```
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 A-ADDR B-ADDR

 101                JOB   TAPE-TO-CARD UTILITY PROGRAM 1401-UT-028
 102  1 010         CTL   6611
 103  1 020         ORG   2701                                                      2701
 104  1 030  START  CS    80                  CLEAR READ AREA                 4  2701  / 080               4    080
 105  1 040         SW    1,201               SET WORD MARKS RD PT            7  2705  , 001 201           4    001    201
 106  1 050         SW    101                 PCH AREAS                       4  2712  , 101               4    101
 107  1 060         LCA   GPMK78,3998         MOVE GPMK TO I99                7  2716  L L24 I98           4   2324   3998
 108  1 070         R                         READ CONTROL CDS                1  2723  1                   4
 109  1 080         MCW   80,180              MV CTL CD INFO                  7  2724  M 080 180           4    080    180
 110  1 090         A     110,ENDTYP          STR EOF OPTION                  7  2731  A 110 K03           4    110   2203
 111  1 100         MCW                       STR NUM OF FILES                1  2738  M                   5
 112  1 110         A                         STR REC PER BLK                 1  2739  A                   5
 113  1 120         A                         STR REC LNGH                    1  2740  A                   5
 114  1 130         BCE   AUTST,112,          TEST FILE SELTN                 8  2741  B P65 112           5   2765    112
 115  1 140         A     116,SLFIL3          STORE FILE 3                    7  2749  A 116 J88           5    116   2188
 116  1 150         A                         STORE FILE 2                    1  2756  A                   5
 117  1 160         A                         STORE FILE 1                    1  2757  A                   5
 118  1 170         MCW   NOP,SW1                                             7  2758  M L25 899           6   2325    899
 119  1 180  AUTST  BCE   AUTNOP,135,         TEST AUTO SEQ                   8  2765  B A23 135           6   3123    135
 120  1 190         SW    135,133                                             7  2773  , 135 133           6    135    133
 121  1 200         A     I9-1,135            TEST PUNCH COLS                 7  2780  A I78 135           6   3978    135
 122  1 210         A     135,134                                             7  2787  A 135 134           6    135    134
 123  1 220         MCW   134,AUTTOT+6                                        7  2794  M 134 |46           7    134   1046
 124  1 23          SW    CNTLNG+1            SET NUM OF COLS                 4  2801  , Q31               7   2831
 125  1 24          S     PUNCH,135           TO BE PUNCHED                   7  2805  S |84 135           7   1084    135
 126  1 25          MZ    BLANKS-1,135                                        7  2812  Y J89 135           7   2189    135
 127  1 26          A     135,CNTLNG+3                                        7  2819  A 135 Q33           7    135   2833
 128  1 27          CW    CNTLNG+1                                            4  2826  ) Q31               7   2831
 129  1 28   CNTLNG SW    CDCNT-4                                             4  2830  , L12               8   2312
 130  1 29          CW    133,135                                             7  2834  ) 133 135           8    133    135
 131  1 30          B     AUTNOP+7            TEST FIXED INFO                 4  2841  B A30               8   3130
 132  1 31   FIXTST BCE   FIXNOP,141,                                         8  2845  B A86 141           8   3186    141
 133  1 32          SW    136,138                                             7  2853  , 136 138           8    136    138
 134  1 33          SW    140                 BR BINARY OUTPUT                4  2860  , 140               8    140
 135  1 34          BCE   LDFIXB,143,1        SET NO OF COLS                  8  2864  B ?04 143 1         9   3004    143
 136  1 35          MCW   141,LDFIX+3         ADD PUNCH K10CTN                7  2872  M 141 R04           9    141   2904
 137  1 36          A     I9,141                                              7  2879  A I79 141           9   3979    141
 138  1 37          A     141,139                                             7  2886  A 141 139           9    141    139
 139  1 38          MCW   139,GPFIX+6         READ ADDTL INFO CD              7  2893  M 139 |99           9    139   1099
 140  1 39          R                         READ FIXED RTNE                 1  2900  1                   9
 141  1 40   LDFIX  LCA   0-0,FIXED                                           7  2901  L 000 K92          10    000   2292
 142  1 41          NOP                                                       1  2908  N                  10
 143  1 42          CS    80                                                  4  2909  / 080              10    080
 144  1 43          SW    1                                                   4  2913  , 001              10    001
 145  1 44          BCE   ALCDFX,156,         BR NO CHG ON EOF                8  2917  B R39 156          10   2939    156
 146  1 45          MCW   LDFIX+6,RDADTL+6   SET EOF TO READ                 7  2925  M R07 Z79          10   2907   1979
 147  1 46          MCW   NOP,NEWFIX+8        NEW CARD                        7  2932  M L25 Z67          10   2325   1967

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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

 148  1 47   ALCDFX BCE   FIXALL,137,A        BR ON NEW CARDS                 8  2939  B B04 137 A        11   3204    137
 149  1 48          MCW   137,FXCDNO          SET CARD NUM                    7  2947  M 137 K05          11    137   2205
 150  1 49   MLTTST BCE   MPLNOP,132,         TEST INTRA NUM                  8  2954  B B15 132          11   3215    132
 151  1 50          SW    131                 SET PCH LOCTN                   4  2962  , 131              11    131
 152  1 51          C     RECLNG,MPCTST                                       7  2966  C J97 I91          11   2197   3991
 153  1 52          BL    MPLOC               BR 2 POS NUM                    5  2973  B R93 T            11   2993
 154  1 53          SW    MPLCDS                                              4  2978  , L28              12   2328
 155  1 54          MCW   132,MOVMCT+6                                        7  2982  M 132 |73          12    132   1073
 156  1 55          B     JOBEND                                              4  2989  B B22              12   3222
 157  1 56   MPLOC  A     ONE80-2,132                                         7  2993  A K06 132          12   2206    132
 158  1 57          B     MPLOC-11                                            4  3000  B R82              12   2982
 159  1 58   LDFIXB MCW   139,*+4             SET FIXED RTNE                  7  3004  M 139 ?14          12    139   3014
 160  1 59          SW    400                 TO BINARY MODE                  4  3011  , 400              12    400
 161  1 60          MCW   FIVE,GPFIX+4                                        7  3015  M A22 |97          13   3122   1097
 162  1 61          CW    GPFIX+7                                             4  3022  ) /00              13   1100
 163  1 62          MCW   B,GPFIX+7                                          7  3026  M L26 /00          13   2326   1100
 164  1 63          MCW   NOP,LDFIX-1                                        7  3033  M L25 R00          13   2325   2900
 165  1 64          MCW   FIVE,LDFIX+1                                       7  3040  M A22 R02          13   3122   2902
 166  1 65          CS    580                                                 4  3047  / 580              13    580
 167  1 66          CS                                                        1  3051  /                  13
 168  1 67          SW    401                                                 4  3052  , 401              14    401
 169  1 68          RCB                       RD FIX INFO BINA                2  3056  1 C                14
 170  1 69          LCA   *-7,RDADTL-1        SET EOF TO RD FX                7  3058  L ?57 Z72          14   3057   1972
 171  1 70          CW    LDFIX+7             IN BINARY MODE                  4  3065  ) R08              14   2908
 172  1 71          MCW   MPLOC,LDFIX+7                                       7  3069  M R93 R08          14   2993   2908
 173  1 72          SW    ALCDFX-10,ALCDFX-13                                 7  3076  , R29 R26          14   2929   2926
 174  1 73          A     ONE80-2,ALCDFX-8                                    7  3083  A K06 R31          14   2206   2931
 175  1 74          A     ONE80-2,ALCDFX-11                                   7  3090  A K06 R28          15   2206   2928
 176  1 75          MCW   LDFIX,ALCDFX-14                                     7  3097  M R01 R25          15   2901   2925
 177  1 76          MCW   *-6,LDFIX                                           7  3104  M A04 R01          15   3104   2901
 178  1 77          CW    ALCDFX-10,ALCDFX-13                                 7  3111  ) R29 R26          15   2929   2926
 179  1 78          B     FIXTST+27                                           4  3118  B Q72              15   2872
 180  1 79   FIVE   DCW   5                                                   1  3122                     15
 181  1 80   AUTNOP MCW   NOP,AUTTOT          NOP MAIN SEQ NUM                7  3123  M L25 |40          16   2325   1040
 182  1 81          BCE   TSTSEQ,160,         BR NO SELTN                     8  3130  B A49 160          16   3149    160
 183  1 82          MCW   LCSELT,SW5+3        SET SW5 TO SELTN                7  3138  M I44 |08          16   3944   1008
 184  1 83          B     SELECT                                              4  3145  B C95              16   3395
 185  1 84   TSTSEQ MCW   SQADD,BLARGR+14     SET SEQ ADD RCLG                7  3149  M 381 482          16    381    482
 186  1 85          BCE   NOSEQ,148,          BR ON NO SEQNCE                 8  3156  B A68 148          17   3168    148
 187  1 86          B     SELECT                                              4  3164  B C95              17   3395
 188  1 87   NOSEQ  MCW   NOP,SW4             NOP SW4                         7  3168  M L25 |01          17   2325   1001
 189  1 88          MCW   NOP,CVTTST-8        NOP STR LST SQ                  7  3175  M L25 V73          17   2325   1573
 190  1 89          B     FIXTST                                              4  3182  B Q45              17   2845
 191  1 90   FIXNOP MCW   NOP,MOVMCT-5        NOP ADTL FIX MOV                7  3186  M L25 |62          17   2325   1062
 192  1 91          MCW   NOP,MOVMCT-12                                      7  3193  M L25 |55          18   2325   1055
 193  1 92          B     MLTTST                                              4  3200  B R54              18   2954
 194  1 93   FIXALL MCW   BLANKS-1,MOVMCT-1  PCH FIX ALL CDS                 7  3204  M J89 |66          18   2189   1066
 195  1 94          B     FIXNOP+7                                            4  3211  B A93              18   3193
 196  1 95   MPLNOP MCW   NOP,MOVMCT          NOP INTRA CD CNT                7  3215  M L25 |67          18   2325   1067
 197  1 96   JOBEND BCE   ENDJOB,159,                                        8  3222  B B72 159          18   3272    159
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SEQ PG LIN  LABEL   OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

198  1 97           MCW   MOVTAP,BDBLCK      SET TAPE ERROR      7  3230  M 953 T91          19   953   1391
199  1 98           MCW   MOVTAP,BDBLCK+14                       7  3237  M 953 U05          19   953   1405
200  1 981          MCW   NOP,BBLKND-8                          7  3244  M L25 U26          19  2325   1426
201  1 99           MCW   LCSELT,BBLKND-5                       7  3251  M I44 U29          19  3944   1429
202  2 00           MCW   NOP,FXBBLK-4                          7  3258  M L25 U64          19  2325   1464
203  2 01           MCW   NOP,BINBBK                            7  3265  M L25 829          20  2325    829
204  2 02   ENDJOB  BCE   HDRLGH,147,4       TEST HDR CMPRE      8  3272  B B92 147 4        20  3292    147
205  2 03           BCE   STORTR,ENDTYP,1                       8  3280  B C28 K03 1        20  3328   2203
206  2 04           B     GPMTST                                4  3288  B C36              20  3336
207  2 05   HDRLGH  R                                           1  3292  1                  20
208  2 06           LCA   80,3880                               7  3293  L 080 H80          20   080   3880
209  2 07           C     146,ZERO80                            7  3300  C 146 K11          21   146   2211
210  2 08           BL    MORE                                  5  3307  B C16 T            21  3316
211  2 09           B     ENDJOB+8                              4  3312  B B80              21  3280
212  2 10   MORE    R                                           1  3316  1                  21
213  2 11           MCW   80,3960                               7  3317  M 080 I60          21   080   3960
214  2 12           B     ENDJOB+8                              4  3324  B B80              21  3280
215  2 13   STORTR  R                         SET TRAIL LABEL     1  3328  1                  21
216  2 14           LCA   80,TRALOC           TEST 705 GP NK      7  3329  L 080 O40          22   080   2640
217  2 15   GPMTST  BCE   XCEPTN-7,155,       NOP PCH REL         8  3336  B C70 155          22  3370    155
218  2 16           MCW   NOP,PUNCH+2                           7  3344  M L25 |86          22  2325   1086
219  2 17           SW    155                                   4  3351  , 155              22   155
220  2 18           NOP   155,595                               7  3355  N 155 595          22   155    595
221  2 19           CW    155                                   4  3362  ) 155              22   155
222  2 20           B     XCEPTN                                4  3366  B C77              23  3377
223  2 21           MCW   NOP,CONGMK                           7  3370  M L25 |75          23  2325   1075
