEC2    S     K1,COUNT2                                    7  2396  S E74 25S           23
295  2 403          BWZ   MORE,COUNT2,B  STILL POSITIVE?              8  2403  V M31 25S B         24
296  2 411          BCE   7&X2,0&X2,I                                  8  2411  B 0!7 0!0 I         24
297  2 419          BCE   7&X2,0&X2,A                                  8  2419  B 0!7 0!0 A         24
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  2 427         B     10&X2                                        4  2427  B 0J0               24
299  2 431  MORE   B     1943                                         4  2431  B Z43               24
300  2 434         S                                                  1  2435  S                   24
301  2 438         DC    @_00@                                        3  2438                      24
302  2 539         SW                                                 1  2439  ,                   24
303  2 442         DC    @;0J@                                        3  2442                      25
304  2 443         BW    3651,RDFLAG                                  8  2443  V F51 23V 1         25
305  2 451         CS    24                                           4  2451  / 024               25
306  2 455         SW    0&X3                                         4  2455  , 0?0               25
307  2 459         MN                                                 1  2459  D                   25
308  2 460         SBR   X3                                           4  2460  H 099               26
309  2 464         SBR   SW1&3,2&X3                                   7  2464  H Q97 0?2           26
310  2 471         SBR   CW2&3                                        4  2471  H A49               26
311  2 475         SW    1                                            4  2475  , 001               26
312  2 479         BCE   IFMT,0&X2,I                                  8  2479  B Q33 0!0 I         26
313  2 487         BCE   AFMT3,0&X2,A                                 8  2487  B 41Z 0!0 A         26
314  2 495         MCW   0&X1                                         4  2495  M 0|0               26
315  2 501         DC    @;00@                                        3  2501                      27
316  2 502         MCW                                                1  2502  M                   27
317  2 503         SBR   X1                                           4  2503  H 089               27
318  2 507         SW    0&X1                                         4  2507  , 0|0               27
319  2 511         A     6&X2,X3                                      7  2511  A 0!6 099           27
320  2 518         SBR   CW1&3,2&X3                                   7  2518  H A45 0?2           28
321  2 525         MCW   K0DOT0  0.0                                  4  2525  M 25V               28
322  2 529         SW    2&X3                                         4  2529  , 0?2               28
323  2 533         BCE   *&9,1&X1,0                                   8  2533  B N49 0|1 0         28
324  2 541            V  2674                                         4  2541  V O74               28
325  2 548         DC    @;0K2@                                       4  2548                      28
326  2 549         BCE   EFMT,0&X2,E                                  8  2549  B N68 0!0 E         28
327  2 557         A     A12K  NOT E FORMAT                          4  2557  A L27               29
328  2 563         DC    @;00@                                        3  2563                      29
329  2 564         B     *&8                                          4  2564  B N75               29
330  2 568  EFMT   S     A12K                                         4  2568  S L27               29
331  2 574         DC    @;00@                                        3  2574                      29
332  2 575         MN                                                 1  2575  D                   29
333  2 578         DC    @;00@                                        3  2578                      29
334  2 581         DC    W2                                           3  2581  F50                 29
335  2 582         MN                                                 1  2582  D                   29
336  2 583         MCW                                                1  2583  M                   29
337  2 586         DC    @;00@                                        3  2586                      29
338  2 587         BCE   FFMT1,0&X2,F                                 8  2587  B P04 0!0 F         29
339  2 595         C     W2,KZ4-2  TWO ZERO DIGITS                    7  2595  C F50 B64           30
340  2 602         BE    *&9                                          5  2602  B O15 S             30
341  2 607         BM    *&8,SAVZON                                   8  2607  V O22 F48 K         30
342  2 615         MZ    NOZONE,SAVZON                                7  2615  Y B62 F48           30
343  2 622         ZA    A12K                                         4  2622  ? L27               30
344  2 628         DC    @;00@                                        3  2628                      30
345  2 629         MN                                                 1  2629  D                   30
346  2 633         DC    @;00@                                        3  2632                      30
347  2 635         DC    SBR&6                                        3  2635  O43                 31
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
348  2 636         MN                                                      1  2636  D                   31
349  2 637  SBR    SBR   X1,0&X1                                          7  2637  H 089 0|0           31
350  2 644         ZA    MANWID,W3  MANTISSA WIDTH IN ARITF                7  2644  ? 837 23S           31
351  2 651         S     K2,W3        INCLUDES THE EXPONENT WIDTH          7  2651  S E05 23S           31
352  2 658         C     W3                                                4  2658  C 23S               32
353  2 664         DC    @;00@                                             3  2664                      32
354  2 665         BH    2728                                              5  2665  B P28 U             32
355  2 670         B     2797                                              4  2670  B P97               32
356         *
357  2 674         MCW   KX,2&X3  BLANK X BLANK                           7  2674  M 25Y 0?2           32
358  2 681         MCW           0.0                                       1  2681  M                   32
