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

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

 101  1 01   001    JOB   1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3
 102  1 02          CTL   630 1
 103  1 03          SFX   I                                                     I
 104  1 04   OTHER  EQU   START                                                 I      0101
 105  1 05   MINUS2 EQU   2                                                     I      0002
 106  1 06   MINUS3 EQU   3                                                     I      0003
 107  1 07   DIOCSB EQU   LABDIO-4                                             I      0576
 108  1 08          ORG   1                                                     I            0001
 109  1 09   MAINX  DA    1X86                                                  I      0001  0086                    ADDR
 110  1 10   LMAINX EQU   *                                                     I      0086
 111  1 11   *      XINIT INDEX1,INDEX2,INDEX3
 112    01   INDEX1 EQU   089                                                   I      0089
 113    02   089    DCW   000                                                   I   3  0089                       4
 114    04   091    DC    00                                                    I   2  0091                       4
 115    05   INDEX2 EQU   094                                                   I      0094
 116    06   094    DCW   000                                                   I   3  0094                       4
 117    08   096    DC    00                                                    I   2  0096                       4
 118    09   INDEX3 EQU   099                                                   I      0099
 119    10   099    DCW   000                                                   I   3  0099                       4
 120    12   100    DC    0                                                     I   1  0100                       4
 121  1 12   *
 122  1 13   * START OF MAIN LINE
 123  1 14   *
 124  1 15          ORG   101                                                   I            0101
 125  1 16   START  RWD   4                                                     I   5  0101  U %U4 R                4
 126  1 17          RWD   5                                                     I   5  0106  U %U5 R                4
 127  1 18          RWD   6                                                     I   5  0111  U %U6 R                4
 128  1 19          BSS   OVLAY2,B                                            I   5  0116  B P32 B                5
 129  1 20          B     REDREC                                              I   4  0121  B 774                  5
 130  1 21          C     MAINX&17, @JOB@                                     I   7  0125  C 018 W05              5
 131  1 22          BU    CMCTL                                               I   5  0132  B 157 /                5
 132  1 23          CC    1                                                   I   2  0137  F 1                    5
 133  1 24          MCW   80,280                                              I   7  0139  M 080 280              5
 134  1 25          W                                                         I   1  0146  2                      5
 135  1 26             N1                CC 1 IN REV 0.                       I   2  0147  N 1                    6
 136  1 27          B     WRTREC                                              I   4  0149  B 721                  6
 137  1 28          B     REDREC                                              I   4  0153  B 774                  6
 138  1 29   CMCTL  C     MAINX&17, @CTL@                                     I   7  0157  C 018 W08              6
 139  1 30          BU    FIND                                                I   5  0164  B 642 /                6
 140  1 31          BCE   ROBIN,MAINX&23,1                                    I   8  0169  B 623 024 1            6
 141  1 32          MN    MAINX&21,*&8                                        I   7  0177  D 022 191              6
 142  1 33          BCE   ROBIN,@456@,                                        I   8  0184  B 623 W11              7
 143  1 34          CHAIN 2                                                   I                          MACRO
 144                BCE                                                     I   1  0192  B                GEN      7
 145                BCE                                                     I   1  0193  B                GEN      7
 146  1 35          B     BLUE                                                I   4  0194  B 627                  7
 147  1 36          ORG   201                                                 I            0201


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

 148  1 37          DA    1X132                                                 I      0201   0332
 149  1 38                6,6                                                 I      0206              FIELD
 150  1 39   DTFTAB EQU   LABDTF-1                                             I      0349
 151  1 40          ORG   333                                                 I            0333
 152  1 41   EITHER B     NEXREC                                              I   4  0333  B 681                  8
 153  1 42   *
 154  1 43   *              CONTROL CARD INFORMATION
 155  1 44   *
 156  1 45   SPECL  DCW   @*@                                                 I   1  0337                       8
 157  1 46   SYMNM  DCW   #3                                                  I   3  0340                       8
 158  1 47   *
 159  1 48   *              DTF  MAJOR  TABLE
 160  1 49   *
 161  1 50          DCW   @,@                                                 I   1  0341                       8
 162  1 51          DCW   @;@                COBOL   YES                      I   1  0342                       8
 163  1 52          DCW   @;@                EXITS   YES                      I   1  0343                       8
 164  1 53   FILENM DCW   #6                                                  I   6  0349                       8
 165  1 54   LABDTF DCW   @;@          1    INPUT         1     FILETYPE      I   1  0350                       9
 166  1 55          DCW   @;@          2    OUTPUT        2                   I   1  0351                       9
 167  1 56          DCW   @;@          3    TAPE          3                   I   1  0352                       9
 168  1 57          DCW   @;@          4    READER        4                   I   1  0353                       9
 169  1 58          DCW   @;@          5    PUNCH         5                   I   1  0354                       9
 170  1 59          DCW   @;@          6    PRINTER       6                   I   1  0355                       9
 171  1 60          DCW   @;@          7    LOAD          7     MODEPAR       I   1  0356                       9
 172  1 61          DCW   @;@          8    CHECKPOINT     8    FEATURES      I   1  0357                      10
 173  1 62          DCW   @;@          9    NUMBER        9     CHANDRIVE     I   1  0358                      10
 174  1 63          DCW   @;@         10    NUMBER       10     CARDPOC       I   1  0359                      10
 175  1 64          DCW   @;@         11    NUMBER       11     ALTTAPE       I   1  0360                      10
 176  1 65          DCW   @;@         12    BLOCKED      12     RECFORM       I   1  0361                      10
 177  1 66          DCW   @;@         13    UNBLOCKED    13                   I   1  0362                      10
 178  1 67          DCW   @;@         14    MIXED        14                   I   1  0363                      10
 179  1 68          DCW   @;@         15    VARIABLE     15                   I   1  0364                      11
 180  1 69          DCW   @   ;@      16-19 NUMBER       16     SIZEREC       I   4  0368                      11
 181  1 70          DCW   @;@         20    NUMBER       17     PADDING       I   1  0369                      11
 182  1 71          DCW   @   ;@      21-24 NUMBER       18     BLOCKSIZE     I   4  0373                      11
 183  1 72          DCW   @        ;@   25-34    LABELS  19     IOAREAS       I  10  0383                      11
 184  1 73          DCW   @        ;@   35-44            20                   I  10  0393                      11