224  2 22   XCEPTN  SW    24,56               SET WD MKS TO       7  3377  , 024 056          23   024    056
225  2 23           SW    63,67               READ EXCEPT         7  3384  , 063 067          23   063    067
226  2 24           R     56                  ROUTINE             4  3391  1 056              23   056
227  2 25   SELECT  SW    48                  SELECTION TEST      4  3395  , 048              23   048
228  2 26           MCW   BRFIX,NOSEQ-1                         7  3399  M I94 A67          24  3994   3167
229  2 27           MCW   48,SEQTOT           STR SEQ FLD TOT     7  3406  M 048 N46          24   048   2546
230  2 28           MCW   60                  STR SEL FLD TOT     4  3413  M 060              24   060
231  2 29           MCW   60                                    4  3417  M 060              24   060
232  2 30           A     SEQTOT,FULTOT       STR CMB TOTAL       7  3421  A N46 N45          24  2546   2545
233  2 31           CW    48                                    4  3428  ) 048              24   048
234  2 32   ENTHLD  MCW   70,HOLD             MOVE 1ST FIELD      7  3432  M 070 I77          25   070   3977
235  2 33           MCW                       TO HOLD AREA        1  3439  M                  25
236  2 34           MCW                                           1  3440  M                  25
237  2 35           MCW   HOLD-8                                 4  3441  M I69              25  3969
238  2 36           MCW                                           1  3445  M                  25
239  2 37           BCE   TWMULT,HOLD-1,1                       8  3446  B E81 I76 1        25  3581   3976
240  2 38           BCE   TSTSEQ+7,HOLD-2,    BR ALL FLDS STRD    8  3454  B A56 I75          25  3156   3975
241  2 39           A     I9,HOLD-12                            7  3462  A I79 I65          26  3979   3965
242  2 40           BWZ   INSERT,HOLD,K       BR ON FIELD INSERT  8  3469  V G32 I77 K        26  3732   3977
243  2 41           BCE   LNGH M,HOLD-7,1     BR REC LGH 1000     8  3477  B G21 I70 1        26  3721   3970
244  2 42   ADNTRY  A     CONST1,HOLD-4       SET FLD TP LOC      7  3485  A J93 I73          26  2193   3973
245  2 43           MCW   HOLD-4                                 4  3492  M I73              26  3973
246  2 44           A     HOLD-12,HOLD-2                        7  3496  A I65 I75          27  3965   3975
247  2 45           A     HOLD-12,HOLD-7                        7  3503  A I65 I70          27  3965   3970
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SEQ PG LIN  LABEL   OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

248  2 46           C     HOLD,CDSQNO         TST CD PCH SEQ      7  3510  C I77 I63          27  3977   3963
249  2 47           BH    CSQERR                                  5  3517  B I20 U            27  3920
250  2 48   FLDMOV  MCW   HOLD,FLD 1          STR FLD PARAM       7  3522  M I77 L44          27  3977   2344
251  2 49           MCW                                           1  3529  M                  27
252  2 50           MCW                                           1  3530  M                  27
253  2 51           MCW                                           1  3531  M                  28
254  2 52           A     ONE80-2,FLDCNT                          7  3532  A K06 I81          28  2206   3981
255  2 53           BCE   MODTST-12,150,      BR ON NO SEQ        8  3539  B F50 150          28  3650    150
256  2 54           NOP   SETLST                                  4  3547  N E93              28  3593
257  2 55   LSTREC  A     ONE80-2,ADCNTR      FIND STORE LOCTN    7  3551  A K06 I84          28  2206   3984
258  2 56           C     ADCNTR,RECBLK       OF LAST RECORD      7  3558  C I84 K00          28  3984   2200
259  2 57           BE    SETLST              OF BLOCK            5  3565  B E93 S            28  3593
260  2 58           A     RECLNG,LTHCTR                           7  3570  A J97 I87          29  2197   3987
261  2 59           B     LSTREC                                  4  3577  B E51              29  3551
262  2 60   TWMULT  CW    MPLCDS                                  4  3581  ) L28              29  2328
263  2 61           SW    MLTTST+23                               4  3585  , R77              29  2977
264  2 62           B     ENTHLD+22                               4  3589  B D54              29  3454
265  2 63   SETLST  A     LTHCTR,HOLD-4       SET LAST RECORD     7  3593  A I87 I73          29  3987   3973
266  2 64           A     LTHCTR,HOLD-7       IN HOLD POSITION    7  3600  A I87 I70          29  3987   3970
267  2 65           MCW   B,LSTREC-4                             7  3607  M L26 E47          30  2326   3547
268  2 66           C     150,FLDCNT          BR WHEN SEL FLD     7  3614  C 150 I81          30   150   3981
269  2 67           BE    SEQ1                EQUAL SEQ FLD       5  3621  B G61 S            30  3761
270  2 68           C     152,FLDCNT                              7  3626  C 152 I81          30   152   3981
271  2 69           BE    SEQ2                                    5  3633  B H07 S            30  3807
272  2 70           C     154,FLDCNT                              7  3638  C 154 I81          30   154   3981
273  2 71           BE    SEQ3                                    5  3645  B H67 S            31  3867
274  2 72           C     FLDCNT,FULTOT                           7  3650  C I81 N45          31  3981   2545
275  2 73           BE    TSTSEQ+7                                5  3657  B A56 S            31  3156
276  2 74   MODTST  BCE   MODIFY,FLDCNT,2    BR AFT 2 FLDS       8  3662  B G03 I81 2        31  3703   3981
277  2 75           A     ONE80-2,ENTHLD+2                        7  3670  A K06 D34          31  2206   3434
278  2 76   SELWMK  SW    FLDMOV+4            UPDATE FLD STDR     4  3677  , E26              31  3526
279  2 77           A     TWELVE,FLDMOV+6     INSTRUCTION AND     7  3681  A N48 E28          32  2548   3528
280  2 78           CW    FLDMOV+4            AND BRANCH          4  3688  ) E26              32  3526
281  2 79           MCW   HOLD,CDSQNO                           7  3692  M I77 I63          32  3977   3963
282  2 80           B     ENTHLD                                  4  3699  B D32              32  3432
283  2 81   MODIFY  MCW   ONE80-2,ENTHLD+2    MODIFY INST         7  3703  M K06 D34          32  2206   3434
284  2 82           MCW   ZZZERO-2,MODTST+7   TO STORE FLD IN     7  3710  M L04 F69          32  2304   3669
285  2 83           R     SELWMK              HOLD AND RD CC2     4  3717  1 F77              33  3677
286  2 84   LNGH M  MZ    LNGH M,HOLD-6       SET 1000 POS REC    7  3721  Y G21 I71          33  3721   3971
287  2 85           B     ADNTRY                                  4  3728  B D85              33  3485
288  2 86   INSERT  MZ    HOLD,HOLD-7         SET FIELD FOR       7  3732  Y I77 I70          33  3977   3970
289  2 87           MCW   HOLD-2              INSERTION OF        4  3739  M I75              33  3975
290  2 88           MZ    BLANKS-1,HOLD       CHARACTERS          7  3743  Y J89 I77          33  2189   3977
291  2 89           A     HOLD-12,HOLD-2                          7  3750  A I65 I75          34  3965   3975
292  2 90           B     FLDMOV-12                               4  3757  B E10              34  3510
293  2 91   SEQ1    MCW   FLDMOV+6,SQFLD1     SET INSTRUCTIONS    7  3761  M E28 O50          34  3528   2650
294  2 92           MCW   HOLD-7,LDREAD+7     TO LOAD READ        7  3768  M I70 556          34  3970    556
295  2 93           MCW   HOLD-4,LDREAD+3     AREA WITH LAST      7  3775  M I73 552          34  3973    552
296  2 94           MCW   HOLD-4,CONMOV+14                       7  3782  M I73 W60          34  3973   1660
297  2 95           MCW   HOLD-10,LDREAD+10                      7  3789  M I67 559          35  3967    559
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SEQ  PG LIN  LABEL   OP   OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

298   2  96         MCW  HOLD-10,LDCTR                        7  3796  M I67 I41          35   3967   3941
299   2  97         B    MODTST-12                           4  3803  B F50              35   3650
300   2  98   SEQ2  MCW  FLDMOV+6,SQFLD2                     7  3807  M E28 O53          35   3528   2653
301   2  99         MCW  HOLD-7,LDREAD+18                   7  3814  M I70 567          35   3970    567
302   3  00         MCW  HOLD-4,CONMOV+18                   7  3821  M I73 W64          35   3973   1664
303   3  01         MCW  HOLD-4,LDREAD+14                   7  3828  M I73 563          36   3973    563
304   3  02         A    HOLD-10,LDCTR                      7  3835  A I67 I41          36   3967   3941
305   3  03         MCW  LDCTR,HOLD-10                      7  3842  M I41 I67          36   3941   3967
306   3  04         MCW  LDCTR,LDREAD+21                    7  3849  M I41 570          36   3941    570
307   3  05         MCW  TWO,CLSQWM+21                      7  3856  M L29 448          36   2329    448
308   3  06         B    MODTST-12                          4  3863  B F50              36   3650
309   3  07   SEQ3  MCW  FLDMOV+6,SQFLD3                     7  3867  M E28 O56          37   3528   2656
310   3  08         MCW  THREE,CLSQWM+21                    7  3874  M O44 448          37   2644    448
311   3  09         MCW  HOLD-7,LDREAD+29                   7  3881  M I70 578          37   3970    578
312   3  10         MCW  HOLD-4,LDREAD+25                   7  3888  M I73 574          37   3973    574
313   3  11         MCW  HOLD-4,CONMOV+22                   7  3895  M I73 W68          37   3973   1668
314   3  12         A    HOLD-10,LDCTR                      7  3902  A I67 I41          38   3967   3941
315   3  14         MCW  LDCTR,LDREAD+32                    7  3909  M I41 581          38   3941    581
316   3  15         B    MODTST-12                          4  3916  B F50              38   3650
317   3  16   CSQERR MCW  SELCON,280          PRINT MESSAGE  7  3920  M I61 280          38   3961    280
318   3  17         W                        CARD NUM FOR   1  3927  2                  38
319   3  18         CS   280                 FLD SEQ PCHG   4  3928  / 280              38    280
320   3  19         SW   201                 OUT OF SEQUENCE 4  3932  , 201              38    201
321   3  20         H    *-3                                4  3936  . I36              39   3936
322   3  21   LDCTR  DCW  #2                                  2  3941                    39
323   3  22   LCSELT DSA  FLDSEL                             3  3944  600                39    600
324   3  23   SELCON DCW  @FLD CD NO SEQ ERR@               17  3961                    39
325   3  24   CDSQNO DCW  #2                                  2  3963                    39
326   3  25         DCW  #2                                  2  3965                    39
327   3  26         DCW  #2                                  2  3967                    39
328   3  27         DCW  #3                                  3  3970                    40
329   3  28         DCW  #3                                  3  3973                    40
330   3  29   HOLD   DCW  #4                                  4  3977                    40
331   3  30   I9     DCW  @I9@                                2  3979                    40
332   3  31   FLDCNT DCW  #2                                  2  3981                    40
333   3  32   ADCNTR DCW  #3                                  3  3984                    40
334   3  33   LTHCTR DCW  #3                                  3  3987                    40
335   3  34   MPCTST DCW  #4                                  4  3991                    41
336   3  35   BRFIX  DSA  FIXTST                             3  3994  Q45                41   2845
337   3  36         ORG  333                                          0333
338   3  37   FLDSEQ NOP  ERESTR              RESTORE AFT SQER 4  0333  N 526             42    526
339   3  38   SEQFLD MCW  SQFLD1,SEQMOV+3     SET SEQ FLD    7  0337  M O50 347          42   2650    347
340   3  39   SEQMOV MCW  0-0,TEST            FOR COMPARE    7  0344  M 000 198          42    000    198
341   3  40         MCW                                      1  0351  M                  42
342   3  41         MCW                                      1  0352  M                  42
343   3  42         MCW                                      1  0353  M                  42
344   3  43         MCW                                      1  0354  M                  42
345   3  44         A    ONE80-2,SEQCNT                     7  0355  A K06 O57          43   2206   2657
346   3  45         C    ZZZERO,RCOUNT      TEST FOR FIRST  7  0362  C L06 L12          43   2306   2312
347   3  46         BE   ONCE               RECORD OF BLOCK 5  0369  B 493 S            43    493
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SEQ  PG LIN  LABEL   OP   OPERANDS                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

348   3  47         MCW  TEST-7,SQINST+3                     7  0374  M 191 423          43    191    423
349   3  48   SQADD  A    ADLNGH,TEST-4      UPDATE TAPE    7  0381  A L09 194          43   2309    194
350   3  49         A    ADLNGH,TEST-7      LOCATION BY ONE 7  0388  A L09 191          44   2309    191
351   3  50         MCW  TEST-4,SEQWMK+3    RECORD LENGTH  7  0395  M 194 419          44    194    419
352   3  51         MCW  TEST-4,CLSQWM+3    AND COMPARE    7  0402  M 194 430          44    194    430
353   3  52         MCW  TEST-7,SQINST+6    INSTRUCTIONS   7  0409  M 191 426          44    191    426
354   3  53   SEQWMK SW   0-0                               4  0416  , 000              44    000
355   3  54   SQINST C    0-0,0-0                           7  0420  C 000 000          44    000    000
356   3  55   CLSQWM CW   0-0                               4  0427  ) 000              45    000
357   3  56         BH   BLARGR             BR SEQ OK      5  0431  B 468 U            45    468
358   3  57         BL   ERROR1             BR SEQ ERR     5  0436  B 504 T            45    504
359   3  58         BCE  BLARGR,SEQCNT,1    BR ALL FLDS CHKD 8  0441  B 468 O57 1        45    468   2657