359  2 682         SBR   X3,2&X3                                           7  2682  H 099 0?2           32
360  2 689         SBR   CW3&3                                             4  2689  H A53               32
361  2 693         A     9&X2,X3                                           7  2693  A 0!9 099           33
362  2 700         B     NOOVFL                                            4  2700  B A38               33
363         *
364  2 704  FFMT1  BM    2766,SAVZON                                       8  2704  V P66 F48 K         33
365  2 712         C     6&X2,W2                                           7  2712  C 0!6 F50           33
366  2 719         BL    2629                                              5  2719  B O29 T             33
367  2 724         B     2674                                              4  2724  B O74               33
368         *
369  2 728         S     23                                                4  2728  S 023               33
370  2 732         MCM                                                     1  2732  P                   34
371  2 738         DC    @_0A001@                                          6  2738                      34
372  2 739         MCW   KZ4                                               4  2739  M B66               34
373  2 743         MZ          NOZONE                                      1  2743  Y                   34
374  2 744         MCW   W2,X1                                             7  2744  M F50 089           34
375  2 751         MCW   KZ4-3  ONE ZERO DIGIT                            4  2751  M B63               34
376  2 755         MCW   GMWM,3&X1                                         7  2755  M 27Z 0|3           34
377  2 762         B     2797                                              4  2762  B P97               34
378  2 766         MZ    NOZONE,0&X1                                       7  2766  Y B62 0|0           35
379  2 773         C     9&X2,W2                                           7  2773  C 0!9 F50           35
380  2 780         BU    *&8                                               5  2780  B P92 /             35
381  2 785         C                                                       1  2785  C                   35
382  2 788         DC    @_0A@                                             3  2788                      35
383  2 791         DC    K5                                                3  2791  23T                 35
384  2 792         BH    IFMT2                                             5  2792  B Q65 U             35
385  2 797         MZ                                                      1  2797  Y                   35
386  2 800         DC    @;0K@                                             3  2800                      35
387  2 803         DC    @0|0@  0&X1                                       3  2803                      35
388  2 804         B     IFMT2                                             4  2804  B Q65               36
389         *
390         * CHECK RECORD LENGTH
391         *
392  2 808  CHKLEN SBR   CHKLEX&3                                          4  2808  H Q32               36
393  2 812         C     ENDREC,X3                                         7  2812  C 23Y 099           36
394  2 819         BL    CHKLEX                                            5  2819  B Q29 T             36
395  2 824         NOP   3700  SNAPSHOT ROUTINE IS CLOBBERED               4  2824  N G00               36
396  2 828         H                                                       1  2828  .                   36
397  2 829  CHKLEX B     0                                                 4  2829  B 000               36
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
398         *
399  2 833  IFMT    MCW   0&X1                                              4  2833  M 0|0              37
400  2 839         DC    @_00@                                             3  2839                     37
401  2 840         A     6&X2,X3                                           7  2840  A 0!6 099          37
402  2 847         MCW   6&X2,X1                                          7  2847  M 0!6 089          37
403  2 854         ZA                                                      1  2854  ?                  37
404  2 857         DC    @_00@                                             3  2857                     37
405  2 860         DC    @0|0@  0&X1                                       3  2860                     37
406  2 861         B     INCX3                                             4  2861  B J37              37
407  2 865  IFMT2   MCS   0&X1,0&X3                                        7  2865  Z 0|0 0?0          37
408  2 872         SBR   SX3&6                                            4  2872  H R58              38
409  2 876         MN    0&X1,0&X3  AT LEAST SHOW THE LOW ORDER DIGIT      7  2876  D 0|0 0?0          38
410  2 883         SBR   MCS&3,0&X3                                       7  2883  H A90 0?0          38
411  2 890         SBR   CW3&3                                            4  2890  H A53              38
412  2 894  SW1     SW    0                                                4  2894  , 000              38
413  2 898         BM    *&5,0&X1                                          8  2898  V R10 0|0 K        38
414  2 906         B     SX3                                               4  2906  B R52              38
415  2 910  GETB    BCE   GOTB,0&X3,  FOUND A BLANK?                       8  2910  B R34 0?0          39
416  2 918         SBR   X3                                               4  2918  H 099              39
417  2 922         BW    SX3,1&X3  END OF THE FIELD, NO SIGN               8  2922  V R52 0?1 1        39
418  2 930         B     GETB                                              4  2930  B R10              39
419  2 934  GOTB    MZ    BZONE,0&X3  SET THE SIGN                          7  2934  Y G81 0?0          39
420  2 941         SW    1&X3                                             4  2941  , 0?1              39
421  2 945         SBR   CW3&3,1&X3                                       7  2945  H A53 0?1          40
422  2 952  SX3     SBR   X3,111                                           7  2952  H 099 111          40
423  2 959         BCE   CW2,0&X2,I                                       8  2959  B A46 0!0 I        40
424  2 967         A     9&X2,X3                                           7  2967  A 0!9 099          40
425  2 974         BCE   FFMT2,0&X2,F                                     8  2974  B R93 0!0 F        40