 185  1 74          DCW   @        ;@  45-54             21     WORKAREA      I  10  0403                      12
 186  1 75          DCW   @;@         55    NUMBER       22     INDEXREG      I   1  0404                      12
 187  1 76          DCW   @        ;@  56-65 LABEL      23     EORADDR       I  10  0414                      12
 188  1 77          DCW   @        ;@   66-75 LABEL     24     WLRADDR       I  10  0424                      12
 189  1 78          DCW   @;@         76    RECORD       25     TOTALS        I   1  0425                      12
 190  1 79          DCW   @   ;@      77-80 HASH         26                   I   4  0429                      12
 191  1 80          DCW   @;@         81    STANDARD     27                   I   1  0430                      12
 192  1 81          DCW   @;@         82    NONSTANDARD  28                   I   1  0431                      13
 193  1 82          DCW   @;@         83    TM           29                   I   1  0432                      13
 194  1 83          DCW   @;@         84    ALL          30                   I   1  0433                      13
 195  1 84          DCW   @;@         85    IDENT        31                   I   1  0434                      13
 196  1 85          DCW   @  ;@                                               I   3  0437                      13
 197  1 86          DCW   @    ;@                                             I   5  0442                      13
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 87           DCW   @         ;@                                       I  10  0452                      13
199  1 88           DCW   @    ;@      104-108 NUMBER     35     SERIALNUM   I   5  0457                      14
200  1 89           DCW   @         ;@ 109-118            39     EX1ADDR     I  10  0467                      14
201  1 90           DCW   @         ;@ 119-128            40     EX2ADDR     I  10  0477                      14
202  1 91           DCW   @         ;@ 129-138            41     EX3ADDR     I  10  0487                      14
203  1 92           DCW   @         ;@ 139-148            42     EX4ADDR     I  10  0497                      15
204  1 93           DCW   @         ;@ 149-158            43     EX5ADDR     I  10  0507                      15
205  1 94           DCW   @         ;@ 159-168            44     EX6ADDR     I  10  0517                      15
206  1 95           DCW   @         ;@ 169-178            45     EX7ADDR     I  10  0527                      16
207  1 96           DCW   @         ;@ 179-188            46     EX8ADDR     I  10  0537                      16
208  1 97           DCW   @         ;@ 189-198            47     VARBUILD    I  10  0547                      16
209  1 98           DCW   @;@          199  UNLOAD       37                 I   1  0548                      16
210  1 99           DCW   @;@          100  NOREWD       38                 I   1  0549                      16
211  2 00           DCW   @;@           9      201              OVERFLOW    I   1  0550                      16
212  2 01           DCW   @;@          12      202                          I   1  0551                      16
213  2 02           DCW   @  ;@       203-205   NUMBER                     I   3  0554                      17
214  2 03           DCW   @;@              206                 FORMCNTL    I   1  0555                      17
215  2 04           DCW   #9                                               I   9  0564                      17
216  2 05           DCW   @;@           216     ADDRESS          OVERFLOW   I   1  0565                      17
217  2 06           DCW   @ @                                              I   1  0566                      17
218  2 07   ENDDTF  DCW   @ @                                              I   1  0567                      17
219  2 08   *
220  2 09   *              DIOCS MAJOR TABLE
221  2 10   *
222  2 11           DCW   @,@                                              I   1  0568                      17
223  2 12   DIVIDE  EQU   *                                                I      0568
224  2 13           DCW   @;@              40   PAR        OUT  TAPEUSE    I   1  0569                      18
225  2 14           DCW   @;@              39   PAR        INP  TAPEUSE    I   1  0570                      18
226  2 15           DCW   @;@              38   PAR        YES  EXITS      I   1  0571                      18
227  2 16   LABDIO  DCW   #9                        DIOCSORG               I   9  0580                      18
228  2 17           DCW   @;@               5                             I   1  0581                      18
229  2 18           DCW   @;@               6       OVERLAP    FEATURES    I   1  0582                      18
230  2 19           DCW   @;@               7       TAPE       IODEVICES   I   1  0583                      18
231  2 20           DCW   @;@               8       READER                 I   1  0584                      19
232  2 21           DCW   @;@               9       PUNCH                  I   1  0585                      19
233  2 22           DCW   @;@              10       PRINTER                I   1  0586                      19
234  2 23           DCW   @;@              11       STANDARD   LABELDEF    I   1  0587                      19
235  2 24           DCW   @;@              12       NONSTANDARD            I   1  0588                      19
236  2 25           DCW   @;@              13       MIXED                  I   1  0589                      19
237  2 26           DCW   @;@              14       CHECK                  I   1  0590                      19
238  2 27           DCW   @;@              15       IDENT                  I   1  0591                      20
239  2 28           DCW   @;@              16       TM                     I   1  0592                      20
240  2 29           DCW   @;@              17       YES        ALTDRIVE    I   1  0593                      20
241  2 30           DCW   @;@              18       1          EXITS       I   1  0594                      20
242  2 31           DCW   @;@              19       2                      I   1  0595                      20
243  2 32           DCW   @;@              20       3                      I   1  0596                      20
244  2 33           DCW   @;@              21       4                      I   1  0597                      20
245  2 34           DCW   @;@              22       5                      I   1  0598                      21
246  2 35           DCW   @;@              23       6                      I   1  0599                      21
247  2 36           DCW   @;@              24       7                      I   1  0600                      21
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
248  2 37           DCW   @;@              25       8                      I   1  0601                      21
249  2 38           DCW   @;@              RDLIN    LABELDEF               I   1  0602                      21
250  2 39           DCW   @;@              27       729        DRIVETYPE   I   1  0603                      21
251  2 40           DCW   @;@              28       7330                   I   1  0604                      21
252  2 41           DCW   @;@              29       NORWD      RWDOPTION   I   1  0605                      22
253  2 42           DCW   @;@              30       UNLOAD                 I   1  0606                      22
254  2 43           DCW   @;@              31    TAPE,#        READERROR   I   1  0607                      22
255  2 44           DCW   @;@              32    SCAN                   I   1  0608                      22
256  2 45           DCW   @;@              33    PROCESS                I   1  0609                      22
257  2 46           DCW   @;@              CLEAN    READERROR             I   1  0610                      22
258  2 47           DCW   @;@              35       YES        INPVAR      I   1  0611                      22
259  2 48           DCW   @;@              36       YES        INPFXNO     I   1  0612                      23
260  2 49           DCW   @;@              37       RECORD     COUNTS      I   1  0613                      23
261  2 50           DCW   @;@         38   HASH                           I   1  0614                      23
262  2 51           DCW   #5                                               I   5  0619                      23