360   3  59         SW   SEQFLD+1           SET INSTRUCTIONS 4  0449  , 338             45    338
361   3  60         A    THREE,SEQFLD+3     FOR NEXT FIELD 7  0453  A O44 340          45   2644    340
362   3  61         CW   SEQFLD+1           TO BE SEQUENCED 4  0460  ) 338             45    338
363   3  62         B    FLDSEQ+4                          4  0464  B 337              46    337
364   3  63   BLARGR MCW  SQBASE,SEQFLD+3    RESET COMPARE  7  0468  M O47 340          46   2647    340
365   3  64         MCW  ZZZERO-2,SEQCNT    TO CHECK MAJOR 7  0475  M L04 O57          46   2304   2657
366   3  65         NOP  RECLNG,ADLNGH      SEQ FIELD      7  0482  N J97 L09          46   2197   2309
367   3  66         B    SW5                BR TO MAIN RTNE 4  0489  B |05             46   1005
368   3  67   ONCE   A    TEST-10,SQINST+3                  7  0493  A 188 423          46    188    423
369   3  68         B    SQADD                             4  0500  B 381              47    381
370   3  69   ERROR1 SW   SSD+4              SET INST TO PRIN 4  0504  , |83             47   1083
371   3  70         MCW  SEQERR,290         COMPLETE RECORD 7  0508  M 591 290          47    591    290
372   3  71         MCW  B,FLDSEQ           AND ERROR MSGE 7  0515  M L26 333          47   2326    333
373   3  72         B    BLARGR                            4  0522  B 468              47    468
374   3  73   ERESTR CS   290                RESTORE FROM   4  0526  / 290              47    290
375   3  74         SW   201                SEQ ERR RTNE   4  0530  , 201              47    201
376   3  75         CW   SSD+4                             4  0534  ) |83             48   1083
377   3  76         B    SEQFLD                            4  0538  B 337              48    337
378   3  77         MCW  ZZZERO,SQINST+3                   7  0542  M L06 423          48   2306    423
379   3  78   LDREAD SW   1                  LOAD LAST REC  4  0549  , 001              48    001
380   3  79         MCW  1,1                SEQ FIELDS TO  7  0553  M 001 001          48    001    001
381   3  80         SW   1                  READ AREAS     4  0560  , 001              48    001
382   3  81         MCW  1,1                               7  0564  M 001 001          48    001    001
383   3  82         SW   1                                 4  0571  , 001              49    001
384   3  83         MCW  1,1                               7  0575  M 001 001          49    001    001
385   3  84         B    CONMOV+11                         4  0582  B W57              49   1657
386   3  85   SEQERR DCW  @SEQERR@                         6  0591                    49
387   3  86   BRSEQ  DSA  FLDSEQ                            3  0594  333                49    333
388   3  87         ORG  600                                          0600
389   3  88   FLDSEL MCW  ONE01,CONTRL       FIELD SELECTION 7  0600  M L23 N50          50   2323   2550
390   3  89         MCW  FLDORG,ORG+3                      7  0607  M 186 617          50    186    617
391   3  90   ORG    MCW  0-0,TEST           MOVE FIELD     7  0614  M 000 198          50    000    198
392   3  91         MCW                     PARAMETERS     1  0621  M                  50
393   3  92         MCW                     TO HOLD AREA   1  0622  M                  50
394   3  93         MCW                                    1  0623  M                  50
395   3  94         MCW                                    1  0624  M                  50
396   3  95         C    SELCTR,SELTOT                     7  0625  C O96 N43          51   2696   2543
397   3  96         BE   PCHBR1                            5  0632  B 740 S            51    740
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

398  3 97          A     ONE80-2,SELCTR                           7  0637  A K06 O96           51   2206   2696
399  3 98   CTLCMP C     TEST,CONTRL                              7  0644  C 198 N50           51    198   2550
400  3 99          BU    PCHBR2                 BR FLDS IN PCH    5  0651  B 784 /             51    784
401  4 00          BWZ   CHRADD,TEST-7,K        TST CHAR INSERT   8  0656  V 814 191 K         51    814    191
402  4 01          A     ADLNGH,TEST-4          UPDATE INST       7  0664  A L09 194           52   2309    194
403  4 02          A     ADLNGH,TEST-7                            7  0671  A L09 191           52   2309    191
404  4 03          MCW   TEST-7,INST+3                           7  0678  M 191 713           52    191    713
405  4 04          MCW   TEST-4,CWMINS+3                        7  0685  M 194 720           52    194    720
406  4 05          MCW   TEST-4,WMINST+3                        7  0692  M 194 702           52    194    702
407  4 06   WMINST SW    0-0                                      4  0699  , 000               52    000
408  4 07          MCW   TEST-2,INST+6                          7  0703  M 196 716           53    196    716
409  4 08   INST   MCW   0-0,0100               MOVE TAPE TO PCH  7  0710  M 000 100           53    000    100
410  4 09   CWMINS CW    0-0                                      4  0717  ) 000               53    000
411  4 10   TRNFLD SW    ORG+1                  UPDATE INST TO    4  0721  , 615               53    615
412  4 11          A     TWELVE,ORG+3           PICK UP NEXT FLD  7  0725  A N48 617           53   2548    617
413  4 12          CW    ORG+1                                    4  0732  ) 615               53    615
414  4 13          B     ORG                                      4  0736  B 614               53    614
415  4 14   PCHBR1 MCW   BCLP1,SW8+3                             7  0740  M N57 |92           54   2557   1092
416  4 15          B     NUMCDS                 BR TO PUNCH       4  0747  B |33               54   1033
417  4 16   CLPCH1 CS    180                    CLEAR PUNCH       4  0751  / 180               54    180
418  4 17          SW    101                    AREA              4  0755  , 101               54    101
419  4 18          MCW   ZZZERO-1,CONTRL        RESET COUNT       7  0759  M L05 N50           54   2305   2550
420  4 19          MCW   ZZZERO-1,SELCTR                          7  0766  M L05 O96           54   2305   2696
421  4 20          A     RECLNG,ADLNGH          UPDATE REC CTR    7  0773  A J97 L09           55   2197   2309
422  4 21          B     BLKTST-14                                4  0780  B V25               55   1525
423  4 22   PCHBR2 MCW   BCLP2,SW8+3            BR TO PUNCH       7  0784  M N60 |92           55   2560   1092
424  4 23          A     ONE80-2,CONTRL                           7  0791  A K06 N50           55   2206   2550
425  4 24          B     NUMCDS                                   4  0798  B |33               55   1033
426  4 25   CLPCH2 CS    180                    CLEAR PUNCH       4  0802  / 180               55    180
427  4 26          SW    101                    AREA              4  0806  , 101               55    101
428  4 27          B     CTLCMP                                   4  0810  B 644               56    644
429  4 28   CHRADD MCW   TEST-8,ZWMINS+3        INSERT CHAR       7  0814  M 190 838           56    190    838
430  4 29          MCW   TEST-8,ZINST+14        FIELD IN          7  0821  M 190 879           56    190    879
431  4 30          MCW   TEST-2,ZINST+6         PUNCH LOCATION    7  0828  M 196 871           56    196    871
432  4 31   ZWMINS SW    100                                      4  0835  , 100               56    100
433  4 32          MCW   TEST-2,ZINST+10                         7  0839  M 196 875           56    196    875
434  4 33          C     ONE01,TEST-10                            7  0846  C L23 188           57   2323    188
435  4 34          BH    ZINST                                    5  0853  B 865 U             57    865
436  4 35          MCW   NOP,ZINST+7                            7  0858  M L25 872           57   2325    872
437  4 36   ZINST  MCW   TEST-6,100                             7  0865  M 192 100           57    192    100
438  4 37          MCW   100                                      4  0872  M 100               57    100
439  4 38          CW    100                                      4  0876  ) 100               57    100
440  4 39          MCW   CHRADD,ZINST+7                         7  0880  M 814 872           58    814    872
441  4 40          B     TRNFLD                                   4  0887  B 721               58    721
442  4 41          CS    180                                      4  0891  / 180               58    180
443  4 42          SW    101                                      4  0895  , 101               58    101
444  4 43   SW1    B     SW2                    SWITCH 1          4  0899  B 949               58    949
445  4 44   SELFIL A     ONE80-2,FILNUM         SELECT FILE       7  0903  A K06 J82           58   2206   2182
446  4 45   FILCMP C     FILNUM,SLFIL1          TO BE PCHED       7  0910  C J82 J84           58   2182   2184
447  4 46          BE    SW2                                      5  0917  B 949 S             59    949
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

448  4 47          BL    ENDFIL                 BR EOF ON UNEQUA  5  0922  B Y57 T             59   1857
449  4 48   TAPMOV RT    1,TPNTRY                                 8  0927  M %U1 P01 R         59    001   2701
450  4 49          MCW   BLANK                                    4  0935  M L03               59   2303
451  4 50          CW                                             1  0939  )                   59
452  4 51          BEF   SELFIL                                   5  0940  B 903 K             59    903
453  4 52          B     TAPMOV                                   4  0945  B 927               59    927
454  4 53   SW2    NOP   COLBIN                 BR ON COLBIN      4  0949  N 699               60    699
455  4 54   MOVTAP RT    1,TPNTRY               READ TAPE         8  0953  M %U1 P01 R         60    001   2701
456  4 55          MCW   BLANK                                    4  0961  M L03               60   2303
457  4 56          CW                                             1  0965  )                   60
458  4 57          BER   TAPERR                 BR ON TRAN ERR    5  0966  B S88 L             60   1288
459  4 58   SW3    NOP   ERESET                                  4  0971  N T66               60   1366
460  4 59   EOF    BEF   FILEND                 BR EOF            5  0975  B W73 K             60   1673
461  4 60          BSS   XTRPCH,C                                 5  0980  B |20 C             61   1020
462  4 61          MCW   CONST1,RECORD                           7  0985  M J93 183           61   2193    183
463  4 62          BSS   NO SPF,F                                5  0992  B |09 F             61   1009
464  4 63   TSTXCP NOP   EXCPTN                 BR EXCEPT RTNE    4  0997  N /28               61   1128
465  4 64   SW4    B     FLDSEQ                 BR SEQ RTNE       4  1001  B 333               61    333
466  4 65   SW5    B     CREG                   BR FX FAR FLD SL  4  1005  B 600               61    600
467  4 66   NO SPF MCW   NOP,PUNCH+2            NOP PCH RL ON F   7  1009  M L25 |86           61   2325   1086
468  4 67          B     TSTXCP                                   4  1016  B 997               62    997
469  4 68   XTRPCH P                            BYPASS RECORDS    1  1020  4                   62
470  4 69          NOP                          ON SENSE SWITCH   1  1021  N                   62
471  4 70          MCW   NOP,XTRPCH             C CONTROL         7  1022  M L25 |20           62   2325   1020
472  4 71          B     MOVTAP                                   4  1029  B 953               62    953
473  4 72   NUMCDS A     ONE80-2,CDCNT          UPDATE CD CNT     7  1033  A K06 L16           62   2206   2316
474  4 73   AUTTOT MCW   CDCNT,100              MOVE CD CNT       7  1040  M L16 100           62   2316    100
475  4 74          NOP                          TO PUNCH          1  1047  N                   63
476  4 75          A     ONE80-2,MPLCDS         UPDATE INTRA CNT  7  1048  A K06 L28           63   2206   2328
477  4 76          C     FXCDNO,MPLCDS          TEST CD NUM FOR   7  1055  C K05 L28           63   2205   2328
478  4 77          BE    GPFIX                  ADDTL INFO        5  1062  B |93 S             63   1093
479  4 78   MOVMCT MCW   MPLCDS,100             MOVE INTRA TO PC  7  1067  M L28 100           63   2328    100
480  4 79          NOP                                            1  1074  N                   63
481  4 80   CONGMK B     CVTTST                 BR CVT 705 GM     4  1075  B V81               63   1581
482  4 81   SSD    BSS   PRTPCH,D              BR PRPTCH ON D    5  1079  B /05 D             64   1105
483  4 82   PUNCH  P                            PUNCH CARD        1  1084  4                   64
484  4 83          NOP                                            1  1085  N                   64
485  4 84          SPF                          PUNCH RELEASE     1  1086  9                   64
486  4 85          SS    4                      STACKER SELECT    2  1087  K 4                 64
487  4 86   SW8    B     CMP                    BR TO REC SEG     4  1089  B 607               64    607
488  4 87   GPFIX  MCW   FIXED,100              MOVE ADDTL INFO   7  1093  M K92 100           64   2292    100
489  4 88          NOP                          TO PUNCH          1  1100  N                   65
490  4 89          B     MOVMCT                                   4  1101  B |67               65   1067
491  4 90   PRTPCH MCW   180,280                MOVE PUNCH INFO   7  1105  M 180 280           65    180    280
492  4 91          P                            TO PRINT AREA     1  1112  4                   65
493  4 92          W                            PRINT AND PUNCH   1  1113  2                   65
494  4 93          BCV   FRMCTL                                   5  1114  B /23 @             65   1123
495  4 94          B     SW8-3                  BR TO NEXT SEG    4  1119  B |86               65   1086
496  4 95   FRMCTL CCB   SW8-3,1                                  5  1123  F |86 1             66   1086
497  4 97   EXCPTN LCA   RECORD,TSTCH1+3        TEST TAPE REC     7  1128  L 183 /73           66    183   1173