426  2 982         MN    0&X3                                              4  2982  D 0?0              41
427  2 986         MN                                                      1  2986  D                  41
428  2 987         MN                                                      1  2987  D                  41
429  2 988         MN                                                      1  2988  D                  41
430  2 989         SBR   X3                                               4  2989  H 099              41
431  2 993  FFMT2   SBR   SX3A&6,1&X3                                      7  2993  H ?88 0?1          41
432  3 000         S     1&X3                                             4  3000  S 0?1              41
433  3 004         MN                                                      1  3004  D                  42
434  3 005         SAR   X3                                               4  3005  Q 099              42
435  3 009         BCE   FINDGM,0&X2,E                                    8  3009  B ?44 0!0 E        42
436  3 017         BWZ   FINDGM,SAVZON,B                                  8  3017  V ?44 F48 B        42
437  3 025         C     9&X2,W2                                          7  3025  C 0!9 F50          42
438  3 032         BH    SX3A                                             5  3032  B ?82 U            42
439  3 037         A     W2,X3                                            7  3037  A F50 099          43
440  3 044  FINDGM  BCE   SX3A,3&X1,}  GM                                 8  3044  B ?82 0|3 } GMARK  43
441  3 052         MN    1&X1,2&X3                                        7  3052  D 0|1 0?2          43
442  3 059         SBR   X1,1&X1                                          7  3059  H 089 0|1          43
443  3 066         BWZ   SX3A,2&X3,B                                      8  3066  V ?82 0?2 B        43
444  3 074         SBR   X3                                               4  3074  H 099              44
445  3 078         B     FINDGM                                           4  3078  B ?44              44
446  3 082  SX3A    SBR   X3,0                                            7  3082  H 099 000          44
447  3 089         BAV   *&1                                              5  3089  B ?94 Z            44
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
448  3 094          A     KP5,0&X3                                          7  3094  A F47 0?0           44
449  3 101          MCW   NOZONE,0&X3                                      7  3101  M B62 0?0           44
450  3 108          BCE   FFMT3,0&X2,F                                      8  3108  B A33 0!0 F         45
451  3 116          SBR   X3,4&X3                                           7  3116  H 099 0?4           45
452  3 123          MN    0&X3                                              4  3123  D 0?0               45
453  3 127          MCW   W2                                                4  3127  M F50               45
454  3 131          MZ                                                      1  3131  Y                   45
455  3 132          MCW                                                     1  3132  M                   45
456  3 133  FFMT3   BAV   OVFL                                            5  3133  B A66 Z             45
457  3 138  NOOVFL  CW                                                    1  3138  )                   46
458  3 141          DC    @_00@                                             3  3141                      46
459  3 142  CW1     CW    0                                                 4  3142  ) 000               46
460  3 146  CW2     CW    0                                                 4  3146  ) 000               46
461  3 150  CW3     CW    0                                                 4  3150  ) 000               46
462  3 154  SW2     SW                                                      1  3154  ,                   46
463  3 157          DC    @_0A@                                             3  3157                      46
464  3 158          B     CHKLEN                                            4  3158  B Q08               46
465  3 162          B     DEC2                                              4  3162  B L96               46
466          *
467  3 166  OVFL    MCW   CW1&3,X1                                          7  3166  M A45 089           47
468  3 173          MZ    NOZONE,0&X1                                       7  3173  Y B62 0|0           47
469  3 180          MCW           DOT                                       1  3180  M                   47
470  3 181          A             ONE                                       1  3181  A                   47
471  3 182          BAV   *&9                                               5  3182  B A95 Z             47
472  3 187  MCS     MCS   0                                                 4  3187  Z 000               47
473  3 191          B     NOOVFL                                            4  3191  B A38               47
474  3 195          MN    0&X1                                              4  3195  D 0|0               48
475  3 199          C                                                       1  3199  C                   48
476  3 200          MN                                                      1  3200  D                   48
477  3 201          SBR   X1                                                4  3201  H 089               48
478  3 205          C     CW2&3,X1                                          7  3205  C A49 089           48
479  3 212          BL    XXFLD                                             5  3212  B B40 T             48
480  3 217          SW    0&X1                                              4  3217  , 0|0               48
481  3 221          MCW   1&X1,0&X1                                        7  3221  M 0|1 0|0           49
482  3 228          CW                                                      1  3228  )                   49
483  3 229          LCA   K10,2&X1                                  V3M4    7  3229  L 27Y 0|2           49
484  3 236          B     4269                                      V3M4    4  3236  B 26Z               49
485  3 240  XXFLD   MCW   1&X3,0&X3  CLEAR THE FIELD                        7  3240  M 0?1 0?0           49
486  3 247          MCW                                                     1  3247  M                   49
487  3 248          MCW                                                     1  3248  M                   49
488  3 249          MCW   KX,3&X1    THEN PUT BLANK X BLANK IN IT            7  3249  M 25Y 0|3           50