263  2 52           DCW   @;@         39-44       CHECKPOINT               I   1  0620                      23
264  2 53           DCW   @;@          45   RELEASE            FEATURES    I   1  0621                      23
265  2 54   ENDDIO  DCW   @;@          46   STORAGE                        I   1  0622                      23
266  2 55   *
267  2 56   *
268  2 57   ROBIN   S     SPECL                                            I   4  0623  S 337               24
269  2 575  BLUE    MCW   MAINX&25,NORDRL#1                                I   7  0627  M 026 W12           24
270  2 58   THRU    B     WRTREC                                           I   4  0634  B 721               24
271  2 59           B     REDREC                                           I   4  0638  B 774               24
272  2 60   FIND    C     MAINX&19,KDIOCS                                  I   7  0642  C 020 V71           24
273  2 61           BE    GOTIT                                            I   5  0649  B 670 S             24
274  2 62   *
275  2 63   *
276  2 64   *                READ IN PHASE 2
277  2 65   *
278  2 66   *
279  2 67           BCE   THRU,MAINX&5,*                                   I   8  0654  B 634 006 *         24
280  2 68   PREPS2  B     SAVCD                                            I   4  0662  B O98               25
281  2 69           B     PASS2                                            I   4  0666  B V06               25
282  2 70   GOTIT   MCW   @M@,LENGTH                                       I   7  0670  M W13 743           25
283  2 72   WHOM    B     WRTREC                                           I   4  0677  B 721               25
284  2 73   NEXREC  B     REDREC                                           I   4  0681  B 774               25
285  2 74   GAMMA   BCE   WHOM,MAINX&5,*                                   I   8  0685  B 677 006 *         25
286  2 75           C     MAINX&17,@DTF@                                   I   7  0693  C 018 W16           25
287  2 76           BE    DTFND                                            I   5  0700  B 713 S             26
288  2 77           B     WRTREC                                           I   4  0705  B 721               26
289  2 78           B     UPPER                                            I   4  0709  B 821               26
290  2 79   DTFND   B     SAVCD                                            I   4  0713  B O98               26
291  2 80           B     CRDOUT                                           I   4  0717  B J68               26
292  2 81   *
293  2 82   *              WRITE ROUTINE
294  2 83   *
295  2 84   WRTREC  SBR   WRTEXT&3                                         I   4  0721  H 761               26
296  2 85           MCW   LMAINX,LOPUT-1                                   I   7  0725  M 086 I97           26
297  2 86           SW    LOPUT                                            I   4  0732  , I98               27
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
298  2 87           MCW   GMWMRK,LOPUT                               I   7  0736  M 773 I98          27
299  2 88   LENGTH  NOP   @W@,OUTPT&74                              I   7  0743  N W17 I86          27
300  2 89   SHORT   B     CTAPE                                      I   4  0750  B S22              27
301  2 90           NOP   TDF6                                       I   4  0754  N 764              27
302  2 91   WRTEXT  B     0                                          I   4  0758  B 000              27
303  2 92   TDF6    DCW   000                                        I   3  0764                     27
304  2 93           WT    6,OUTPT                                    I   8  0765  M %U6 I12 W        28
305  2 94   GMWMRK  DC    @}@                                        I   1  0773              GMARK  28
306  2 95   *
307  2 96   *               READ ROUTINE
308  2 97   *
309  2 98   REDREC  SBR   REDEXT&3                                   I   4  0774  H 809              28
310  2 99           CS    LMAINX                                     I   4  0778  / 086              28
311  3 00           BSS   RTWED,C                                    I   5  0782  B 798 C            28
312  3 01           BLC   DTFOUT                                     I   5  0787  B M46 A            28
313  3 02           R                                                I   1  0792  1                  28
314  3 03           SSB   REDEXT,1                                   I   5  0793  K 806 1            28
315  3 04   RTWED   B     CTAPE                                      I   4  0798  B S22              29
316  3 05           NOP   TDF4                                       I   4  0802  N 812              29
317  3 06   REDEXT  B     0                                          I   4  0806  B 000              29
318  3 07   TDF4    DCW   &DTFOUT                                    I   3  0812  M46                29
319  3 08           RT    4,MAINX                                    I   8  0813  M %U4 001 R        29
320  3 09   *
321  3 10   *               LOOK UP LABEL
322  3 11   *
323  3 12   UPPER   CW    SCNSW#1                                    I   4  0821  ) W18              29
324  3 13           BCE   NEXREC,MAINX&20,                          I   8  0825  B 681 021          29
325  3 14           SBR   CHAIR&3,LSTPAR                            I   7  0833  H O66 O75          30
326  3 15           S     INDEX2&1                                   I   4  0840  S 095              30
327  3 16           SBR   INDEX3,LBLTBL                            I   7  0844  H 099 H46          30
328  3 17   COMPR   C     MAINX&7,0&X3                               I   7  0851  C 008 0?0          30
329  3 18           SBR   INDEX3                                     I   4  0858  H 099              30
330  3 19           BE    COMEQ                                      I   5  0862  B 984 S            30
331  3 20           BCE   NEXREC,0&X3,@                              I   8  0867  B 681 0?0 @        31
332  3 21           A     @7@,INDEX2                                 I   7  0875  A W19 094          31
333  3 22           B     COMPR                                      I   4  0882  B 851              31
334  3 23   BRTBL   B     ACTSCN                                     I   4  0886  B /13              31
335  3 24           DCW   &DIOCSB&36                 INPFXNO         I   3  0892  612                31
336  3 25           B     REASB                                      I   4  0893  B /73              31
337  3 26           DCW   #3                         READERROR       I   3  0899                     31
338  3 27           B     OPDSCN                                     I   4  0900  B O14              32
339  3 28           DCW   &RWDTB                     RWDOPT          I   3  0906  F95                32
340  3 29           B     OPDSCN                                     I   4  0907  B O14              32
341  3 30           DCW   &DRITB                     DRIVETYPE       I   3  0913  F82                32
342  3 31           B     OPDSCN                                     I   4  0914  B O14              32
343  3 32           DCW   &COUTB                     COUNTS          I   3  0920  G08                32
344  3 33           B     ACTSCN                                     I   4  0921  B /13              32
345  3 34           DCW   &DIOCSB&35                 VARINP          I   3  0927  611                33
346  3 35           B     EXISB                                      I   4  0928  B 992              33
347  3 36           DCW   #3                                         I   3  0934                     33
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
348  3 37           B     ACTSCN                                     I   4  0935  B /13              33
349  3 38           DCW   &DIOCSB&17                 ALTDRIVE        I   3  0941  593                33
350  3 39           B     OPDSCN                                     I   4  0942  B O14              33
351  3 40           DCW   &LABTB                     LABELDEF        I   3  0948  F20                33
352  3 41           B     OPDSCN                                     I   4  0949  B O14              34
353  3 42           DCW   &IODTB                     IODEVICES       I   3  0955  E77                34
354  3 43           B     OPDSCN                                     I   4  0956  B O14              34