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

498  4 98           LCA   RECORD,TSTCH2+3    LOCATION FOR           7  1135  L 183 /96           66   183   1196
499  4 981  EXCEPT  A     RECLNG,RECORD                             7  1142  A J97 183           66  2197    183
500  4 99           A     ADDEX1,TSTCH1+3    EXCEPTION CODES        7  1149  A O83 /73           66  2683   1173
501  5 00           A     ADDEX2,TSTCH2+3                           7  1156  A O87 /96           67  2687   1196
502  5 01           CW    TSTCH1+1,TSTCH2+1                         7  1163  ) /71 /94           67  1171   1194
503  5 02   TSTCH1  MCW   0-0,FIRSTX                               7  1170  M 000 O72           67   000   2672
504  5 03           C     FIRSTX,XCHAR1      COMPARE FIRST          7  1177  C O72 O80           67  2672   2680
505  5 04           BU    TSTCH2             CHARACTER              5  1184  B /93 /             67  1193
506  5 05           B     XCPFND                                    4  1189  B S12               67  1212
507  5 06   TSTCH2  MCW   0-0,SECNDX                               7  1193  M 000 O73           68   000   2673
508  5 07           C     SECNDX,XCHAR2      COMPARE SECOND         7  1200  C O73 O84           68  2673   2684
509  5 08           BU    SW4                CHARACTER              5  1207  B |01 /             68  1001
510  5 09   XCPFND  SW    NUMCDS+4           SET INST TO            4  1212  , |37               68  1037
511  5 10           MCW   LCPTPN,NUMCDS+3    PROCESS EXCEPT         7  1216  M O76 |36           68  2676   1036
512  5 11           MCW   B                  RECORD                 4  1223  M L26               68  2326
513  5 12           SW    BLKTST+11                                 4  1227  , V50               68  1550
514  5 13           MCW   BRXEND,BLKTST+10                         7  1231  M O79 V49           69  2679   1549
515  5 14   OPTION  MCW   NOP,PRTPCH+7                             7  1238  M L25 /12           69  2325   1112
516  5 15           MCW   NOP,PRTPCH+8                             7  1245  M L25 /13           69  2325   1113
517  5 16           B     SW5                                       4  1252  B |05               69  1005
518  5 17   XCPEND  LCA   NMCDCW+6,NUMCDS+6   RESET INST FOR        7  1256  L 091 |39           69   091   1039
519  5 18           LCA   BLKDCW+4,BLKTST+11  NORMAL PROCESS        7  1263  L 096 V50           69   096   1550
520  5 19           LCA   FOUR,PRTPCH+7                            7  1270  L O94 /12           70  2694   1112
521  5 20           LCA   TWO,PRTPCH+8                             7  1277  L L29 /13           70  2329   1113
522  5 21           B     BLKTST+7                                  4  1284  B V46               70  1546
523  5 22   TAPERR  NOP   TPECNT             TAPE ERROR             4  1288  N T10               70  1310
524  5 23           P                        DUMMY PUNCH            1  1292  4                   70
525  5 24           BCE   ERRSTK,SW8-2,N     FOR PCH REL            8  1293  B T55 |87 N         70  1355   1087
526  5 25           MCW   NOP,*+1                                   7  1301  M L25 T08           70  2325   1308
527  5 26           SS    4                                         2  1308  K 4                 71
528  5 27   TPECNT  BEF   1673                                      5  1310  B W73 K             71  1673
529  5 271             N0                                         2  1315  N 0                 71
530  5 272          MCW   B,TAPERR                                  7  1317  M L26 S88           71  2326   1288
531  5 28           A     ONE80-2,ERRCNT                            7  1324  A K06 V03           71  2206   1503
532  5 29           BCE   BDBLCK,ERRCNT-1,1                         8  1331  B T91 V02 1         71  1391   1502
533  5 291          BSP   1                                         5  1339  U %U1 B             71   001
534  5 30           MCW   B,SW3                                     7  1344  M L26 971           72  2326    971
535  5 31           B     MOVTAP                                    4  1351  B 953               72   953
536  5 32   ERRSTK  MCW   KEIGHT-1,TPECNT-2                        7  1355  M O70 T08           72  2670   1308
537  5 33           B     TPECNT-2                                  4  1362  B T08               72  1308
538  5 34   ERESET  MCW   ZZZERO,ERRCNT       RESET FOR NORMAL       7  1366  M L06 V03           72  2306   1503
539  5 35           MCW   NOP,TAPERR         TAPE TRANS             7  1373  M L25 S88           72  2325   1288
540  5 36           MCW   NOP,SW3                                   7  1380  M L25 971           73  2325    971
541  5 37           B     EOF                                       4  1387  B 975               73   975
542  5 38   BDBLCK  NOP   NOP,PRTPCH+7                             7  1391  N L25 /12           73  2325   1112
543  5 39           NOP   NOP,PRTPCH+8       BLOCK OPTION           7  1398  N L25 /13           73  2325   1113
544  5 40           NOP   CDCNT,BBLKCT                              7  1405  N L16 V07           73  2316   1507
545  5 41           SW    SSD+4,BLKTST+11                           7  1412  , |83 V50           73  1083   1550
546  5 42           MCW   LOCBND,BLKTST+10                        7  1419  M V10 V49           74  1510   1549
547  5 43           B     ERESET             RESET INST             4  1426  B T66               74  1366
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

548  5 431          B     FXBBLK                                    4  1430  B U68               74  1468
549  5 435  BBLKND  BL    FLDSEL                                    5  1434  B 600 T             74   600
550  5 44           MCW   TWO,PRTPCH+8       FOR NORMAL             7  1439  M L29 /13           74  2329   1113
551  5 45           MCW   FOUR               PROCESSING             4  1446  M O94               74  2694
552  5 46           CW    SSD+4,BLKTST+11                           7  1450  ) |83 V50           74  1083   1550
553  5 47           MCW   BLKDCW+4,BLKTST+11                       7  1457  M O96 V50           75   096   1550
554  5 48           B     BLKTST             CORRECT TAPE           4  1464  B V39               75  1539
555  5 49   FXBBLK  H                        READ AREA              1  1468  .                   75
556  5 491          MCW   ZZZERO,RCOUNT                            7  1469  M L06 L12           75  2306   2312
557  5 50           MCW   BBLKCT,CDCNT       BY HAND                7  1476  M V07 L16           75  1507   2316
558  5 51           BSP   1                                         5  1483  U %U1 B             75   001
559  5 52           RT    1,TPNTRY                                  8  1488  M %U1 P01 R         75   001   2701
560  5 53           BSS   ERESET,G                                  5  1496  B T66 G             76  1366
561  5 54           H                                               1  1501  .                   76
562  5 55   ERRCNT  DCW   #2                                        2  1503                      76
563  5 56   BBLKCT  DCW   #4                                        4  1507                      76
564  5 57   LOCBND  DSA   BBLKND                                    3  1510  U34                 76  1434
565  5 58   UPCNT   MCW   ONE80,PCHMOV+6     UPDATE RECORD          7  1511  M K08 693           76  2208    693
566  5 59           MCW   BRCMP,SW8+3        COUNT                  7  1518  M K95 |92           76  2295   1092
567  5 60           A     ONE80-2,RCOUNT                            7  1525  A K06 L12           77  2206   2312
568  5 61           MCW   ZZZERO,MPLCDS                             7  1532  M L06 L28           77  2306   2328
569  5 62   BLKTST  C     RECBLK,RCOUNT      TEST FOR END           7  1539  C K00 L12           77  2200   2312
570  5 63           BL    TSTXCP             OF BLOCK               5  1546  B 997 T             77   997
571  5 64           A     RECBLK,RECTOT      UPDATE REC TOT         7  1551  A K00 L20           77  2200   2320
572  5 65           MCW   ZZZERO,RCOUNT      COUNT                  7  1558  M L06 L12           78  2306   2312
573  5 66           MCW   ZZZERO             RESET RECORD           4  1565  M L06               78  2306
574  5 67           MCW   ZZZERO             COUNTER AND            4  1569  M L06               78  2306
575  5 68           B     LDREAD-7           ADD COUNTER            4  1573  B 542               78   542
576  5 69           B     MOVTAP-4                                  4  1577  B 949               78   949
577  5 70   CVTTST  BCE   CONVRT,101,                               8  1581  B W31 101           78  1631    101
578  5 71           SW    CVTTST+4           FOR CONVERSION         4  1589  , V85               78  1585
579  5 72           A     ONE80-2,CVTTST+6   OF 705 GPMK            7  1593  A K06 V87           79  2206   1587
580  5 73           CW    CVTTST+4           TO 1401 GPMK           4  1600  ) V85               79  1585
581  5 74           C     CVTTST+6,ONE80                            7  1604  C V87 K08           79  1587   2208
582  5 75           BL    *+5                                       5  1611  B W20 T             79  1620
583  5 76           B     CVTTST                                    4  1616  B V81               79  1581
584  5 77           MCW   ONE01,CVTTST+6                           7  1620  M L23 V87           79  2323   1587
585  5 78           B     SSD                                       4  1627  B |79               79  1079
586  5 79   CONVRT  SW    CVTTST+4                                  4  1631  , V85               80  1585
587  5 80           MCW   CVTTST+6,CONMOV+6                       7  1635  M V87 W52           80  1587   1652
588  5 81           CW    CVTTST+4                                  4  1642  ) V85               80  1585
589  5 82   CONMOV  MCW   595,0-0                                  7  1646  M 595 000           80   595    000
590  5 83           B     CVTTST+8                                  4  1653  B V89               80  1589
591  5 84           CW    1                                         4  1657  ) 001               80   001
592  5 85           CW    1                                         4  1661  ) 001               80   001
593  5 86           CW    1                                         4  1665  ) 001               81   001
594  5 87           B     MOVTAP-4                                  4  1669  B 949               81   949
595  5 88   FILEND  CS    299                CLEAR PRINT            4  1673  / 299               81   299
596  5 89           CS    180                PUNCH AND              4  1677  / 180               81   180
597  5 90           CS    80                 READ AREAS             4  1681  / 080               81   080
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SEQ PG LIN  LABEL   OP    OPERANDS                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

598  5 91           P                                      1  1685  4                  81
599  5 92           MCW   CONST3,225          MOVE REC TOT  7  1686  M N41 225          81   2541    225
600  5 93           MCW   RECTOT              AND CD CNT TO 4  1693  M L20             82   2320
601  5 94           MCW   CONST2              PRINT AREA    4  1697  M N32             82   2532
602  5 95           MCW   CDCNT                            4  1701  M L16             82   2316
603  5 96           W                          PRINT       1  1705  2                  82
604  5 97           CC    1                    CLEAR PRINT AREA 2  1706  F 1              82
605  5 98           CS    225                               4  1708  / 225              82    225
606  5 99           SW    201                               4  1712  , 201              82    201
607  6 00           SW    101,1                             7  1716  , 101 001          83    101    001
608  6 01           MCW   225,RECTOT         RESET REC TOT 7  1723  M 225 L20          83    225   2320
609  6 02           MCW                      AND CD CNT CNTRS 1  1730  M                83
610  6 03           MCW                                    1  1731  M                  83
611  6 04           MCW   PRTPCH+7,XTRPCH                  7  1732  M /12 |20          83   1112   1020
612  6 05           BCE   ALTSTK,PUNCH+3,N   ALTERNATE STACKR 8  1739  B Y46 |87 N        83   1846   1087
613  6 06           MCW   NOP,PUNCH+3                      7  1747  M L25 |87          83   2325   1087
614  6 07           BSS   SWB ON,B                         5  1754  B Y75 B            84   1875
615  6 08  TSTALL BCE   ALLTAP,NUMFIL,     BRANCH TRAIL EOR 8  1759  B Y79 K02          84   1879   2202
616  6 09           B     TYPFIL                           4  1767  B Z93              84   1993
617  6 10  TSTNUM B     MLTFIL             BR TO SPEC FILES 4  1771  B X94              84   1794
618  6 11           SW    FILCMP+4           UPDATE SELECT 4  1775  , 914              84    914
619  6 12           A     TWO,FILCMP+6       FILE COUNT    7  1779  A L29 916          84   2329    916
620  6 13           CW    FILCMP+4                         4  1786  ) 914              84    914
621  6 14           B     NEWFIX             BR NEW FIX INFO 4  1790  B Z59              85   1959
622  6 15  MLTFIL A     ONE80-2,FILTOT     UPDATE SPECIFIED 7  1794  A K06 L32          85   2206   2332
623  6 16           C     NUMFIL,FILTOT      FILE COUNT    7  1801  C K02 L32          85   2202   2332
624  6 17           BU    NEWFIX             BR ON MORE FILES 5  1808  B Z59 /            85   1959
625  6 18  PROSND CS    299                              4  1813  / 299              85    299
626  6 19           MCW   ZZZERO-1,FILTOT    RESET FILE COUNT 7  1817  M L05 L32          85   2305   2332
627  6 20           SW    201                              4  1824  , 201              85    201
628  6 21           CS    TPNTRY+98                        4  1828  / P99              86   2799
629  6 22           BSS   FILE,E             NO REWIND     5  1832  B Y42 E            86   1842
630  6 23  REEL   RWD   1                    REWIND TAPE   5  1837  U %U1 R            86    001