489  3 256          B     NOOVFL                                            4  3256  B A38               50
490          *
491  3 260          DCW   1                                                 1  3260                      50
492  3 261          DCW   @.@                                               1  3261                      50
493  3 262  NOZONE  DCW   #1                                               1  3262                      50
494  3 266  KZ4     DCW   @0000@                                            4  3266                      50
495          *
496  3 267  IFMT3   MCW   X1,X3                                           7  3267  M 089 099           50
497  3 274          MZ    ZAS2,3288                                         7  3274  Y 06S B88           51
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
498  3 281          MN    0&X3                                             4  3281  D 0?0              51
499  3 287          DC    @_0A@                                            3  3287                     51
500  3 288          ZA                                                     1  3288  ?                  51
501  3 289          MCW   4146,X1                                          7  3289  M 14W 089          51
502  3 296          LCA                                                    1  3296  L                  51
503  3 299          DC    @_00@                                            3  3299                     51
504  3 302          DC    @0|0@  0&X1                                      3  3302                     51
505  3 303          B     4155                                             4  3303  B 15V              51
506          *
507          * END OF FILE ON INPUT
508          *
509  3 307  EOFRD   NOP   4002                                             4  3307  N 00S              51
510  3 311          H                                                      1  3311  .                  52
511          *
512          * TAPE READ
513          *
514  3 312  RDTAPE SW    RDFLAG                                           4  3312  , 23V              52
515  3 316  CLEARR CS    332                                              4  3316  / 332              52
516  3 320          CS                                                     1  3320  /                  52
517  3 321          B     REDOIO                                           4  3321  B C84              52
518          *
519          * AFTER TAPE READ
520          *
521  3 325  ENDRD   BEF   EOFRD                                           5  3325  B C07 K            52
522  3 330          BCE   REDOIO,12&X3,}  SHORT -- NOISE -- RECORD?       8  3330  B C84 0A2 } GMARK  52
523  3 338          CHAIN 12                                                                 MACRO
524                 BCE                                                    1  3338  B           GEN    53
525                 BCE                                                    1  3339  B           GEN    53
526                 BCE                                                    1  3340  B           GEN    53
527                 BCE                                                    1  3341  B           GEN    53
528                 BCE                                                    1  3342  B           GEN    53
529                 BCE                                                    1  3343  B           GEN    53
530                 BCE                                                    1  3344  B           GEN    53
531                 BCE                                                    1  3345  B           GEN    54
532                 BCE                                                    1  3346  B           GEN    54
533                 BCE                                                    1  3347  B           GEN    54
534                 BCE                                                    1  3348  B           GEN    54
535                 BCE                                                    1  3349  B           GEN    54
536  3 350          B     1928                                             4  3350  B Z28              54
537  3 354          B     CLEARR                                           4  3354  B C16              54
538          *
539          * END OF TAPE ON OUTPUT
540          *
541  3 358  EOFWR   MN    UNIT,*&4                                         7  3358  D J36 C68          55
542  3 365          WTM   0                                                5  3365  U %U0 M            55
543  3 370          NOP   4003                                             4  3370  N 00T              55
544  3 374          H                                                      1  3374  .                  55
545          *
546          * WRITE TAPE
547          *
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
548  3 375  CLEARW CS    332                                           4  3375  / 332              55
549  3 379         CS                                                  1  3379  /                  55
550  3 380         B     1928                                          4  3380  B Z28              55
551  3 384  REDOIO MN    UNIT,TAPE&3                                   7  3384  D J36 D37          56
552  3 391         MCW   KR,TAPE&7  ASSUME IT'S READ, NOT WRITE       7  3391  M 25Z D41          56
553  3 398         ZA    KR,W3      @R@ USED AS -9 HERE                7  3398  ? 25Z 23S          56
554  3 405         BW    DOIO,RDFLAG                                   8  3405  V D27 23V 1        56
555  3 413         MCW   KW,TAPE&7  OOPS, IT'S WRITE                  7  3413  M 26| D41          56
556  3 420         A     KP41,W3                                       7  3420  A 26S 23S          57
557  3 427  DOIO   LCA   GMWM,SNAPSH                                   7  3427  L 27Z 333          57
558  3 434  TAPE   RT    0,0&X3                                        8  3434  M %U0 0?0 R        57
559  3 442         LCA   BEGINN,SNAPSH  UNCLOBBER                     7  3442  L W97 333          57
560  3 449         BER   TAPERR                                       5  3449  B E91 L            57
561  3 454         BCE   ENDRD,TAPE&7,R                               8  3454  B C25 D41 R        58
562  3 462         BEF   EOFWR                                        5  3462  B C58 K            58
563  3 467         B     CLEARW                                        4  3467  B C75              58
564         *
565         * PRINT
566         *
567  3 471  CLEARP CS    SNAPSH                                        4  3471  / 333              58