355  3 44           DCW   &FEATB                     FEATURES        I   3  0962  E52                34
356  3 45           B     DIOSB                      DIOCSORG        I   4  0963  B /47              34
357  3 46           DCW   &DIOCSB&5                                  I   3  0969  581                34
358  3 47           B     DIOSB                                      I   4  0970  B /47              34
359  3 48           DCW   &DIOCSB&44                                 I   3  0976  620                35
360  3 49           B     OPDSCN                                     I   4  0977  B O14              35
361  3 50           DCW   &TAPTB                                    I   3  0983  E33                35
362  3 51   COMEQ   S     INDEX3&1                                   I   4  0984  S 100              35
363  3 52           B     BRTBL&X2                                   I   4  0988  B 8Q6              35
364  3 53   *
365  3 54   EXISB   LCA   @$@,DIVIDE&3                              I   7  0992  L W20 571          35
366  3 55           B     OPDSCN                                     I   4  0999  B O14              35
367  3 56           DCW   &EXITB                     EXITS           I   3  1005  F69                36
368  3 57   *
369  3 58   NEWSCN  SBR   NWEXT&3                                    I   4  1006  H /04              36
370  3 59           MCW   @   @,OPDAR#3                             I   7  1010  M W23 W26          36
371  3 60           S     INDEX2&1                                   I   4  1017  S 095              36
372  3 61   NWSCNL  C     MAINX&21&X3,@  @                           I   7  1021  C 0B2 W28          36
373  3 62           SW    MAINX&20                                   I   4  1028  , 021              36
374  3 63           BE    FDBLK                                      I   5  1032  B '90 S            36
375  3 64           BCE   FOUND,MAINX&20&X3,,                       I   8  1037  B /05 0B1 ,        37
376  3 65           C     INDEX3,@52@                                I   7  1045  C 099 W30          37
377  3 66           BE    BLKFD                                      I   5  1052  B '97 S            37
378  3 67           MCW   MAINX&20&X3,OPDAR-2&X2                    I   7  1057  M 0B1 WK4          37
379  3 68           A     @1@,INDEX2                                 I   7  1064  A W31 094          37
380  3 69           BCE   FOUND,INDEX2,3                           I   8  1071  B /05 094 3        38
381  3 70           A     @1@,INDEX3                                 I   7  1079  A W31 099          38
382  3 71           B     NWSCNL                                     I   4  1086  B '21              38
383  3 72   FDBLK   A     @1@,INDEX3                                 I   7  1090  A W31 099          38
384  3 73   BLKFD   SW    SCNSW                                      I   4  1097  , W18              38
385  3 74   NWEXT   B     0                                          I   4  1101  B 000              38
386  3 75   FOUND   B     SCANX                                      I   4  1105  B N55              38
387  3 76           B     NWEXT                                      I   4  1109  B /01              39
388  3 77   *
389  3 78   *               ACTUAL  SCAN  FOR YES
390  3 79   *
391  3 80   ACTSCN  SBR   INDEX1                                     I   4  1113  H 089              39
392  3 81           MCW   2&X1,INDEX1                               I   7  1117  M 0'2 089          39
393  3 82           C     MAINX&22,@YES@                             I   7  1124  C 023 W34          39
394  3 83           BU    ACTOUT                                     I   5  1131  B /43 /            39
395  3 84           LCA   @$@,0&X1                                  I   7  1136  L W20 0'0          39
396  3 85   ACTOUT  B     EITHER                                     I   4  1143  B 333              39
397  3 86   *
```

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

398  3 87   *             DIOCSORG
399  3 88   *
400  3 89   DIOSB  SBR   INDEX1                                     I   4  1147  H 089             40
401  3 90          MCW   2&X1,INDEX1                               I   7  1151  M 0'2 089         40
402  3 91          B     SCANX                                     I   4  1158  B N55            40
403  3 92          LCA   MAINX&18&X3,0&X1                         I   7  1162  L 0A9 0'0        40
404  3 93          B     NEXREC                                    I   4  1169  B 681            40
405  3 94   *
406  3 95   *             READERROR
407  3 96   *
408  3 97   REASB  SBR   CHAIR&3,CHTAP                             I   7  1173  H O66 /87         40
409  3 98          B     OPDSCN                                    I   4  1180  B O14            40
410  3 99          DCW   &REATB                                    I   3  1186  G27              41
411  4 00   CHTAP  C     OPDAR,@TAP@                               I   7  1187  C W26 W37        41
412  4 01          BU    LSTPAR                                    I   5  1194  B O75 /          41
413  4 02          B     SCANX                                     I   4  1199  B N55            41
414  4 03          BCE   LSTPAR,MAINX&18&X3,                      I   8  1203  B O75 0A9        41
415  4 04          MCW   MAINX&18&X3,DIOCSB&31                     I   7  1211  M 0A9 607        41
416  4 05          B     LSTPAR                                    I   4  1218  B O75            41
417  4 06   *
418  4 07   *             COMBINATION READ/ WRITE ROUTINE
419  4 08   *
420  4 09   CTAPE  SBR   INDEX2                                    I   4  1222  H 094            42
421  4 10          SBR   ICONPR&3                                  I   4  1226  H T43            42
422  4 11          MCW   3&X2,INDEX2                               I   7  1230  M 0!3 094        42
423  4 12          MCW   8&X2,ITAPEC&7                            I   7  1237  M 0!8 T01        42
424  4 13          MCW   0&X2,IEORC&3                            I   7  1244  M 0!0 T13        42
425  4 14          SW    ICOMPR&4                                  I   4  1251  , T19            42
426  4 15          MCW   7&X2,ICOMPR&6                            I   7  1255  M 0!7 T21        43
427  4 16          A     @12@,ICOMPR&6                             I   7  1262  A W39 T21        43
428  4 17          CW    ICOMPR&4                                  I   4  1269  ) T19            43
429  4 18          MN    ITAPEC&3,IHALT&6                          I   7  1273  D S97 U28        43
430  4 19          MN    ITAPEC&7,IHALT&6                          I   7  1280  D T01 U28        43
431  4 20          MCW   @9@,IERRCT#1                            I   7  1287  M W40 W41        43
432  4 21   ITAPEC RT    0,0                                       I   8  1294  M %U0 000 R      44
433  4 22          BCE   IOMETS,ITAPEC&7,W                        I   8  1302  B T35 T01 W      44
434  4 23   IEORC  BEF   0                                         I   5  1310  B 000 K          44
435  4 24   ICOMPR BCE   ITAPEC,0,}                               I   8  1315  B S94 000 } GMARK 44
436  4 25          CHAIN 12                                       I                 MACRO
437                BCE                                           I   1  1323  B           GEN  44
438                BCE                                           I   1  1324  B           GEN  44
439                BCE                                           I   1  1325  B           GEN  44
440                BCE                                           I   1  1326  B           GEN  45
441                BCE                                           I   1  1327  B           GEN  45
442                BCE                                           I   1  1328  B           GEN  45
443                BCE                                           I   1  1329  B           GEN  45
444                BCE                                           I   1  1330  B           GEN  45
445                BCE                                           I   1  1331  B           GEN  45
446                BCE                                           I   1  1332  B           GEN  45
447                BCE                                           I   1  1333  B           GEN  46
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

448                BCE                                           I   1  1334  B           GEN  46