631  6 24  FILE   H     NEWFIX             HALT BR NEWFIX 4  1842  . Z59              86   1959
632  6 25  ALTSTK MCW   LETR K,PUNCH+3                    7  1846  M L30 |87          86   2330   1087
633  6 26           B     TSTALL-5                         4  1853  B X54              86   1754
634  6 27  ENDFIL MCW   ZZZERO-1,FILNUM    RESET SELECT  7  1857  M L05 J82          86   2305   2182
635  6 28           MCW   LOCSLF,FILCMP+6    FILE COUNTER  7  1864  M 099 916          87    099    916
636  6 29           B     PROSND                           4  1871  B Y13              87   1813
637  6 30  SWB ON H     TSTALL                           4  1875  . X59              87   1759
638  6 31  ALLTAP LCA   GPMK78,TPNTRY+80                  7  1879  L L24 P81          87   2324   2781
639  6 32           RTW   1,TPNTRY                        8  1886  L %U1 P01 R        87    001   2701
640  6 33           MCW   BLANKS                          4  1894  M J90              87   2190
641  6 34           B     TRAILR             BR TO TRAILER 4  1898  B Z16              87   1916
642  6 35           BEF   PROSND             BR ON 2 TPMKS 5  1902  B Y13 K            88   1813
643  6 36  BKSPSE BSP   1                                5  1907  U %U1 B            88    001
644  6 37           B     TYPFIL                           4  1912  B Z93              88   1993
645  6 38  TRAILR BCE   TRALOK,TPNTRY+80,  TEST TRAILER LAB 8  1916  B Z40 P81          88   1940   2781
646  6 39           C     TPNTRY+79,TRALOC   ON TAPE TO LABEL 7  1924  C P80 O40          88   2780   2640
647  6 40  TRALRT BU    BKSPSE             STORED FROM CARD 5  1931  B Z07 /            88   1907
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SEQ PG LIN  LABEL   OP    OPERANDS                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

648  6 41           B     PROSND                           4  1936  B Y13              88   1813
649  6 42  TRALOK C     TWO,TWO                          7  1940  C L29 L29          89   2329   2329
650  6 43           MCW   TPNTRY+79,TRALOC                7  1947  M P80 O40          89   2780   2640
651  6 44           C                                      1  1954  C                  89
652  6 45           B     TRALRT                           4  1955  B Z31              89   1931
653  6 46  NEWFIX CS    TPNTRY+80                        4  1959  / P81              89   2781
654  6 47           NOP   TPNTRY                           4  1963  N P01              89   2701
655  6 48           B     HDRPRO                           4  1967  B !83              89   2083
656  6 49           R                          INSERT NEW  1  1971  1                  90
657  6 50           NOP                        INFORMATION IN 1  1972  N                  90
658  6 51  RDADTL NOP   0-0,0-0              FIXED INFO AREA 7  1973  N 000 000          90    000    000
659  6 52           NOP                                    1  1980  N                  90
660  6 53           CS    80                               4  1981  / 080              90    080
661  6 54           SW    1                                4  1985  , 001              90    001
662  6 55           B     HDRPRO                           4  1989  B !83              90   2083
663  6 56  TYPFIL B     TSTNUM                           4  1993  B X71              91   1771
664  6 57           LCA   GPMK78,TPNTRY+80   PROCESS TRAILER 7  1997  L L24 P81          91   2324   2781
665  6 58           RT    1,TPNTRY           LABELS        8  2004  M %U1 P01 R        91    001   2701
666  6 59           MCW   BLANKS             BETWEEN FILES 4  2012  M J90              91   2190
667  6 60           CS    180                              4  2016  / 180              91    180
668  6 61           SW    101                              4  2020  , 101              91    101
669  6 62           BEF   TSTNUM                           5  2024  B X71 K            91   1771
670  6 63           BCE   TRALES,TPNTRY+80,                8  2029  B !71 P81          92   2071   2781
671  6 64           MCW   TPNTRY+79,280                    7  2037  M P80 280          92   2780    280
672  6 65  TRANRC MCW   280,180                          7  2044  M 280 180          92    280    180
673  6 66           W                                      1  2051  2                  92
674  6 67           CS    280                              4  2052  / 280              92    280
675  6 68           CS    TPNTRY+81                        4  2056  / P82              92   2782
676  6 69           SW    201,TPNTRY                       7  2060  , 201 P01          92    201   2701
677  6 70           B     TYPFIL+11                        4  2067  B !04              93   2004
678  6 71  TRALES MCW   TPNTRY+79,280                    7  2071  M P80 280          93   2780    280
679  6 72           MCW                                    1  2078  M                  93
680  6 73           B     TRANRC                           4  2079  B !44              93   2044
681  6 74  HDRPRO B     SW1-8              PROCESS HEADER 4  2083  B 891              93    891
682  6 75           RT    1,TPNTRY           LABELS BETWEEN 8  2087  M %U1 P01 R        93    001   2701
683  6 76           MCW   BLANK              FILES         4  2095  M L03              93   2303
684  6 77           CW                                     1  2099  )                  94
685  6 78           BEF   SW1-8                           5  2100  B 891 K            94    891
686  6 79           NOP   INITL                            4  2105  N J65              94   2165
687  6 80  PART1  NOP   TPNTRY+79,280      FIRST 80 CHAR  7  2109  N P80 280          94   2780    280
688  6 81           NOP   280,180                          7  2116  N 280 180          94    280    180
689  6 82           NOP                                    1  2123  N                  94
690  6 83           NOP   280                              4  2124  N 280              94    280
691  6 84  PART2  MCW   TPNTRY+79,200      SECOND 80 CHAR 7  2128  M P80 200          95   2780    200
692  6 85           NOP   280,180                          7  2135  N 280 180          95    280    180
693  6 86           W                                      1  2142  2                  95
694  6 87           CS    280                              4  2143  / 280              95    280
695  6 88           SW    201,200                          7  2147  , 201 200          95    201    200
696  6 89           MCW   B,PART1-4                        7  2154  M L26 J05          95   2326   2105
697  6 90           B     HDRPRO+4                         4  2161  B !87              95   2087
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SEQ PG LIN  LABEL  OP   OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR
698  6 91   INITL  MCW  NOP,PART1-4               7  2165  M L25 J05          96   2325   2105
699  6 92          BSP  1                         5  2172  U %U1 B            96    001
700  6 93          B    SW1-8                     4  2177  B 891              96    891
701  6 94   FILNUM DCW  #2                        2  2182                     96
702  6 95   SLFIL1 DCW  #2                        2  2184                     96
703  6 96   SLFIL2 DCW  #2                        2  2186                     96
704  6 97   SLFIL3 DCW  #2                        2  2188                     96
705  6 98   BLANKS DCW  #2                        2  2190                     97
706  6 99   TPNTRY EQU  2701                         2701
707  7 00   CONST1 DSA  2700                      3  2193  P00                97   2700
708  7 01   RECLNG DCW  #4                        4  2197                     97
709  7 02   RECBLK DCW  #3                        3  2200                     97
710  7 03   NUMFIL DCW  #2                        2  2202                     97
711  7 04   ENDTYP DCW  #1                        1  2203                     97
712  7 05   FXCDNO DCW  #2                        2  2205                     97
713  7 06   ONE80  DCW  180                       3  2208                     98
714  7 07   ZERO80 DCW  080                       3  2211                     98
715  7 08   SIX    DCW  6                         1  2212                     98
716  7 09   FIXED  DS   80                           2292
717  7 10   BRCMP  DSA  CMP                       3  2295  607                99    607
718  7 11   BRUPCT DSA  UPCNT                     3  2298  V11                99   1511
719  7 12   UNITNO DCW  1                         1  2299                     99
720  7 13   SXTEEN DCW  016                       3  2302                     99
721  7 14   BLANK  DCW  #1                        1  2303                     99
722  7 15   ZZZERO DCW  000                       3  2306                     99
723  7 16   ADLNGH DCW  #3                        3  2309                     99
724  7 17   RCOUNT DCW  #3                        3  2312                    100
725  7 18   CDCNT  DCW  #4                        4  2316                    100
726  7 19   RECTOT DCW  #4                        4  2320                    100
727  7 20   ONE01  DCW  101                       3  2323                    100
728  7 21   GPMK78 DCW  @}@                       1  2324            GMARK   100
729  7 22   NOP    NOP                            1  2325  N                 100
730  7 23   B      B                              1  2326  B                 100
731  7 24   MPLCDS DCW  #2                        2  2328                    101
732  7 25   TWO    DCW  2                         1  2329                    101
733  7 26   LETR K DCW  @K@                       1  2330                    101
734  7 27   FILTOT DCW  #2                        2  2332                    101
735  7 28   FLD 1  DCW  #12                      12  2344                    101
736  7 29          DCW  #12                      12  2356                    101
737  7 30          DCW  #12                      12  2368                    102
738  7 31          DCW  #12                      12  2380                    102
739  7 32          DCW  #12                      12  2392                    102
740  7 33          DCW  #12                      12  2404                    103
741  7 34          DCW  #12                      12  2416                    103
742  7 35          DCW  #12                      12  2428                    103
743  7 36          DCW  #12                      12  2440                    104
744  7 37          DCW  #12                      12  2452                    104
745  7 38          DCW  #12                      12  2464                    104
746  7 39          DCW  #12                      12  2476                    105
747  7 40          DCW  #12                      12  2488                    105
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SEQ PG LIN  LABEL  OP   OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR
748  7 41          DCW  #12                     12  2500                    105
749  7 42          DCW  #12                     12  2512                    106
750  7 43          DCW  #12                     12  2524                    106
751  7 44   CONST2 DCW  @  CDCNT @              8  2532                    106
752  7 45   CONST3 DCW  @ NUM REC @              9  2541                    107
753  7 46   SELTOT DCW  #2                        2  2543                    107
754  7 47   FULTOT DCW  #2                        2  2545                    107
755  7 48   SEQTOT DCW  #1                        1  2546                    107
756  7 49   TWELVE DCW  12                        2  2548                    107
757  7 50   CONTRL DCW  #2                        2  2550                    107
758  7 51   ZZ80   DCW  0080                      4  2554                    107
759  7 52   BCLP1  DSA  CLPCH1                    3  2557  751               108    751
760  7 53   BCLP2  DSA  CLPCH2                    3  2560  802               108    802
761  7 54   TRALOC DS   80                           2640
762  7 55   BRFILE DSA  FILE                      3  2643  Y42               109   1842
763  7 56   THREE  DCW  3                         1  2644                    109
764  7 57   SQBASE DSA  SQFLD1                    3  2647  O50               109   2650
765  7 58   SQFLD1 DCW  #3                        3  2650                    109
766  7 59   SQFLD2 DCW  #3                        3  2653                    109
767  7 60   SQFLD3 DCW  #3                        3  2656                    109
768  7 61   SEQCNT DCW  #1                        1  2657                    109
769  7 62   LETR F DCW  @F@                       1  2658                    110
770  7 63   ONE00  DCW  100                       3  2661                    110
771  7 64   BRUP   DSA  UPCNT+14                  3  2664  V25               110   1525
772  7 65   BRVAR  DSA  VNDTST-7                  3  2667  649               110    649
773  7 66   STKHLD DCW  #2                        2  2669                    110
774  7 67   KEIGHT DCW  @K8@                      2  2671                    110
775  7 68   FIRSTX DCW  #1                        1  2672                    110
776  7 69   SECNDX DCW  #1                        1  2673                    111
777  7 70   LCPTPN DSA  PRTPCH                    3  2676  /05               111   1105
778  7 71   BRXEND DSA  XCPEND                    3  2679  S56               111   1256
779  7 72   XCHAR1 DCW  #1                        1  2680                    111
780  7 73   ADDEX1 DCW  #3                        3  2683                    111
781  7 74   XCHAR2 DCW  #1                        1  2684                    111
782  7 75   ADDEX2 DCW  #3                        3  2687                    111
783  7 76   MVDIGT MN                             1  2688  D                 112
784  7 77   LETR S DCW  @S@                       1  2689                    112
785  7 78   LOCSW4 DSA  SW4                       3  2692  |01               112   1001
786  7 79   LETR Y MZ                             1  2693  Y                 112
787  7 80   FOUR   DCW  4                         1  2694                    112
788  7 81   SELCTR DCW  #2                        2  2696                    112
789  7 82          EX   START                          B P01                113   2701