568  3 475         CS                                                  1  3475  /                  58
569  3 476         B     1928                                          4  3476  B Z28              58
570  3 480         BCE   K2,200,     NO SPACING                        8  3480  B E05 200          58
571  3 488         BCE   DBLE,200,0  DOUBLE SPACE?                     8  3488  B E20 200 0        59
572  3 496         MN    200,*&2     SET SKIP-TO CHANNEL               7  3496  D 200 E04          59
573  3 503         CC    0                                             2  3503  F 0                59
574  3 505  K2     W                                                   1  3505  2                  59
575  3 506         BCV   *&5                                           5  3506  B E15 @            59
576  3 511         B     CLEARP                                        4  3511  B D71              59
577  3 515         CCB   CLEARP,1                                      5  3515  F D71 1            59
578  3 520  DBLE   CCB   K2,J                                          5  3520  F E05 J            60
579         *
580         * PUNCH
581         *
582  3 525  PUNCH  MCW   A281,ENDREC                                   7  3525  M 26V 23Y          60
583  3 532         CS    1928,285                                      7  3532  / Z28 285          60
584  3 539         SW    200                                           4  3539  , 200              60
585  3 543         LCA   279,180                                       7  3543  L 279 180          60
586  3 550         P                                                   1  3550  4                  60
587  3 551         SSB   PUNCH,4                                      5  3551  K E25 4            60
588         *
589         * READ A CARD
590         *
591  3 556  READCD CS    80                                            4  3556  / 080              61
592  3 560         MCW   A281,ENDREC                                   7  3560  M 26V 23Y          61
593  3 567         SW    1,RDFLAG                                      7  3567  , 001 23V          61
594  3 574  K1     R                                                   1  3574  1                  61
595  3 575         LCA   80,279                                        7  3575  L 080 279          61
596  3 582         SSB   1928,1                                        5  3582  K Z28 1            61
597  3 587         B     READCD                                        4  3587  B E56              61
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
598         *
599         * TAPE I/O ERROR
600         *
601  3 591  TAPERR  MN    UNIT,BSP&3                                 7  3591  D J36 F08          62
602  3 598          MN    UNIT,SKP&3                                 7  3598  D J36 F21          62
603  3 605  BSP     BSP   0                                          5  3605  U %U0 B            62
604  3 610          BCE   *&6,TAPE&7,R                               8  3610  B F23 D41 R        62
605  3 618  SKP     SKP   0                                          5  3618  U %U0 E            62
606  3 623          S     K1,W3                                      7  3623  S E74 23S          62
607  3 630          BWZ   DOIO,W3,B                                  8  3630  V D27 23S B        63
608  3 638          NOP   1111                                       4  3638  N /11              63
609  3 642          H                                                1  3642  .                  63
610  3 643          B     REDOIO                                     4  3643  B C84              63
611         *
612  3 647  KP5     DCW   &5                                         1  3647                     63
613  3 648  SAVZON  DCW   #1                                         1  3648                     63
614  3 650  W2      DCW   00                                         2  3650                     63
615         *
616  3 651          SW    0&X3                                       4  3651  , 0?0              64
617  3 655          MCW   X1,4146                                    7  3655  M 089 14W          64
618  3 662          MCW   X3,X1                                      7  3662  M 099 089          64
619  3 669          A     6&X2,X1                                    7  3669  A 0!6 089          64
620  3 676          BCE   IFMT4,0&X2,I                              8  3676  B F99 0!0 I        64
621  3 684          BCE   AFMT2,0&X2,A                               8  3684  B 39| 0!0 A        65
622  3 692          A     9&X2,X1                                    7  3692  A 0!9 089          65
623  3 699  IFMT4   SW    0&X1                                       4  3699  , 0|0              65
624  3 703          SBR   CW4&3,0&X1                                7  3703  H 15Y 0|0          65
625  3 710          S                                                1  3710  S                  65
626  3 713          DC    @;00@                                      3  3713                     65
627  3 714          S                                                1  3714  S                  65
628  3 715          MZ    NOZONE                              V3M4   4  3715  Y B62              65
629  3 721          DC    @;0K@                               V3M4   3  3721                     65
630  3 722          MZ    ABZ2,ZAS2                           V3M4   7  3722  Y G89 06S          66
631  3 729          BCE   3765,0&X3,                          V3M4   8  3729  B G65 0?0          66
632  3 737          BCE   BZONE,0&X3,-                        V3M4   8  3737  B G81 0?0 -        66
633  3 745          BCE   BZONE,0&X3,@                        V3M4   8  3745  B G81 0?0 @        66
634  3 753          BCE   3785,0&X3,&                         V3M4   8  3753  B G85 0?0 &        66
635  3 761          B     3793                                V3M4   4  3761  B G93             67
636  3 765          BW    4132,1&X3                           V3M4   8  3765  V 13S 0?1 1        67
637  3 773          B     INCX3                               V3M4   4  3773  B J37             67
638  3 777          B     3722                                V3M4   4  3777  B G22             67
639  3 781  BZONE   ZS    ZAS2                                V3M4   4  3781  ! 06S             67
640  3 785          SW    1&X3                                V3M4   4  3785  , 0?1             67
641  3 789  ABZ2    B     INCX3                               V3M4   4  3789  B J37             67
642  3 793          BCE   IFMT3,0&X2,I                        V3M4   8  3793  B B67 0!0 I        68