449  4 26   IOMETS BER   IRWRED                                    I   5  1335  B T44 L          46
450  4 27   ICONPR B     0                                         I   4  1340  B 000            46
451  4 28   IRWRED S     @1@,IERRCT                                I   7  1344  S W31 W41        46
452  4 29          MN    ITAPEC&3,*&4                              I   7  1351  D S97 T61        46
453  4 30          BSP   0                                         I   5  1358  U %U0 B          46
454  4 31          BCE   ITROW,ITAPEC&7,W                         I   8  1363  B T83 T01 W      47
455  4 32          BM    IHALT,IERRCT                              I   8  1371  V U22 W41 K      47
456  4 33          B     ITAPEC                                    I   4  1379  B S94            47
457  4 34   ITROW  A     @1@,IERASC#2                              I   7  1383  A W31 W43        47
458  4 35          SKP   6                                         I   5  1390  U %U6 E          47
459  4 36          BCE   ICHALT,IERASC-1,5                        I   8  1395  B U07 W42 5      48
460  4 37          B     ITAPEC-7                                  I   4  1403  B S87            48
461  4 38   ICHALT S     IERASC                                    I   4  1407  S W43            48
462  4 39          H     0,202                                     I   7  1411  . 000 202        48
463  4 40          B     ITAPEC-7                                  I   4  1418  B S87            48
464  4 41   IHALT  H     0,200                                     I   7  1422  . 000 200        48
465  4 42          BSS   ITAPEC-7,E                                I   5  1429  B S87 E          48
466  4 43          MCW   ITAPEC&7,*&8                             I   7  1434  M T01 U48        49
467  4 44          RT    0,0                                       I   8  1441  M %U0 000 R      49
468  4 45          H     0,201                                     I   7  1449  . 000 201        49
469  4 46          B     ICONPR                                    I   4  1456  B T40            49
470  4 47   PASSI  LCA   ENDDIO,ENDDTF                            I   7  1460  L 622 567        49
471  4 48          LCA                                           I   1  1467  L                49
472  4 49          SBR   EITHER&3,DIFREC                         I   7  1468  H 336 M06        50
473  4 50          MCW   &DTFTAB&X1,OPDFND&6                     I   7  1475  M W46 O93        50
474  4 51          LCA   186,LMAINX                               I   7  1482  L 186 086        50
475  4 52          B     WRTREC                                    I   4  1489  B 721            50
476  4 53          B     DTFNM                                     I   4  1493  B L91            50
477  4 54   ALTBY  B     BYPSS                                     I   4  1497  B C49            50
478  4 55          BSP   4                                         I   5  1501  U %U4 B          50
479  4 56   PASS2  RT    1,3997                                    I   8  1506  M %U1 I97 R      51
480  4 57          RT    1,3997                                    I   8  1514  M %U1 I97 R      51
481  4 58          SBR   TDF1&7,341                               I   7  1522  H P30 341        51
482  4 59          B     CTAPE                                     I   4  1529  B S22            51
483  4 60          NOP   TDF1                                      I   4  1533  N P23            51
484  4 61          B     OVLY3                                     I   4  1537  B 341            51
485  4 62   *
486  4 63   NUMERC SBR   INDEX1                                    I   4  1541  H 089            51
487  4 64          MCW   2&X1,INDEX1                               I   7  1545  M 0'2 089        52
488  4 65          SW    MAINX&20                                  I   4  1552  , 021            52
489  4 66          MCW   MAINX&20,DTFTAB&X1                       I   7  1556  M 021 3U9        52
490  4 67          B     DIFREC                                    I   4  1563  B M06            52
491  4 68   KDIOCS DCW   @DIOCS@                                   I   5  1571                   52
492  4 69   BLORB  B     SCANX                                     I   4  1572  B N55            52
493  4 70          A     MAINX&18&X3,BLOWA-1                       I   7  1576  A 0A9 W01        52
494  4 71          LCA   BLOWA-1,DTFTAB&24                         I   7  1583  L W01 373        53
495  4 72          S     BLOWA                                     I   4  1590  S W02            53
496  4 73          B     EITHER                                    I   4  1594  B 333            53
497  4 74   BLOWA  DCW   &00000                                    I   5  1602                   53
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

498  4 75           LTORG *                                               I          1603
                    DCW   @JOB@                                         I   3  1605              LIT     53
                    DCW   @CTL@                                         I   3  1608              LIT     53
                    DCW   @456@                                         I   3  1611              LIT     53
             NORDRL DCW   #01                                           I   1  1612              AREA    54
                    DCW   @M@                                           I   1  1613              LIT     54
                    DCW   @DTF@                                         I   3  1616              LIT     54
                    DCW   @W@                                           I   1  1617              LIT     54
             SCNSWI DCW   #01                                           I   1  1618              AREA    54
                    DCW   @7@                                           I   1  1619              LIT     54
                    DCW   @$@                                           I   1  1620              LIT     54
                    DCW   @   @                                         I   3  1623              LIT     55
             OPDARI DCW   #03                                           I   3  1626              AREA    55
                    DCW   @  @                                          I   2  1628              LIT     55
                    DCW   @52@                                          I   2  1630              LIT     55
                    DCW   @1@                                           I   1  1631              LIT     55
                    DCW   @YES@                                         I   3  1634              LIT     55
                    DCW   @TAP@                                         I   3  1637              LIT     55
                    DCW   @12@                                          I   2  1639              LIT     56
                    DCW   @9@                                           I   1  1640              LIT     56
             IERRCT DCW   #01                                           I   1  1641              AREA    56
             IERASC DCW   #02                                           I   2  1643              AREA    56
                    DCW   &DTFTAB&X                                     I   3  1646  3U9         ADCON   56
499  4 76           ORG   1649                                          I          1649
500  4 77   OVER    DCW   @}@                                           I   1  1649              GMARK   57
501  4 78           EX                                                  I          B 000                58
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

502  4 79           JOB   1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 1 -VERSION 3 I
503  4 80           ORG   1650                                          I          1650
504  4 81           SFX   I                                             I
505  4 82   *
506  4 83   *               DTF  TABLE  OF  BRANCHES
507  4 84   *
508  4 85   DTFINT  SBR   INDEX3,DTFLAB                                 I   7  1650  H 099 H03          61
509  4 86           SBR   CHAIR&3,LSTPAR                                I   7  1657  H O66 O75          61
510  4 87           BCE   DIFREC,MAINX&20,                               I   8  1664  B M06 021          61
511  4 88           CW    SCNSW                                         I   4  1672  ) W18              61
512  4 89           C     MAINX&6,@EX@                                  I   7  1676  C 007 H48          61