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

790                 JOB   1401-UT-028 EXCEPTION ROUTINE
791  7 83           ORG   2701                                                  2701
792  7 84           BCE   TPUNIT,117,        BR NO EXCEPTIONS          8  2701  B A50 117         116  3150   117
793  7 85           MCW   B,TSTXCP           SET INSTRUCTIONS          7  2709  M L26 997         116  2326   997
794  7 86           BCE   FIXCPT,160,        FOR EXCEPTION             8  2716  B P77 160         116  2777   160
795  7 87  OPTST   BCE   PRINTX,117,2       OPTION DESIRED            8  2724  B P59 117 2       116  2759   117
796  7 88           BCE   PTPCHX,117,3                                 8  2732  B P92 117 3       116  2792   117
797  7 89           BCE   STKSLX,117,4                                 8  2740  B Q03 117 4       117  2803   117
798  7 90           MCW   NOP,PUNCH+2                                  7  2748  M L25 |86         117  2325  1086
799  7 91           B     SETXCP                                       4  2755  B Q31             117  2831
800  7 92  PRINTX   MCW   NOP,PUNCH+2                                  7  2759  M L25 |86         117  2325  1086
801  7 93           MCW   NOP,OPTION+7                                 7  2766  M L25 S45         117  2325  1245
802  7 94           B     SETXCP                                       4  2773  B Q31             117  2831
803  7 95  FIXCPT   MCW   NOP,EXCEPT                                   7  2777  M L25 /42         118  2325  1142
804  7 96           B     OPTST                                        4  2784  B P24             118  2724
805  7 97  ERROR    H     *-3                                          4  2788  . P88             118  2788
806  7 98  PTPCHX   MCW   NOP,OPTION                                   7  2792  M L25 S38         118  2325  1238
807  7 99           B     PRINTX+7                                     4  2799  B P66             118  2766
808  8 00  STKSLX   MCW   STKX+6,OPTION+6                             7  2803  M A35 S44         118  3135  1244
809  8 01           MCW   XCPSTK+6,OPTION+13                          7  2810  M A42 S51         119  3142  1251
810  8 02           MCW   RETSTK+6,XCPEND+20                         7  2817  M A49 S76         119  3149  1276
811  8 03           MCW   NOP,XCPEND+21                              7  2824  M L25 S77         119  2325  1277
812  8 04  SETXCP   C     117,FOUR           PICK UP PARAMTRS          7  2831  C 117 O94         119   117  2694
813  8 05           BL    ERROR              FOR EXCEPT OPTS           5  2838  B P88 T           119  2788
814  8 06           MCW   118,XCHAR1         ANALYZE AND               7  2843  M 118 O80         120   118  2680
815  8 07           BCE   XLOC1M,121,1       MODIFY INST               8  2850  B A07 121 1       120  3107   121
816  8 08           A     124,ADDEX1         TO PROCESS                7  2858  A 124 O83         120   124  2683
817  8 09           BCE   NOCHR2,126,        EXCEPTION RECORD          8  2865  B ?63 126         120  3063   126
818  8 10  STORE2   MCW   125,XCHAR2                                   7  2873  M 125 O84         120   125  2684
819  8 11           BCE   XLOC2M,127,1                                 8  2880  B A18 127 1       121  3118   127
820  8 12           A     130,ADDEX2                                   7  2888  A 130 O87         121   130  2687
821  8 13           BWZ   ZNCHR1,120,B                                8  2895  V ?85 120 B       121  3085   120
822  8 14           BWZ   DGCHR1,120,2                                8  2903  V R26 120 2       121  2926   120
823  8 15           BWZ   ERROR,120,S                                 8  2911  V P88 120 S       121  2788   120
824  8 16           MCW   MVDIGT,TSTCH1                               7  2919  M O88 /70         122  2688  1170
825  8 17  DGCHR1   MZ    BLANK,120                                    7  2926  Y L03 120         122  2303   120
826  8 18           BCE   ANDOR,120,1                                  8  2933  B R60 120 1       122  2960   120
827  8 19           BCE   *+5,120,2                                    8  2941  B R53 120 2       122  2953   120
828  8 20           B     ERROR                                        4  2949  B P88             122  2788
829  8 21           MCW   LETR S,TSTCH1+18                            7  2953  M O89 /88         123  2689  1188
830  8 22  ANDOR    BCE   OR,119,2                                    8  2960  B R94 119 2       123  2994   119
831  8 23           BCE   *+5,119,1                                    8  2968  B R80 119 1       123  2980   119
832  8 24           NOP   ERROR                                        4  2976  N P88             123  2788
833  8 25           MCW   NOP,TSTCH1+19                               7  2980  M L25 /89         123  2325  1189
834  8 26           MCW   LOCSW4,TSTCH1+17                           7  2987  M O92 /87         124  2692  1187
835  8 27  OR       BWZ   ZNCHR2,126,2                                8  2994  V ?96 126 2       124  3096   126
836  8 28           BWZ   DGCHR2,126,2                                8  3002  V ?25 126 2       124  3025   126
837  8 29           BWZ   ERROR,126,S                                 8  3010  V P88 126 S       124  2788   126
838  8 30           MCW   MVDIGT,TSTCH2                               7  3018  M O88 /93         124  2688  1193
839  8 31  DGCHR2   MZ    BLANK,126                                    7  3025  Y L03 126         125  2303   126
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

840  8 32           BCE   TPUNIT,126,1                                 8  3032  B A50 126 1       125  3150   126
841  8 33           BCE   *+5,126,2                                    8  3040  B ?52 126 2       125  3052   126
842  8 34           B     ERROR                                        4  3048  B P88             125  2788
843  8 35           MCW   LETR S,TSTCH2+18                           7  3052  M O89 S11         125  2689  1211
844  8 36           B     TPUNIT                                       4  3059  B A50             125  3150
845  8 37  NOCHR2   SW    125                                          4  3063  , 125             126   125
846  8 38           MCW   124,130                                     7  3067  M 124 130         126   124   130
847  8 39           MCW   118,125                                     7  3074  M 118 125         126   118   125
848  8 40           B     STORE2                                       4  3081  B Q73             126  2873
849  8 41  ZNCHR1   MCW   LETR Y,TSTCH1                               7  3085  M O93 /70         126  2693  1170
850  8 42           B     DGCHR1                                       4  3092  B R26             126  2926
851  8 43  ZNCHR2   MCW   LETR Y,TSTCH2                               7  3096  M O93 /93         127  2693  1193
852  8 44           B     DGCHR2                                       4  3103  B ?25             127  3025
853  8 45  XLOC1M   MZ    LETR Y,122                                   7  3107  Y O93 122         127  2693   122
854  8 46           B     STORE2-15                                    4  3114  B Q58             127  2858
855  8 47  XLOC2M   MZ    LETR Y,128                                   7  3118  Y O93 128         127  2693   128
856  8 48           B     STORE2+15                                    4  3125  B Q88             127  2888
857  8 49  STKX     MCW   SW8-1,STKHLD                                7  3129  M |88 O69         128  1088  2669
858  8 50  XCPSTK   MCW   KEIGHT,SW8-1                                7  3136  M O71 |88         128  2671  1088
859  8 51  RETSTK   MCW   STKHLD,SW8-1                                7  3143  M O69 |88         128  2669  1088
860  8 52  TPUNIT   BCE   PGMSEL,142,        BR BI SOEC TUNIT          8  3150  B B46 142         128  3246   142
861  8 53           SW    142                                          4  3158  , 142             128   142
862  8 54           MCW   142,UNITNO          MOVE SPECIFIED            7  3162  M 142 K99         129   142  2299
863  8 55           MCW   UNITNO,ALLTAP+10   TAPE UNIT NUM             7  3169  M K99 Y89         129  2299  1889
864  8 551          MCW   UNITNO,TPECNT+32                            7  3176  M K99 T42         129  2299  1342
865  8 56           MCW   UNITNO,TYPFIL+14   INTO ALL TAPE             7  3183  M K99 !07         129  2299  2007
866  8 57           MCW   UNITNO,REEL+3      INSTRUCTIONS              7  3190  M K99 Y40         129  2299  1840
867  8 58           MCW   UNITNO,BKSPSE+3                             7  3197  M K99 Z10         130  2299  1910
868  8 59           MCW   UNITNO,MOVTAP+3                             7  3204  M K99 956         130  2299   956
869  8 60           MCW   UNITNO,TAPMOV+3                             7  3211  M K99 930         130  2299   930
870  8 61           MCW   UNITNO,FXBBLK+18                            7  3218  M K99 U86         130  2299  1486
871  8 62           MCW   UNITNO,FXBBLK+23                            7  3225  M K99 U91         130  2299  1491
872  8 63           MCW   UNITNO,HDRPRO+7                             7  3232  M K99 !90         131  2299  2090
873  8 64           MCW   UNITNO,INITL+10                             7  3239  M K99 J75         131  2299  2175
874  8 65  PGMSEL   CS    80                 SELECT PROPER             4  3246  / 080             131   080
875  8 66           SW    24,56              ROUTINE FOR               7  3250  , 024 056         131   024   056
876  8 67           SW    63,67              MAIN PROGRAM              7  3257  , 063 067         131   063   067
877  8 68           R                                                  1  3264  1                 131
878  8 69           BCE   SELPGM,160,                                  8  3265  B B77 160         132  3277   160
879  8 70           B     RUNOUT                                       4  3273  B B97             132  3297
880  8 71  SELPGM   BCE   56,RECLNG-3,V      READ VARIABLE             8  3277  B 056 J94 V       132   056  2194
881  8 72           BCE   56,76,2            READ FIXED                8  3285  B 056 076 2       132   056   076
882  8 73           R     SELPGM+8                                     4  3293  1 B85             132  3285
883  8 74  RUNOUT   BCE   56,76,             RD ANAL                   8  3297  B 056 076         133   056   076
884  8 75           R     RUNOUT                                       4  3305  1 B97             133  3297
885  8 76           NOP                                                1  3309  N                 133
886  8 77           EX    OPTST-23                                                 B P24             134  2724
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

887                 JOB   1401-UT-028 VARIABLE LENGTH RECORDS
888  8 78           ORG   600                                                    0600
889  8 79   VARECD  MCW   CONST1,VARINS+10   SET INSTRUCTIONS          7  0600  M J93 690          137   2193    690
890  8 80           MCW   VCONST,VNDTST+6    TO PROCESS              7  0607  M 737 662          137    737    662
891  8 81           MCW   ONE00,VARINS+13    VARIABLE LENGTH         7  0614  M O61 693          137   2661    693
892  8 82           SW    VARINS+8,VNDTST+4                         7  0621  , 688 660          137    688    660
893  8 83           A     ONE80-2,VARINS+13                         7  0628  A K06 693          137   2206    693
894  8 84           A     ONE80-2,VARINS+10                         7  0635  A K06 690          138   2206    690
895  8 85           A     ONE80-2,VNDTST+6                          7  0642  A K06 662          138   2206    662
896  8 86           CW    VARINS+8,VNDTST+4                         7  0649  ) 688 660          138    688    660
897  8 87   VNDTST  BW    VAREND,0-0                                8  0656  V 698 000 1        138    698    000
898  8 88           C     VARINS+13,ONE80                           7  0664  C 693 K08          138    693   2208
899  8 89           BE    VARINS                                    5  0671  B 680 S            139    680
900  8 90           B     VARECD+21                                 4  0676  B 621              139    621
901  8 91   VARINS  MCW   BRVAR,SW8+3                               7  0680  M O67 |92          139   2667   1092
902  8 92           MCW   0-0,0-0                                   7  0687  M 000 000          139    000    000
903  8 93           B     NUMCDS                                    4  0694  B |33              139   1033
904  8 94   VAREND  MCW   BRUP,SW8+3                               7  0698  M O64 |92          139   2664   1092
905  8 95           CS    180                                       4  0705  / 180              139    180
906  8 96           SW    VNDTST+4,101                              7  0709  , 660 101          140    660    101
907  8 97           MCW   VNDTST+6,VARCWM+3                         7  0716  M 662 730          140    662    730
908  8 98           CW    VNDTST+4                                  4  0723  ) 660              140    660
909  8 99   VARCWM  CW    0-0                                       4  0727  ) 000              140    000
910  9 00           B     VARINS+7                                  4  0731  B 687              140    687
911  9 01   VCONST  DSA   2701                                      3  0737  P01                140   2701
912  9 02           EX    RUNOUT                                                 B B97              141   3297
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

913                 JOB   1401-UT-028 FIXED LENGTH RECORDS
914  9 03           ORG   600                                                    0600
915  9 04   CREG    MCW   RECLNG,CHAREG      SET CHAR CNT              7  0600  M J97 084          144   2197    084
916  9 05   CMP     C     ZZ80,CHAREG        FOR FIX LNG REC           7  0607  C N54 084          144   2554    084
917  9 06           BH    ADD80              BR OVER 80 CHAR           5  0614  B 659 U            144    659
918  9 07           CS    180                                          4  0619  / 180              144    180