643  3 801          SBR   X1                                  V3M4   4  3801  H 089             68
644  3 807          DC    @_0J@                               V3M4   3  3807                     68
645  3 808          CW    FLAG1,FLAG2                                7  3808  ) 26W 26X          68
646  3 815          CW    FLAG3                                      4  3815  ) 26Y              68
647  3 819          S     W3A                                        4  3819  S 22T              68
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
648  3 823          BCE   AFMT1,0&X2,A                                      8  3823  B 28| 0!0 A          68
649  3 831          B     CHKCH1                                            4  3831  B H81                69
650          *
651  3 835  DOT     SBR   W3,0&X3                                           7  3835  H 23S 0?0            69
652  3 842          SW    FLAG3                                             4  3842  , 26Y                69
653  3 846          BW    *&8,FLAG1                                         8  3846  V H61 26W 1          69
654  3 854          SBR   W3,1&X3                                           7  3854  H 23S 0?1            69
655  3 861  NOTDOT  BW    CKEFMT,1&X3                                       8  3861  V 04X 0?1 1          69
656  3 869          BCE   CKEFMT,1&X3,                                     8  3869  B 04X 0?1            70
657  3 877          B     INCX3                                             4  3877  B J37                70
658  3 881  CHKCH1  BCE   DOT,0&X3,.                                       8  3881  B H35 0?0 .          70
659  3 889          C     0&X3,KZ4-3  ONE ZERO DIGIT                        7  3889  C 0?0 B63            70
660  3 896          BL    4163                                              5  3896  B 16T T              70
661  3 901          BH    CHKCH2                                            5  3901  B I18 U              70
662  3 906          BW    4163,FLAG1                                        8  3906  V 16T 26W 1          71
663  3 914          B     NOTDOT                                            4  3914  B H61                71
664          *
665          * CHECK VALIDITY OF CHARACTER
666          *
667  3 918  CHKCH2  BCE   ER1121,0&X2,F  NO EXPONENT IF F FORMAT           8  3918  B I71 0!0 F          71
668  3 926          SBR   W3B,4&X3                                          7  3926  H 22W 0?4            71
669  3 933          MZ    ABZONE,ZAS                                        7  3933  Y I76 03W            71
670  3 940          BCE   EXP,0&X3,E                                       8  3940  B I80 0?0 E          72
671  3 948  CKSIGN  MZ    0&X3,ZAS                                          7  3948  Y 0?0 03W            72
672  3 955          BCE   SIGN,0&X3,&                                      8  3955  B 01S 0?0 &          72
673  3 963          BCE   SIGN,0&X3,-                                      8  3963  B 01S 0?0 -          72
674          *
675          * DATA AND FORMAT SPECIFICATIONS DISAGREE IN MODE OR
676          * ACCEPTABLE CHARACTERS.
677          *
678  3 971  ER1121  NOP   1121                                              4  3971  N /21                72
679  3 975          H                                                       1  3975  .                    72
680  3 976  ABZONE  B     ER1121                                            4  3976  B I71                73
681          *
682  3 980  EXP     BWZ   *&9,1&X3,2                                        8  3980  V I96 0?1 2          73
683  3 988          B     INCX3                                             4  3988  B J37                73
684  3 992          B     CKSIGN                                            4  3992  B I48                73
685  3 996          BCE   *&5,1&X3,                                        8  3996  B 00Y 0?1            73
686  4 004          B     *&5                                               4  4004  B 01S                73
687  4 008          B     INCX3                                             4  4008  B J37                73
688  4 012  SIGN    SW    1&X3                                              4  4012  , 0?1                74
689  4 016          BW    ZAS,2&X3                                          8  4016  V 03W 0?2 1          74
690  4 024          BCE   ZAS,2&X3,                                        8  4024  B 03W 0?2            74
691  4 032          SBR   X3                                              4  4032  H 099                74
692  4 036  ZAS     ZA    1&X3,W3A  SOMETIMES ZS                           7  4036  ? 0?1 22T            74
693  4 043          B     *&16                                              4  4043  B 06S                74
694  4 047  CKEFMT  BCE   ER1121,0&X2,E  E FORMAT?                         8  4047  B I71 0!0 E          75
695  4 055          SBR   W3B,1&X3                                          7  4055  H 22W 0?1            75
696  4 062  ZAS2    ZA                                                      1  4062  ?                    75
697  4 065          DC    @;0K@                                             3  4065                       75
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
698  4 066          BW    *&5,FLAG1                                           8  4066  V 07Y 26W 1         75
699  4 074          B     4140                                                4  4074  B 14|               75
700  4 078          BW    *&15,FLAG3                                          8  4078  V 10| 26Y 1         75
701  4 086          S     9&X2,W3B                                            7  4086  S 0!9 22W           76
702  4 093          ZA    W3B,W3                                              7  4093  ? 22W 23S           76
703  4 100          S     W3,W3C                                              7  4100  S 23S 22Z           76
704  4 107          A     A12K,W3A                                            7  4107  A L27 22T           76
705  4 114          ZS    W3C                                                 4  4114  ! 22Z               76
706  4 118          A     W3C,W3A                                             7  4118  A 22Z 22T           76
707  4 125          ZA    W3A                                                 4  4125  ? 22T               77
708  4 131          DC    @;00@                                               3  4131                     77
709  4 132          BCE   IFMT3,0&X2,I                                        8  4132  B B67 0!0 I         77
710  4 140          MCW                                                       1  4140  M                   77