513  4 90           BE    EXIRB                                         I   5  1683  B !31 S            61
514  4 91           S     INDEX2&1                                      I   4  1688  S 095              62
515  4 92   SEEK    C     MAINX&7,0&X3                                  I   7  1692  C 008 0?0          62
516  4 93           SBR   INDEX3                                       I   4  1699  H 099              62
517  4 94           BE    AGREE                                         I   5  1703  B Z35 S            62
518  4 95           BCE   DIFREC,0&X3,@                                 I   8  1708  B M06 0?0 @        62
519  4 96           A     @7@,INDEX2                                    I   7  1716  A H49 094          62
520  4 97           B     SEEK                                          I   4  1723  B W92              62
521  4 98   DTFBR   B     OPDSCN                                        I   4  1727  B O14              63
522  4 99           DCW   REWXZ                    REWIND               I   3  1733  E00                63
523  5 00           B     ACTUAL                                        I   4  1734  B !89              63
524  5 01           DCW   &DTFTAB&205              REELSEQ              I   3  1740  554                63
525  5 02           B     ACTUAL                                        I   4  1741  B !89              63
526  5 03           DCW   &DTFTAB&108              SERIALNUM            I   3  1747  457                63
527  5 04           B     HEARB                                         I   4  1748  B N37              63
528  5 05           DCW   &DTFTAB&103                                   I   3  1754  452                64
529  5 06           B     OPDSCN                                        I   4  1755  B O14              64
530  5 07           DCW   &CHEXZ                   CHECKLABEL           I   3  1761  D87                64
531  5 08           B     OPDSCN                                        I   4  1762  B O14              64
532  5 09           DCW   &TYPXZ                   TYPELABEL            I   3  1768  D74                64
533  5 10           B     TOTRB                                         I   4  1769  B Z81              64
534  5 11           DCW   #3                       TOTALS               I   3  1775                     64
535  5 12           B     ACTUAL                                        I   4  1776  B !89              65
536  5 13           DCW   &DTFTAB&75               WLRADDR              I   3  1782  424                65
537  5 14           B     ACTUAL                                        I   4  1783  B !89              65
538  5 15           DCW   &DTFTAB&65               EOFADDR              I   3  1789  414                65
539  5 16           B     INDRB                                         I   4  1790  B !71              65
540  5 17           DCW   #3                       INDEXREG             I   3  1796                     65
541  5 18           B     ACTUAL                                        I   4  1797  B !89              65
542  5 19           DCW   &DTFTAB&54               WORKAREA             I   3  1803  403                66
543  5 20           B     IOARB                                         I   4  1804  B Z47              66
544  5 21           DCW   &DTFTAB&44               IOAREAS              I   3  1810  393                66
545  5 22           B     BLORB                                         I   4  1811  B V72              66
546  5 23           DCW   &DTFTAB&24               BLOCKSIZE            I   3  1817  373                66
547  5 24           B     NUMERC                                        I   4  1818  B V41              66
548  5 25           DCW   @020@                    PADDING              I   3  1824                     66
549  5 26           B     ACTUAL                                        I   4  1825  B !89              67
550  5 27           DCW   &DTFTAB&19               SIXEREC              I   3  1831  368                67
551  5 28           B     OPDSCN                                        I   4  1832  B O14              67
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

552  5 29           DCW   &RECXZ                    RECFORM       I   3  1838  D55               67
553  5 30           B     NUMERC                                  I   4  1839  B V41             67
554  5 31           DCW   @011@                     ALTTAPE       I   3  1845                    67
555  5 32           B     NUMERC                                  I   4  1846  B V41             67
556  5 33           DCW   @010@                     CARDPROC      I   3  1852                    68
557  5 34           B     OPDSCN                                  I   4  1853  B O14             68
558  5 35           DCW   &MODXZ                    MODEPAR       I   3  1859  D30               68
559  5 36           B     OPDSCN                                  I   4  1860  B O14             68
560  5 37           DCW   &FILXZ                    FILETYPE      I   3  1866  D23               68
561  5 38           B     NUMERC                                  I   4  1867  B V41             68
562  5 39           DCW   @009@                     CHANDRIVE     I   3  1873                    68
563  5 40           B     ACTUAL                                  I   4  1874  B !89             69
564  5 41           DCW   DTFTAB&198                VARBUILD      I   3  1880  547               69
565  5 42           B     ACTSCN                                  I   4  1881  B /13             69
566  5 43           DCW   &DTFTAB-7                               I   3  1887  342               69
567  5 44           B     NUMERC                                  I   4  1888  B V41             69
568  5 45           DCW   @206@                                   I   3  1894                    69
569  5 46           B     OVERB                                   I   4  1895  B !06             69
570  5 47           DCW   #1                                      I   1  1899                    70
571  5 48           ORG   1900                                    I          1900
572  5 49           RTW   1,1                                     I   8  1900  L %U1 001 R       70
573  5 50           BER   HALT                                    I   5  1908  B Z21 L           70
574  5 51           CW    OVER                                    I   4  1913  ) W49             70
575  5 52           B     OTHER                                   I   4  1917  B 101             70
576  5 53   HALT    BSP   1                                       I   5  1921  U %U1 B           70
577  5 54           NOP   288                                     I   4  1926  N 288             70
578  5 55           H                                             I   1  1930  .                 71
579  5 56           B     1900                                    I   4  1931  B Z00             71
580  5 57   *
581  5 58   AGREE   S     INDEX3&1                                I   4  1935  S 100             71
582  5 59           SW    MAINX&20                                I   4  1939  , 021             71
583  5 60           B     DTFBR&X2                                I   4  1943  B XK7             71
584  5 61   *               IOAREAS
585  5 62   *
586  5 63   IOARB   B     SCANX                                   I   4  1947  B N55             71
587  5 64           LCA   MAINX&18&X3,DTFTAB&44                   I   7  1951  L 0A9 393         71
588  5 65           BW    EITHER,SCNSW                            I   8  1958  V 333 W18 1       72
589  5 66           B     SCANX                                   I   4  1966  B N55             72
590  5 67           LCA   MAINX&18&X3,DTFTAB&34                   I   7  1970  L 0A9 383         72
591  5 68           B     EITHER                                  I   4  1977  B 333             72
592  5 69   *
593  5 70   *               TOTALS
594  5 71   *
595  5 72   TOTRB   SBR   CHAIR&3,TOTJK                          I   7  1981  H O66 Z95         72
596  5 73           B     OPDSCN                                  I   4  1988  B O14             72
597  5 74           DCW   &TOTXZ                                 I   3  1994  E20               72
598  5 75   TOTJK   LCA   MAINX&18&X3,DTFTAB&80                   I   7  1995  L 0A9 429         73
599  5 76           B     LSTPAR                                  I   4  2002  B O75             73