919  9 08           SW    101,PCHMOV+5                                 7  0623  , 101 692          144    101    692
920  9 09           MCW   BRUPCT,SW8+3       SET SW8 TO REC E          7  0630  M K98 |92          144   2298   1092
921  9 10   SETPCH  MCW   CHAREG,PCHMOV+6    SET MOVE INST             7  0637  M 084 693          145    084    693
922  9 11           A     CHAREG,RECORD                                7  0644  A 084 183          145    084    183
923  9 12           CW    PCHMOV+5                                     4  0651  ) 692              145    692
924  9 13           B     RECMOV                                       4  0655  B 680              145    680
925  9 14   ADD80   A     ZZ80,RECORD        UPDATE RECORD CT          7  0659  A N54 183          145   2554    183
926  9 15           S     ZZ80,CHAREG        UPDATE CHAR CTR           7  0666  S N54 084          145   2554    084
927  9 16           MZ    BLANKS-1,CHAREG                              7  0673  Y J89 084          146   2189    084
928  9 17   RECMOV  MCW   RECORD,PCHMOV+3                             7  0680  M 183 690          146    183    690
929  9 18   PCHMOV  MCW   0-0,180            MOVE REC PART             7  0687  M 000 180          146    000    180
930  9 19           NOP                      TO PUNCH AREA             1  0694  N                  146
931  9 20           B     NUMCDS                                       4  0695  B |33              146   1033
932  9 21   COLBIN  RTB   1,TPNTRY           PROCESS MIXED             8  0699  M %B1 P01 R        146    001   2701
933  9 22           BER   TAPERB             BINARY AND BCD            5  0707  B 793 L            146    793
934  9 23           MCW   ZZZERO,BERCNT      RECORDS                   7  0712  M L06 854          147   2306    854
935  9 24           BEF   FILWMK                                       5  0719  B 773 K            147    773
936  9 25           MBC   TPNTRY+159,580                               8  0724  M Q60 580 B        147   2860    580
937  9 26           A     ONE80-2,CDCNT      UPDATE CD CNT             7  0732  A K06 L16          147   2206   2316
938  9 27           A     ONE80-2,RECTOT     AND REC TOT               7  0739  A K06 L20          147   2206   2320
939  9 28           MCW   SW8-2,*+3                                    7  0746  M |87 755          148   1087    755
940  9 29           PCB                                                2  0753  4 C                148
941  9 30              N4                                              2  0755  N 4                148
942  9 31           CW    TPNTRY+168                                   4  0757  ) Q69              148   2869
943  9 32           BCE   COLBIN,TPNTRY+161,5  TEST LOOK              8  0761  B 699 Q62 5        148    699   2862
944  9 33           B     MOVTAP             AHEAD                     4  0769  B 953              148    953
945  9 34   FILWMK  CW    TPNTRY+1                                     4  0773  ) P02              148   2702
946  9 35           B     FILEND                                       4  0777  B W73              149   1673
947  9 36   TSTBIN  BCE   MOVTAP,TPNTRY+80,                           8  0781  B 953 P81          149    953   2781
948  9 37           B     COLBIN                                       4  0789  B 699              149    699
949  9 38   TAPERB  BCE   BINBBK,BERCNT-1,1                           8  0793  B 829 853 1        149    829    853
950  9 39           BSP   1                                          5  0801  U %U1 B            149    001
951  9 391          BWZ   BNTPER,TPNTRY+168,1                        8  0806  V 818 Q69 1        149    818   2869
952  9 40           B     MOVTAP                                       4  0814  B 953              150    953
953  9 41   BNTPER  A     ONE80-2,BERCNT     SET FOR                   7  0818  A K06 854          150   2206    854
954  9 43           B     COLBIN                                       4  0825  B 699              150    699
955  9 44   BINBBK  B     COLBIN+13          SET INST                  4  0829  B 712              150    712
956  9 45           H                        FOR BIN                   1  0833  .                  150
957  9 46           BSP   1                                          5  0834  U %U1 B            150    001
958  9 47           RTB   1,TPNTRY           PROCEDURE                 8  0839  M %B1 P01 R        150    001   2701
959  9 48           BSS   COLBIN+13,G                                  5  0847  B 712 G            151    712
960  9 49           H                                                  1  0852  .                  151
961  9 50   BERCNT  DCW   #2                                           2  0854                     151
962  9 51           EX    RUNOUT                                                 B B97              152   3297
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SEQ PG LIN  LABEL   OP   OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR
 963                JOB  1401-UT-028 ANAL ROUTINE
 964  9 52          ORG  2701                                    2701
 965  9 53  VARTST  BCE  VRANAL,RECLNG-3,V  BR VAR LNG ANAL  8  2701  B F05 J94 V      155  3605   2194
 966  9 54          BCE  FINISH,143,        BR ON NO BINARY  8  2709  B R22 143        155  2922    143
 967  9 55          CS   599                                 4  2717  / 599            155   599
 968  9 56          CS                                       1  2721  /                155
 969  9 57          SW   401                                 4  2722  , 401            155   401
 970  9 58          BCE  MIXED,143,2        BR MIXED BINARY  8  2726  B D43 143 2      155  3443    143
 971  9 59          MCW  B,MOVTAP+2                          7  2734  M L26 955        156  2326    955
 972  9 591         MCW  *+1,BDBLCK+7                        7  2741  M P48 T98        156  2748   1398
 973  9 60          MCW  B,TAPMOV+2         SET BCD FIXED    7  2748  M L26 929        156  2326    929
 974  9 61          MN   NOP,AUTTOT+4       LENGTH ROUTINE   7  2755  D L25 |44        156  2325   1044
 975  9 62          MN   NOP,GPFIX+4        TO OPERATE IN    7  2762  D L25 |97        156  2325   1097
 976  9 63          CW   GPFIX+7,AUTTOT+7   BINARY MODE      7  2769  ) /00 |47        157  1100   1047
 977  9 64          MCW  B,AUTTOT+7                          7  2776  M L26 |47        157  2326   1047
 978  9 65          MCW  B,GPFIX+7                           7  2783  M L26 /00        157  2326   1100
 979  9 66          LCA  BINPCH,PUNCH+1                      7  2790  L G04 |85        157  3704   1085
 980  9 67          LCA  BINPCH,XTRPCH+1                     7  2797  L G04 |21        157  3704   1021
 981  9 671         LCA  BINPCH,PRTPCH+8                     7  2804  L G04 /13        158  3704   1113
 982  9 672         MCW  NOP,BBLKND+5                        7  2811  M L25 U39        158  2325   1439
 983  9 673         MCW  NOP,BBLKND+12                       7  2818  M L25 U46        158  2325   1446
 984  9 674         MCW  NOP,BDBLCK                          7  2825  M L25 T91        158  2325   1391
 985  9 675         MCW  NOP,BDBLCK+7                        7  2832  M L25 T98        158  2325   1398
 986  9 68          MCW  NOP,CMP                             7  2839  M L25 607        159  2325    607
 987  9 69          MCW  NOP,CMP+7                           7  2846  M L25 614        159  2325    614
 988  9 70          C    RECLNG,ONE68                        7  2853  C J97 F91        159  2197   3691
 989  9 71          BE   FULLCD                              5  2860  B E73 S          159  3573
 990  9 72          MCW  RECLNG,CVTPCH                       7  2865  M J97 G02        159  2197   3702
 991  9 73          A    CVTPCH                              4  2872  A G02            159  3702
 992  9 74          A    CVTPCH                              4  2876  A G02            160  3702
 993  9 75          A    RECLNG,CVTPCH                       7  2880  A J97 G02        160  2197   3702
 994  9 76          MCW  CVTPCH-1,BPCHMV-1                   7  2887  M G01 F98        160  3701   3698
 995  9 77  PCHSET  MCW  NOP,SETPCH                         7  2894  M L25 637        160  2325    637
 996  9 78          LCA  BPCHMV,PCHMOV+7                    7  2901  L F99 694        160  3699    694
 997  9 79          MCW  NOP,UPCNT                          7  2908  M L25 V11        160  2325   1511
 998  9 80          MCW  NOP,UPCNT+7                        7  2915  M L25 V18        161  2325   1518
 999  9 81  FINISH  MCW  UNITNO,CLRTPE+19                  7  2922  M K99 ?33        161  2299   3033
1000  9 82          MCW  UNITNO,BACKUP+3                    7  2929  M K99 E67        161  2299   3567
1001  9 83          BCE  NOSEL,SLFIL1,      BR NO FILE SEL   8  2936  B R62 J84        161  2962   2184
1002  9 84          MCW  NOP,TSTALL         SET INSTRUCTIONS 7  2944  M L25 X59        161  2325   1759
1003  9 85          MCW  NOP,TSTNUM         SET SEL EOR      7  2951  M L25 X71        162  2325   1771
1004  9 86          B    HEADR                               4  2958  B ?06            162  3006
1005  9 87  NOSEL   BCE  REELND,NUMFIL,     SET INST FOR     8  2962  B R77 K02        162  2977   2202
1006  9 88          B    HEADR              SPECIFIC FILE NU 4  2970  B ?06            162  3006
1007  9 89  LCNWFX  DSA  NEWFIX                              3  2976  Z59              162  1959
1008  9 90  REELND  MCW  LCNWFX,TYPFIL+3    SET INST FOR     7  2977  M R76 Z96        162  2976   1996
1009  9 91          MCW  LCNWFX,TRANRC-17   TRAIL OR 2 TP    7  2984  M R76 !27        163  2976   2027
1010  9 92          BCE  HEADR,ENDTYP,1     MKS EOR          8  2991  B ?06 K03 1      163  3006   2203
1011  9 93          MCW  NOP,BKSPSE-9                        7  2999  M L25 Y98        163  2325   1898
1012  9 94  HEADR   BCE  NOHDER,147,                         8  3006  B E84 147        163  3584    147
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SEQ PG LIN  LABEL   OP   OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR
1013  9 95  CLRTPE  LCA  GPMK78,TPNTRY+199                  7  3014  L L24 R00        163  2324   2900
1014  9 96          CS   TPNTRY+198                         4  3021  / Q99            164  2899
1015  9 97          CS                                       1  3025  /                164
1016  9 98          SW   TPNTRY                             4  3026  , P01            164  2701
1017  9 99          RT   1,TPNTRY                           8  3030  M %U1 P01 R      164   001   2701
1018 10 00          MCW  BLANK                               4  3038  M L03            164  2303
1019 10 01          CW                                       1  3042  )                164
1020 10 02          BEF  LDCLER                              5  3043  B F50 K          164  3650
1021 10 03          NOP  BACKUP                              4  3048  N E64            165  3564
1022 10 04          SW   144                                 4  3052  , 144            165   144
1023 10 05          LCA  157,97                              7  3056  L 157 097        165   157    097
1024 10 06          BCE  PRTHDR,87,1                         8  3063  B A44 087 1      165  3144    087
1025 10 07          BCE  PCHHDR,87,2                         8  3071  B C00 087 2      165  3300    087
1026 10 08          BCE  HDCMP,87,4                          8  3079  B C89 087 4      165  3389    087
1027 10 09          B    SETEND                              4  3087  B D05            166  3405
1028 10 10  AFT1ST  MCW  B,CLRTPE+34        SET INSTRUCTIONS 7  3091  M L26 ?48        166  2326   3048
1029 10 11          BCE  CLRTPE+16,97,      HEADER AND       8  3098  B ?30 097        166  3030    097
1030 10 12          BCE  HDPTR,97,2         TRAILER LABEL    8  3106  B A29 097 2      166  3129    097
1031 10 13          MCW  NOP,HDRPRO         PROCESSING       7  3114  M L25 !83        166  2325   2083
1032 10 14          BCE  CLRTPE+16,97,1     BETWEEN FILES    8  3121  B ?30 097 1      167  3030    097
1033 10 15  HDPTR   MCW  NOP,TYPFIL                          7  3129  M L25 Z93        167  2325   1993
1034 10 16          B    CLRTPE+16                           4  3136  B ?30            167  3030
1035 10 17          B    CLRTPE+16                           4  3140  B ?30            167  3030
1036 10 18  PRTHDR  C    86,ZERO80               PRINT HEADER 7  3144  C 086 K11        167   086   2211
1037 10 19          BL   DBLINE                  AND TRAILER  5  3151  B B20 T          167  3220
1038 10 20          SW   PRTINS+1,PRTINS+5                   7  3156  , A85 A89        168  3185   3189
1039 10 21          MCW  86,PRTINS+6                         7  3163  M 086 A90        168   086   3190
1040 10 22          A    86,PRTINS+3                         7  3170  A 086 A87        168   086   3187
1041 10 23          CW   PRTINS+1,PRTINS+5                   7  3177  ) A85 A89        168  3185   3189
1042 10 24  PRTINS  MCW  TPNTRY-1,200                       7  3184  M P00 200        168  2700    200
1043 10 25          MCW  PRTINS+6,PART2+6                    7  3191  M A90 J34        169  3190   2134
1044 10 26          NOP  280,180                             7  3198  N 280 180        169   280    180
1045 10 27          W                                        1  3205  2                169
1046 10 28          CC   1                                   2  3206  F 1              169
1047 10 29          CS   280                                 4  3208  / 280            169   280
1048 10 30          SW   201                                 4  3212  , 201            169   201
1049 10 31          B    AFT1ST                              4  3216  B ?91            169  3091
1050 10 32  DBLINE  MCW  PRTINS+21,PART1+14                 7  3220  M B05 J23        170  3205   2123
1051 10 33          MCW  DBLINE,PART1                        7  3227  M B20 J09        170  3220   2109
1052 10 34          MCW  DBLINE-12,PART1+15                  7  3234  M B08 J24        170  3208   2124
1053 10 35          CS   280                                 4  3241  / 280            170   280
1054 10 36          MCW  TPNTRY+79,280                       7  3245  M P80 280        170  2780    280