711  4 143          DC    @;00@                                               3  4143                     77
712  4 146          DC    000                                                 3  4146                     77
713  4 147          LCA                                                       1  4147  L                   77
714  4 148          MCW   *&4,X3                                              7  4148  M 15Y 099           77
715  4 155  CW4     CW    0                                                   4  4155  ) 000               77
716  4 159          B     SW2                                                 4  4159  B A54               77
717            *
718  4 163          BW    *&12,FLAG1                                          8  4163  V 18S 26W 1         78
719  4 171          SBR   W3C,0&X3                                            7  4171  H 22Z 0?0           78
720  4 178          SW    FLAG1                                               4  4178  , 26W               78
721  4 182          BW    NOTDOT,FLAG2                                        8  4182  V H61 26X 1         78
722  4 190          MN    0&X3,2&X1                                           7  4190  D 0?0 0|2           78
723  4 197          SBR   X1                                                  4  4197  H 089               78
724  4 201          SW    FLAG2                                               4  4201  , 26X               79
725  4 205          BCE   NOTDOT,4&X1,}  GM                                  8  4205  B H61 0|4 } GMARK   79
726  4 213          CW    FLAG2                                               4  4213  ) 26X               79
727  4 217          B     NOTDOT                                              4  4217  B H61               79
728            *
729  4 223  W3A     DCW   #3                                                  3  4223                     79
730  4 226  W3B     DCW   #3                                                  3  4226                     79
731  4 229  W3C     DCW   #3                                                  3  4229                     79
732  4 232  W3      DCW   #3                                                  3  4232                     80
733  4 233  K5      DCW   @5@                                                 1  4233                     80
734  4 234  FLAG    DC    #1                                                  1  4234                     80
735  4 235  RDFLAG  DCW   #1  READ IF WM, WRITE IF NO WM                      1  4235                     80
736  4 238  ENDREC  DCW   #3  ADDRESS OF END OF RECORD, EITHER 334 OR 281     3  4238                     80
737  4 241  RECPOS  DCW   #3                                                  3  4241                     80
738  4 242  CH      DCW   #1                                                  1  4242                     80
739  4 243  WMFLAG  DCW   #1  WM IF CHAR BEING COPIED HAS A WM               1  4243                     80
740  4 246  COUNT   DCW   #3                                                  3  4246                     81
741  4 249  SX1     DCW   #3                                                  3  4249                     81
742  4 252  COUNT2  DCW   #3                                                  3  4252                     81
743  4 255  K0DOT0  DCW   @0.0@                                              3  4255                     81
744  4 258  KX      DCW   @ X @                                              3  4258                     81
745  4 259  KR      DCW   @R@                                                1  4259                     81
746  4 260  KW      DCW   @W@                                                1  4260                     81
747  4 262  KP41    DCW   &41                                                2  4262                     82
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
748  4 265  A281   DSA   281                                           3  4265  281                 82
749  4 266  FLAG1  DCW   #1                                            1  4266                      82
750  4 267  FLAG2  DCW   #1                                            1  4267                      82
751  4 268  FLAG3  DCW   #1                                            1  4268                      82
752  4 269         CW    1&X1                                  V3M4    4  4269  ) 0|1               82
753  4 273         B     NOOVFL                                V3M4    4  4273  B A38               82
754  4 278  K10    DCW   10                                    V3M4    2  4278                      83
755  4 279  GMWM   DCW   @}@                                   V3M4    1  4279              GMARK   83
756                EX    NRET                                                  B 982               84
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
757                 JOB   FORTRAN COMPILER -- A CONVERSION -- PHASE 54D
758                 ORG   4280                                                     4280
759  4 280  AFMT1   BW    *&12,FLAG1                                          8  4280  V 29Z 26W 1         87
760  4 288          SBR   W3C,0&X3                                            7  4288  H 22Z 0?0           87
761  4 295          SW    FLAG1                                               4  4295  , 26W               87
762  4 299          BW    ATEST,FLAG2                                         8  4299  V 34/ 26X 1         87
763  4 307          MN    0&X3,2&X1                                           7  4307  D 0?0 0|2           87
764  4 314          MZ    0&X3,2&X1                                           7  4314  Y 0?0 0|2           88
765  4 321          SBR   X1                                                4  4321  H 089               88
766  4 325          SW    FLAG2                                               4  4325  , 26X               88
767  4 329          BCE   ATEST,4&X1,}  GM                                   8  4329  B 34/ 0|4 } GMARK   88
768  4 337          CW    FLAG2                                               4  4337  ) 26X               88
769  4 341  ATEST   BW    *&9,1&X3  END OF SOURCE FIELD?                      8  4341  V 35X 0?1 1         88
770  4 349          B     INCX3                                               4  4349  B J37               88
771  4 353          B     AFMT1                                               4  4353  B 28|               89
772  4 357          SBR   W3B,1&X3                                            7  4357  H 22W 0?1           89
773  4 364          MCW   4146,*&7                                            7  4364  M 14W 37X           89