600  5 77   OVERB   SBR   CHAIR&3,OVEJK                          I   7  2006  H O66 !20         73
601  5 78           B     OPDSCN                                  I   4  2013  B O14             73
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

602  5 79           DCW   &OVEXZ                                  I   3  2019  E13               73
603  5 80   OVEJK   LCA   MAINX&18&X3,DTFTAB&216                 I   7  2020  L 0A9 565         73
604  5 81           B     LSTPAR                                  I   4  2027  B O75             73
605  5 82   *
606  5 83   *                   EXITS  ROUTINE
607  5 84   *
608  5 85   EXIRB   MCW   @1 8@,INDEX2                           I   7  2031  M H52 094         74
609  5 86           MN    MAINX&7,INDEX2-1                        I   7  2038  D 008 093         74
610  5 87           S     INDEX3&1                                I   4  2045  S 100             74
611  5 88           B     SCANX                                   I   4  2049  B N55             74
612  5 89           LCA   MAINX&18&X3,DTFTAB&X2                  I   7  2053  L 0A9 3M9         74
613  5 90           LCA   @$@,DTFTAB-6                            I   7  2060  L H53 343         74
614  5 91           B     DIFREC                                  I   4  2067  B M06             75
615  5 92   *
616  5 93   *               INDEX  REGISTER
617  5 94   *
618  5 95   INDRB   MN    MAINX&21,DTFTAB&55                      I   7  2071  D 022 404         75
619  5 96           MZ    @ @,DTFTAB&55                           I   7  2078  Y H54 404         75
620  5 97           B     DIFREC                                  I   4  2085  B M06             75
621  5 98   *
622  5 99   *                   LOAD PARAMETERS - ACTUAL
623  6 00   *
624  6 01   ACTUAL  SBR   INDEX1                                  I   4  2089  H 089             75
625  6 015          BW    EITHER,SCNSW                            I   8  2093  V 333 W18 1       75
626  6 02           MCW   2&X1,INDEX1                            I   7  2101  M 0'2 089         76
627  6 03   SEARCH  B     SCANX                                   I   4  2108  B N55             76
628  6 04           LCA   MAINX&18&X3,0&X1                        I   7  2112  L 0A9 0'0         76
629  6 05           SBR   INDEX1                                  I   4  2119  H 089             76
630  6 06           BW    DIFREC,SCNSW                            I   8  2123  V M06 W18 1       76
631  6 07           B     SEARCH                                  I   4  2131  B J08             76
632  6 08   NEWWRT  SBR   WRTEXT&3                               I   4  2135  H 761             76
633  6 09           MCW   LMAINX,LOPUT-1                          I   7  2139  M 086 I97         77
634  6 10           SW    OUTPT&80                                I   4  2146  , I92             77
635  6 11           MCW   GMWMRK,OUTPT&80                         I   7  2150  M 773 I92         77
636  6 12   LONG    MCW   @*@,OUTPT&73                           I   7  2157  M H55 I85         77
637  6 13           B     SHORT                                   I   4  2164  B 750             77
638  6 14   *
639  6 15   *                   OUTPUT  MACRO  STATEMENT  FOR  DIOC
640  6 16   *
641  6 17   CRDOUT  MN    @5@,TDF6&4                              I   7  2168  D H56 768         77
642  6 18           CS    LMAINX                                  I   4  2175  / 086             78
643  6 19           MCW   @55555@,MAINX&19                        I   7  2179  M H61 020         78
644  6 20           SBR   INDEX3,ENDDIO                           I   7  2186  H 099 622         78
645  6 21           B     GOOD&4                                  I   4  2193  B K01             78
646  6 22   GOOD    CS    LMAINX                                  I   4  2197  / 086             78
647  6 23           SW    1                                       I   4  2201  , 001             78
648  6 24           SBR   INDEX1,MAINX&20                        I   7  2205  H 089 021         78
649  6 25           MCW   @'@,MAINX&72                            I   7  2212  M H62 073         79
650  6 26   LODPAR  MCW   0&X3,WKAREA-1                          I   7  2219  M 0?0 L89         79
651  6 27           SBR   INDEX2                                  I   4  2226  H 094             79
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
652  6 28           MCW   INDEX1,SAVXL1#3                            I  7  2230  M 089 H65          79
653  6 29           MCM   1&X2,0&X1                                  I  7  2237  P 0!1 0'0          79
654  6 30           SBR   INDEX1                                     I  4  2244  H 089              79
655  6 31           MCW   @, @,0&X1                                  I  7  2248  M H67 0'0          80
656  6 32           BCE   CONTIN,MAINX&72,'                          I  8  2255  B L01 073 '        80
657  6 33           MCW   SAVXL1,INDEX1                             I  7  2263  M H65 089          80
658  6 34           SW    0&X1                                       I  4  2270  , 0'0             80
659  6 35           MCW   @  @,MAINX&79                             I  7  2274  M H69 080          80
660  6 36           MCW   MAINX&78                                   I  4  2281  M 079              80
661  6 37           CW    0&X1                                       I  4  2285  ) 0'0             81
662  6 38           B     NEWWRT                                     I  4  2289  B J35              81
663  6 39           CW    OUTPT&80                                   I  4  2293  ) I92              81
664  6 40           B     GOOD                                       I  4  2297  B J97              81
665  6 41   CONTIN  MCW   0&X3,0&X3                                  I  7  2301  M 0?0 0?0          81
666  6 42           SBR   INDEX3                                     I  4  2308  H 099              81
667  6 43   COMBLK  C     0&X3,@ @                                    I  7  2312  C 0?0 H54          81
668  6 44           SAR   INDEX3                                     I  4  2319  Q 099              82
669  6 45           BE    COMBLK                                     I  5  2323  B L12 S            82
670  6 46           A     @1@,INDEX3                                 I  7  2328  A H70 099          82
671  6 47           B     ALLDIO,0&X3,,                              I  8  2335  B L47 0?0 ,        82
672  6 48           B     LODPAR                                     I  4  2343  B K19              82
673  6 49   ALLDIO  MCW   @  @,0&X1                                  I  7  2347  M H69 0'0          82
674  6 50           MCW   @ @,MAINX&72                              I  7  2354  M H54 073          83
675  6 51           B     NEWWRT                                     I  4  2361  B J35              83
676  6 52           CW    OUTPT&80                                   I  4  2365  ) I92              83
677  6 53           MN    @6@,TDF6&4                                 I  7  2369  D H71 768          83
678  6 54   BETTER  B     PASSI                                      I  4  2376  B U60              83
679  6 55   WKAREA  DCW   @          '@                              I 11  2390                    83
680  6 56   DTFNM   S     INDEX3&1                                   I  4  2391  S 100              84
681  6 57           B     SCANX                                      I  4  2395  B N55              84
682  6 58           LCA   MAINX&18&X3,FILENM                        I  7  2399  L 0A9 349          84
683  6 59   DIFREC  B     REDREC                                     I  4  2406  B 774              84
684  6 60   DELTA   BCE   ALPHA,MAINX&5,*                           I  8  2410  B M30 006 *        84
685  6 61           C     MAINX&19,@     @                          I  7  2418  C 020 H76          84
686  6 62           BU    DTFOUT                                     I  5  2425  B M46 /            84
687  6 63   ALPHA   B     WRTREC                                     I  4  2430  B 721              85
688  6 64           BCE   DIFREC,MAINX&5,*                           I  8  2434  B M06 006 *        85
689  6 65           B     DTFINT                                     I  4  2442  B W50              85
690  6 66   DTFOUT  MN    @5@,TDF6&4                                 I  7  2446  D H56 768          85
691  6 67           SBR   INDEX3,ENDDTF                            I  7  2453  H 099 567          85