1055 10 37          NOP  280,180                             7  3252  N 280 180        170   280    180
1056 10 38          W                                        1  3259  2                171
1057 10 39          CS   280                                 4  3260  / 280            171   280
1058 10 40          SW   201                                 4  3264  , 201            171   201
1059 10 41          S    ZERO80,86                           7  3268  S K11 086        171  2211    086
1060 10 42          MZ   BLANKS-1,86                         7  3275  Y J89 086        171  2189    086
1061 10 43          MCW  DBLINE+28,PRTINS+3                  7  3282  M B48 A87        171  3248   3187
1062 10 44          MCW  DBLINE,PART1+7                      7  3289  M B20 J16        171  3220   2116
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD	A-ADDR	B-ADDR
1063	10	45		B	PRTHDR+12			4	3296	B A56	172	3156	
1064	10	46	PCHHDR	MCW	PCHHDR,DBLINE+12	PUNCH HEADER		7	3300	M C00 B32	172	3300	3232
1065	10	47		MCW	SIX,DBLINE+39	AND TRAILER		7	3307	M K12 B59	172	2212	3259
1066	10	48		MCW	PCHHDR,PRTINS+14			7	3314	M C00 A98	172	3300	3198
1067	10	49		MCW	SIX,PRTINS+21			7	3321	M K12 B05	172	2212	3205
1068	10	50		MCW	PCHHDR,PART2+7			7	3328	M C00 J35	172	3300	2135
1069	10	51		MCW	SIX,PART2+14			7	3335	M K12 J42	173	2212	2142
1070	10	52		MCW	SIX,TRANRC			7	3342	M K12 !44	173	2212	2044
1071	10	53		CS	180			4	3349	/ 180	173	180	
1072	10	54		SW	101			4	3353	, 101	173	101	
1073	10	55		B	PRTHDR			4	3357	B A44	173	3144	
1074	10	56		SW	HDCMP+1,HDCMP+4	COMPARE HEADER		7	3361	, C90 C93	173	3390	3393
1075	10	57		A	86,HDCMP+6			7	3368	A 086 C95	174	086	3395
1076	10	58		A	86,HDCMP+3			7	3375	A 086 C92	174	086	3392
1077	10	59		CW	HDCMP+1,HDCMP+4			7	3382	) C90 C93	174	3390	3393
1078	10	60	HDCMP	C	3801,TPNTRY			7	3389	C H01 P01	174	3801	2701
1079	10	61		BE	SETEND			5	3396	B D05 S	174	3405	
1080	10	62		B	HDRMSG			4	3401	B D23	174	3423	
1081	10	63	SETEND	MCW	NOP,PART2+14			7	3405	M L25 J42	175	2325	2142
1082	10	64		MCW	NOP,TRANRC+7			7	3412	M L25 !51	175	2325	2051
1083	10	65		B	AFT1ST			4	3419	B ?91	175	3091	
1084	10	66	HDRMSG	MCW	HDERR,220			7	3423	M F85 220	175	3685	220
1085	10	67		W				1	3430	2	175		
1086	10	68		CS	220			4	3431	/ 220	175	220	
1087	10	69		SW	201			4	3435	, 201	175	201	
1088	10	70		H	SETEND			4	3439	. D05	176	3405	
1089	10	71	MIXED	MCW	B,SW2	SET MAIN ROUTINE		7	3443	M L26 949	176	2326	949
1090	10	72		MCW	NOP,UPCNT+7			7	3450	M L25 V18	176	2325	1518
1091	10	73		MCW	UNITNO,BINBBK+13			7	3457	M K99 842	176	2299	842
1092	10	74		BCE	*+8,158,			8	3464	B D79 158	176	3479	158
1093	10	75		MCW	NOP,BINBBK			7	3472	M L25 829	177	2325	829
1094	10	76		MCW	UNITNO,BINBBK+8			7	3479	M K99 837	177	2299	837
1095	10	77		MCW	UNITNO,TAPERB+11			7	3486	M K99 804	177	2299	804
1096	10	78		MCW	UNITNO,COLBIN+3			7	3493	M K99 702	177	2299	702
1097	10	79		MCW	NOP,PUNCH+2			7	3500	M L25 |86	177	2325	1086
1098	10	80		MCW	BINBR,SW8+3			7	3507	M F88 |92	178	3688	1092
1099	10	81		MCW	BINBR,NUMCDS-1			7	3514	M F88 |32	178	3688	1032
1100	10	82		MCW	BINBR,CVTTST-1			7	3521	M F88 V80	178	3688	1580
1101	10	83		MCW	NOP,XTRPCH			7	3528	M L25 |20	178	2325	1020
1102	10	84		MCW	ZZ80,RECLNG			7	3535	M N54 J97	178	2554	2197
1103	10	841		BCE	FINISH,158,			8	3542	B R22 158	179	2922	158
1104	10	842		MCW	NOP,BINBBK			7	3550	M L25 829	179	2325	829
1105	10	85		B	FINISH			4	3557	B R22	179	2922	
1106	10	86	BRPCH	DSA	PUNCH			3	3563	|84	179	1084	
1107	10	87	BACKUP	BSP	1			5	3564	U %U1 B	179	001	
1108	10	88		B	LDCLER			4	3569	B F50	179	3650	
1109	10	89	FULLCD	MCW	BNCNST,CONST1			7	3573	M G07 J93	179	3707	2193
1110	10	90		B	PCHSET			4	3580	B Q94	180	2894	
1111	10	91	NOHDER	MCW	LCLDCL,AFT1ST+10			7	3584	M F04 A01	180	3604	3101
1112	10	92		LCA	157,97			7	3591	L 157 097	180	157	097

SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD	A-ADDR	B-ADDR
1113	10	93		B	AFT1ST			4	3598	B ?91	180	3091	
1114	10	94	LCLDCL	DSA	LDCLER			3	3604	F50	180	3650	
1115	10	95	VRANAL	MCW	ALLTAP+7,MOVTAP	SET MAIN PROGRAM		7	3605	M Y86 953	180	1886	953
1116	10	96		MCW	LCVRCD,SW5+3	FOR VARIABLE		7	3612	M F46 |08	180	3646	1008
1117	10	97		MCW	NOP,PUNCH+2	LENGTH RECORDS		7	3619	M L25 |86	181	2325	1086
1118	10	98		MCW	NOHDER+7,MOVTAP+8			7	3626	M E91 961	181	3591	961
1119	10	99		MCW	LBLNKS,MOVTAP+11			7	3633	M F49 964	181	3649	964
1120	11	00		B	FINISH			4	3640	B R22	181	2922	
1121	11	01	LCVRCD	DSA	VARECD			3	3646	600	181	600	
1122	11	02	LBLNKS	DSA	BLANKS			3	3649	J90	181	2190	
1123	11	03	LDCLER	CS	80			4	3650	/ 080	181	080	
1124	11	04		SW	24,56			7	3654	, 024 056	182	024	056
1125	11	05		SW	63,67			7	3661	, 063 067	182	063	067
1126	11	06		R	56			4	3668	1 056	182	056	
1127	11	07	HDERR	DCW	@HEAD COMP UNEQ@			14	3685		182		
1128	11	08	BINBR	DSA	TSTBIN			3	3688	781	182	781	
1129	11	09	ONE68	DCW	168			3	3691		182		
1130	11	10	BPCHMV	DCW	@M000580B@			8	3699		183		
1131	11	11	CVTPCH	DCW	#3			3	3702		183		
1132	11	12	BINPCH	DCW	@4C@			2	3704		183		
1133	11	13	BNCNST	DCW	092			3	3707		183		
1134	11	14	BRHDPR	DSA	HDRPRO			3	3710	!83	183	2083	
1135	11	15		EX	VARTST					B P01	184	2701	

```
 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR B-ADDR

1136              JOB   1401-UT-028 CLEAR TAPE READ-IN AREA ROUTINE
1137 11 16        ORG   181                                                    0181
1138 11 17  RECORD DCW   #3                                          3  0183              187
1139 11 18  FLDORG DSA   FLD 1                                       3  0186  L44         187   2344
1140 11 19  CHTEST DCW   #2                                          2  0188              187
1141 11 20  HITEST DCW   #3                                          3  0191              187
1142 11 21  LOTEST DCW   #3                                          3  0194              187
1143 11 22  PNTEST DCW   #2                                          2  0196              187
1144 11 23  TEST   DCW   #2                                          2  0198              187
1145 11 24        ORG   81                                                     0081
1146 11 25  CHAREG DCW   #4                                          4  0084              188
1147 11 26  NMCDCW A     ONE80-2,CDCNT                                7  0085  A K06 L16   188   2206   2316
1148 11 27  BLKDCW BL    TSTXCP                                       5  0092  B 997 T     188    997
1149 11 28  LOCSLF DSA   SLFIL1                                       3  0099  J84         188   2184
1150 11 29        ORG   2901                                                   2901
1151 11 30  CLEAR  CS    3997              CLEAR TAPE                 4  2901  / I97       189   3997
1152 11 31        CS                      READ-IN AREA               1  2905  /           189
1153 11 32        CS                                                 1  2906  /           189
1154 11 33        CS                                                 1  2907  /           189
1155 11 34        CS                                                 1  2908  /           189
1156 11 35        CS                                                 1  2909  /           189
1157 11 36        CS                                                 1  2910  /           189
1158 11 37        CS                                                 1  2911  /           190
1159 11 38        CS                                                 1  2912  /           190
1160 11 39        CS                                                 1  2913  /           190
1161 11 40        CS    TPNTRY+198                                   4  2914  / Q99       190   2899
1162 11 41        CS                                                 1  2918  /           190
1163 11 42        NOP   TPNTRY                                       4  2919  N P01       190   2701
1164 11 43        CS    80                                           4  2923  / 080       190    080
1165 11 44        SW    1                                            4  2927  , 001       191    001
1166 11 45        CS    SW1-8,TPNTRY+298                             7  2931  / 891 R99   191    891   2999
1167 11 46        END   CLEAR                                             /  R01 080             2901
```



```
SYMBOL   ADDRESS    SYMBOL   ADDRESS    SYMBOL   ADDRESS    SYMBOL   ADDRESS    SYMBOL   ADDRESS    SYMBOL   ADDRESS
ADCNTR   3984: 0    ADD80    0659: 0    ADDEX1   2683: 0    ADDEX2   2687: 0    ADLNGH   2309: 0    ADNTRY   3485: 0
AFT1ST   3091: 0    ALCDFX   2939: 0    ALLTAP   1879: 0    ALTSTK   1846: 0    ANDOR    2960: 0    AUTNOP   3123: 0
AUTST    2765: 0    AUTTOT   1040: 0    B        2326: 0    BACKUP   3564: 0    BBLKCT   1507: 0    BBLKND   1434: 0
BCLP1    2557: 0    BCLP2    2560: 0    BDBLCK   1391: 0    BERCNT   0854: 0    BINBBK   0829: 0    BINBR    3688: 0
BINPCH   3704: 0    BKSPSE   1907: 0    BLANK    2303: 0    BLANKS   2190: 0    BLARGR   0468: 0    BLKDCW   0092: 0
BLKTST   1539: 0    BNCNST   3707: 0    BNTPER   0818: 0    BPCHMV   3699: 0    BRCMP    2295: 0    BRFILE   2643: 0
BRFIX    3994: 0    BRHDPR   3710: 0    BRPCH    3563: 0    BRSEQ    0594: 0    BRUP     2664: 0    BRUPCT   2298: 0
BRVAR    2667: 0    BRXEND   2679: 0    CDCNT    2316: 0    CDSQNO   3963: 0    CHAREG   0084: 0    CHRADD   0814: 0
CHTEST   0188: 0    CLEAR    2901: 0    CLPCH1   0751: 0    CLPCH2   0802: 0    CLRTPE   3014: 0    CLSQWM   0427: 0
CMP      0607: 0    CNTLNG   2830: 0    COLBIN   0699: 0    CONGMK   1075: 0    CONMOV   1646: 0    CONST1   2193: 0
CONST2   2532: 0    CONST3   2541: 0    CONTRL   2550: 0    CONVRT   1631: 0    CREG     0600: 0    CSQERR   3920: 0
CTLCMP   0644: 0    CVTPCH   3702: 0    CVTTST   1581: 0    CWMINS   0717: 0    DBLINE   3220: 0    DGCHR1   2926: 0
DGCHR2   3025: 0    ENDFIL   1857: 0    ENDJOB   3272: 0    ENDTYP   2203: 0    ENTHLD   3432: 0    EOF      0975: 0
ERESET   1366: 0    ERESTR   0526: 0    ERRCNT   1503: 0    ERROR    2788: 0    ERROR1   0504: 0    ERRSTK   1355: 0
EXCEPT   1142: 0    EXCPTN   1128: 0    FILCMP   0910: 0    FILE     1842: 0    FILEND   1673: 0    FILNUM   2182: 0
FILTOT   2332: 0    FILWMK   0773: 0    FINISH   2922: 0    FIRSTX   2672: 0    FIVE     3122: 0    FIXALL   3204: 0
FIXCPT   2777: 0    FIXED    2292: 0    FIXNOP   3186: 0    FIXTST   2845: 0    FLD 1    2344: 0    FLDCNT   3981: 0
FLDMOV   3522: 0    FLDORG   0186: 0    FLDSEL   0600: 0    FLDSEQ   0333: 0    FOUR     2694: 0    FRMCTL   1123: 0
FULLCD   3573: 0    FULTOT   2545: 0    FXBBLK   1468: 0    FXCDNO   2205: 0    GPFIX    1093: 0    GPMK78   2324: 0
GPMTST   3336: 0    HDCMP    3389: 0    HDERR    3685: 0    HDPTR    3129: 0    HDRLGH   3292: 0    HDRMSG   3423: 0
HDRPRO   2083: 0    HEADR    3006: 0    HITEST   0191: 0    HOLD     3977: 0    I9       3979: 0    INITL    2165: 0
INSERT   3732: 0    INST     0710: 0    JOBEND   3222: 0    KEIGHT   2671: 0    LBLNKS   3649: 0    LCLDCL   3604: 0
LCNWFX   2976: 0    LCPTPN   2676: 0    LCSELT   3944: 0    LCVRCD   3646: 0    LDCLER   3650: 0    LDCTR    3941: 0
LDFIX    2901: 0    LDFIXB   3004: 0    LDREAD   0549: 0    LETR F   2658: 0    LETR K   2330: 0    LETR S   2689: 0
LETR Y   2693: 0    LNGH M   3721: 0    LOCBND   1510: 0    LOCSLF   0099: 0    LOCSW4   2692: 0    LOTEST   0194: 0
LSTREC   3551: 0    LTHCTR   3987: 0    MIXED    3443: 0    MLTFIL   1794: 0    MLTTST   2954: 0    MODIFY   3703: 0
MODTST   3662: 0    MORE     3316: 0    MOVMCT   1067: 0    MOVTAP   0953: 0    MPCTST   3991: 0    MPLCDS   2328: 0
MPLNOP   3215: 0    MPLOC    2993: 0    MVDIGT   2688: 0    NEWFIX   1959: 0    NMCDCW   0085: 0    NO SPF   1009: 0
NOCHR2   3063: 0    NOHDER   3584: 0    NOP      2325: 0    NOSEL    2962: 0    NOSEQ    3168: 0    NUMCDS   1033: 0
NUMFIL   2202: 0    ONCE     0493: 0    ONE00    2661: 0    ONE01    2323: 0    ONE68    3691: 0    ONE80    2208: 0
OPTION   1238: 0    OPTST    2724: 0    OR       2994: 0    ORG      0614: 0    PART1    2109: 0    PART2    2128: 0
PCHBR1   0740: 0    PCHBR2   0784: 0    PCHHDR   3300: 0    PCHMOV   0687: 0    PCHSET   2894: 0    PGMSEL   3246: 0
PNTEST   0196: 0    PRINTX   2759: 0    PROSND   1813: 0    PRTHDR   3144: 0    PRTINS   3184: 0    PRTPCH   1105: 0
PTPCHX   2792: 0    PUNCH    1084: 0    RCOUNT   2312: 0    RDADTL   1973: 0    RECBLK   2200: 0    RECLNG   2197: 0
RECMOV   0680: 0    RECORD   0183: 0    RECTOT   2320: 0    REEL     1837: 0    REELND   2977: 0    RETSTK   3143: 0
RUNOUT   3297: 0    SECNDX   2673: 0    SELCON   3961: 0    SELCTR   2696: 0    SELECT   3395: 0    SELFIL   0903: 0
SELPGM   3277: 0    SELTOT   2543: 0    SELWMK   3677: 0    SEQ1     3761: 0    SEQ2     3807: 0    SEQ3     3867: 0
SEQCNT   2657: 0    SEQERR   0591: 0    SEQFLD   0337: 0    SEQMOV   0344: 0    SEQTOT   2546: 0    SEQWMK   0416: 0
SETEND   3405: 0    SETLST   3593: 0    SETPCH   0637: 0    SETXCP   2831: 0    SIX      2212: 0    SLFIL1   2184: 0
SLFIL2   2186: 0    SLFIL3   2188: 0    SQADD    0381: 0    SQBASE   2647: 0    SQFLD1   2650: 0    SQFLD2   2653: 0
SQFLD3   2656: 0    SQINST   0420: 0    SSD      1079: 0    START    2701: 0    STKHLD   2669: 0    STKSLX   2803: 0
STKX     3129: 0    STORE2   2873: 0    STORTR   3328: 0    SW1      0899: 0    SW2      0949: 0    SW3      0971: 0
SW4      1001: 0    SW5      1005: 0    SW8      1089: 0    SWB ON   1875: 0    SXTEEN   2302: 0    TAPERB   0793: 0
TAPERR   1288: 0    TAPMOV   0927: 0    TEST     0198: 0    THREE    2644: 0    TPECNT   1310: 0    TPNTRY   2701: 0
TPUNIT   3150: 0    TRAILR   1916: 0    TRALES   2071: 0    TRALOC   2640: 0    TRALOK   1940: 0    TRALRT   1931: 0
TRANRC   2044: 0    TRNFLD   0721: 0    TSTALL   1759: 0    TSTBIN   0781: 0    TSTCH1   1170: 0    TSTCH2   1193: 0
TSTNUM   1771: 0    TSTSEQ   3149: 0    TSTXCP   0997: 0    TWELVE   2548: 0    TWMULT   3581: 0    TWO      2329: 0
TYPFIL   1993: 0    UNITNO   2299: 0    UPCNT    1511: 0    VARCWM   0727: 0    VARECD   0600: 0    VAREND   0698: 0
VARINS   0680: 0    VARTST   2701: 0    VCONST   0737: 0    VNDTST   0656: 0    VRANAL   3605: 0    WMINST   0699: 0
XCEPTN   3377: 0    XCHAR1   2680: 0    XCHAR2   2684: 0    XCPEND   1256: 0    XCPFND   1212: 0    XCPSTK   3136: 0
XLOC1M   3107: 0    XLOC2M   3118: 0    XTRPCH   1020: 0    ZERO80   2211: 0    ZINST    0865: 0    ZNCHR1   3085: 0
ZNCHR2   3096: 0    ZWMINS   0835: 0    ZZ80     2554: 0    ZZZERO   2306: 0

UNREFERENCED SYMBOLS
BRFILE BRHDPR BRPCH  BRSEQ  CHTEST HITEST LETR F LOTEST PNTEST SLFIL2 SXTEEN
```