774  4 371          MCW   0,0                                                 7  4371  M 000 000           89
775  4 378          LCA                                                       1  4378  L                   89
776  4 379          MCW   CW4&3,X3                                            7  4379  M 15Y 099           89
777  4 386          B     SW2                                                 4  4386  B A54               89
778  4 390  AFMT2   MCW   K3B                                                 4  4390  M 57X               90
779  4 396          DC    @;00@                                               3  4396                      90
780  4 397          MCW   W20                                                 4  4397  M 59X               90
781  4 403          DC    @;0K@                                               3  4403                      90
782  4 404          SW    0&X1                                                4  4404  , 0|0               90
783  4 408          SBR   CW4&3,0&X1                                          7  4408  H 15Y 0|0           90
784  4 415          B     3793                                          V3M4  4  4415  B G93               90
785         *
786         * MOVE DATA TO A FORMAT FIELD
787         *
788  4 419  AFMT3   MCW   2501,*&7                                           7  4419  M N01 43S           90
789  4 426  AMCW    MCW   0,0                                                 7  4426  M 000 000           91
790  4 433          MCW                                                       1  4433  M                   91
791  4 434          SBR   X1                                                4  4434  H 089               91
792  4 438          SBR   SRC,1&X1                                           7  4438  H 60T 0|1           91
793  4 445          SBR   TRGEND,0&X3                                        7  4445  H 60W 0?0           91
794  4 452          MA    6&X2,TRGEND                                         7  4452  # 0!6 60W           91
795  4 459          SBR   TARGET,1&X3                                       7  4459  H 60| 0?1           92
796  4 466          MCW   AMCW&6,SRCEND                                      7  4466  M 43S 60Z           92
797  4 473          MA    AM2,SRCEND                                          7  4473  # 61S 60Z           92
798  4 480  ALOOP   MN    1&X1,2&X3                                           7  4480  D 0|1 0?2           92
799  4 487          MZ    1&X1,2&X3                                           7  4487  Y 0|1 0?2           92
800  4 494          C     TARGET,TRGEND                                       7  4494  C 60| 60W           93
801  4 501          BE    AEND                                                5  4501  B 55| S             93
802  4 506          C     SRC,SRCEND                                          7  4506  C 60T 60Z           93
803  4 513          BE    AEND                                                5  4513  B 55| S             93
804  4 518          MA    A001,SRC                                            7  4518  # 61V 60T           93
805  4 525          MA    A001,TARGET                                         7  4525  # 61V 60|           93
806  4 532          SBR   X1,1&X1                                            7  4532  H 089 0|1           94
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
807  4 539          SBR   X3,1&X3                                           7  4539  H 099 0?1           94
808  4 546          B     ALOOP                                             4  4546  B 48|               94
809  4 550  AEND    SBR   CW3&3,0&X3                                       7  4550  H A53 0?0           94
810  4 557          MCW   TRGEND,X3                                         7  4557  M 60W 099           94
811  4 564          SBR   X3,2&X3                                           7  4564  H 099 0?2           94
812  4 571          B     CW2                                               4  4571  B A46               95
813         *
814  4 577  K3B     DCW   #3                                                3  4577                      95
815  4 597  W20     DCW   #20                                              20  4597                      95
816  4 600  TARGET  DCW   #3                                                3  4600                      95
817  4 603  SRC     DCW   #3                                                3  4603                      95
818  4 606  TRGEND  DCW   #3                                                3  4606                      95
819  4 609  SRCEND  DCW   #3                                                3  4609                      95
820  4 612  AM2     DSA   15998  -2 = 16000 - 2 = 15998                      3  4612  I9H                 96
821  4 615  A001    DSA   1                                                 3  4615  001                 96
822  4 616          DCW   @}@                                               1  4616              GMARK   96
823                 EX    NRET                                                     B 982               97
824                 END                                                            / 000 080
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
A001	4615	A12K	2327	A281	4265	ABZ2	3789	ABZONE	3976	AEND	4550	AFMT1	4280
AFMT2	4390	AFMT3	4419	ALOOP	4480	AM2	4612	AMCW	4426	ATEST	4341	BEGINN	1697
BSP	3605	BZONE	3781	CH	4242	CHARS	1855	CHKCH1	3881	CHKCH2	3918	CHKLEN	2808
CHKLEX	2829	CKEFMT	4047	CKSIGN	3948	CLEARP	3471	CLEARR	3316	CLEARW	3375	COUNT	4246
COUNT2	4252	CPARGL	2332	CW1	3142	CW2	3146	CW3	3150	CW4	4155	DBLE	3520
DEC2	2396	DOIO	3427	DOT	3835	EFMT	2568	ENDRD	3325	ENDREC	4238	EOFRD	3307
EOFWR	3358	ER1121	3971	EXP	3980	FFMT1	2704	FFMT2	2993	FFMT3	3133	FINDGM	3044
FLAG	4234	FLAG1	4266	FLAG2	4267	FLAG3	4268	GETB	2910	GETWM	1916	GETWML	1912
GMWM	4279	GOTB	2934	GOTWM	1897	IFMT	2833	IFMT2	2865	IFMT3	3267	IFMT4	3699
INCX3	2137	INCX3X	2148	K0DOT0	4255	K1	3574	K10	4278	K2	3505	K3B	4577
K5	4233	KP41	4262	KP5	3647	KR	4259	KW	4260	KX	4258	KZ4	3266
LCA	2079	LISENT	912	LISTP2	2271	LSTPOS	1968	MANWID	837	MCS	3187	MORE	2431
NOOVFL	3138	NOTDOT	3861	NOZONE	3262	NRET	982	OVFL	3166	PUNCH	3525	RDFLAG	4235
RDTAPE	3312	READCD	3556	RECPOS	4241	REDOIO	3384	RELENT	2132	SAVZON	3648	SBR	2637
SIGN	4012	SKP	3618	SNAPSH	333	SRC	4603	SRCEND	4609	SW1	2894	SW2	3154
SX1	4249	SX2	1996	SX3	2952	SX3A	3082	TAPE	3434	TAPERR	3591	TARGET	4600
TRGEND	4606	UNIT	2136	W2	3650	W20	4597	W3	4232	W3A	4223	W3B	4226
W3C	4229	WMFLAG	4243	X1	89	X2	94	X3	99	XXFLD	3240	ZAS	4036
ZAS2	4062												