692  6 68           B     SAVCD                                      I  4  2460  B O98              85
693  6 69           SBR   WALK&3,ALTBY                              I  7  2464  H Q99 U97          86
694  6 70           C     MAINX&17,@DTF@                             I  7  2471  C 018 H79          86
695  6 71           CS    LMAINX                                     I  4  2478  / 086              86
696  6 72           MCW   @33333@,MAINX&19                         I  7  2482  M H84 020          86
697  6 73           BE    SETDSW                                     I  5  2489  B N05 S            86
698  6 74   RIVER   SBR   BETTER&3,PASS2                           I  7  2494  H L79 V06          86
699  6 75           B     GOOD&4                                     I  4  2501  B K01              87
700  6 76   SETDSW  SBR   BETTER&3,RNDTF                            I  7  2505  H L79 N16          87
701  6 77           B     GOOD&4                                     I  4  2512  B K01              87
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
702  6 78   RNDTF   RTW   1,341                                     I  8  2516  L %U1 341 R        87
703  6 79           BSP   1                                        I  5  2524  U %U1 B            87
704  6 80           CW    DTFGM                                      I  4  2529  ) 568              87
705  6 81           B     PASSI                                      I  4  2533  B U60              87
706  6 82   HEARB   B     SCANX                                      I  4  2537  B N55              88
707  6 83           MCW   MAINX&18&X3,DTFTAB&103                     I  7  2541  M 0A9 452          88
708  6 84           B     ACTUAL                                     I  4  2548  B !89             88
709  6 85           DCW   &DTFTAB&93                                 I  3  2554  442               88
710  6 86   *
711  6 87   *               SCAN FOR A COMMA OR TWO BLANKS
712  6 88   *
713  6 89   SCANX   SBR   CLUBS&3                                   I  4  2555  H O13              88
714  6 90   SCANL   SW    MAINX&20                                   I  4  2559  , 021              88
715  6 91           C     MAINX&21&X3,@  @                           I  7  2563  C 0B2 H69          88
716  6 92           A     @1@,INDEX3                                 I  7  2570  A H70 099          89
717  6 93           BE    SETIT                                      I  5  2577  B O02 S            89
718  6 94           BCE   SETWMS,MAINX&19&X3,,                      I  8  2582  B O06 0B0 ,        89
719  6 95           C     INDEX3,@52@                                I  7  2590  C 099 H86          89
720  6 96           BU    SCANL                                      I  5  2597  B N59 /            89
721  6 97   SETIT   SW    SCNSW                                      I  4  2602  , W18              89
722  6 98   SETWMS  SW    MAINX&20&X3                                I  4  2606  , 0B1              90
723  6 99   CLUBS   B     0                                          I  4  2610  B 000              90
724  7 00   *
725  7 01   *               SCAN   OPERAND TABLE
726  7 02   *
727  7 03   *
728  7 04   OPDSCN  SBR   INDEX2                                     I  4  2614  H 094              90
729  7 05           MCW   2&X2,SAVX2                                I  7  2618  M 0!2 H89          90
730  7 06   OPDRTN  B     NEWSCN                                     I  4  2625  B '06             90
731  7 07           MCW   SAVX2#3,INDEX2                            I  7  2629  M H89 094          90
732  7 08   SEEKOP  C     OPDAR,0&X2                                 I  7  2636  C W26 0!0          90
733  7 09           SBR   INDEX2                                     I  4  2643  H 094              91
734  7 10           MCW   0&X2,INDEX1                               I  7  2647  M 0!0 089          91
735  7 11           SAR   INDEX2                                     I  4  2654  Q 094              91
736  7 12           BE    OPDFND                                     I  5  2658  B O87 S            91
737  7 13   CHAIR   BCE   LSTPAR,0&X2,@                             I  8  2663  B O75 0!0 @        91
738  7 14           B     SEEKOP                                     I  4  2671  B O36              91
739  7 15   LSTPAR  BW    EITHER,SCNSW                               I  8  2675  V 333 W18 1        92
740  7 16           B     OPDRTN                                     I  4  2683  B O25              92
741  7 17   OPDFND  LCA   @$@,DIOCSB&X1                             I  7  2687  L H53 5X6          92
742  7 18           B     LSTPAR                                     I  4  2694  B O75              92
743  7 19   SAVCD   SBR   SVCDX&3                                   I  4  2698  H P20              92
744  7 20           CS    186                                        I  4  2702  / 186              92
745  7 21           SW    101                                        I  4  2706  , 101              92
746  7 22           MCW   LMAINX,186                                I  7  2710  M 086 186          93
747  7 23   SVCDX   B     0                                          I  4  2717  B 000              93
748  7 24   *
749  7 25   *               READ  IN  OVERLAY  TWO
750  7 26   *
751  7 27   TDF1    DCW   #3                                        I  3  2723                    93
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
752  7 28           RTW   1,101                                      I   8  2724  L %U1 101 R         93
753  7 29   OVLAY2  SW    GMOVL2                                     I   4  2732  , 332               93
754  7 30           MCW   GMWMRK,GMOVL2                             I   7  2736  M 773 332           93
755  7 31           RT    1,101                                      I   8  2743  M %U1 101 R         94
756  7 32           B     CTAPE                                      I   4  2751  B S22               94
757  7 33           NOP   TDF1                                       I   4  2755  N P23               94
758  7 34           B     PUNCH                                      I   4  2759  B 101               94
759  7 35   *
760  7 36   *               ALTER PART OF IOCS
761  7 37   *
762  7 38   ALTER   B     CTAPE                                      I   4  2763  B S22               94
763  7 39           NOP   TDF4A                                      I   4  2767  N A35               94
764  7 40           MCW   OUTPT&7,SYMNM                             I   7  2771  M I19 340           94
765  7 41           BSS   OUTCL,C                                    I   5  2778  B 119 C             95
766  7 42           BSP   4                                          I   5  2783  U %U4 B             95
767  7 43           SBR   RIVER&6,TUNEL                            I   7  2788  H N00 Q88           95
768  7 44           SBR   PREPS2&3                                   I   4  2795  H 665               95
769  7 45           R                                                I   1  2799  1                   95
770  7 46           C     MAINX&17,@ALT@                             I   7  2800  C 018 H92           95
771  7 47           BU    WALK                                       I   5  2807  B Q96 /             95
772  7 48   HOMAL   B     SAVXX                                      I   4  2812  B C19               96
773  7 49           B     PACKX                                      I   4  2816  B R43               96
774  7 50   NOALTB  B     CTAPE                                      I   4  2820  B S22               96
775  7 51           NOP   TDF4A                                      I   4  2824  N A35               96
776  7 52           C     OUTPT&83,HLDA1                             I   7  2828  C I95 I02           96
777  7 53           BE    CHECK                                      I   5  2835  B ?05 S             96
778  7 54   PROPRE  C     OUTPT&17,@JOB@                             I   7  2840  C I29 H95           96
779  7 55   ALTS1   BU    ALTS2E                                     I   5  2847  B Q60 /             97
780  7 56           B     NOPJB                                      I   4  2852  B 205               97
781  7 57           B     NOTER                                      I   4  2856  B 220               97
782  7 58   ALTS2E  C     OUTPT&17,@CTL@                             I   7  2860  C I29 H98           97
783  7 59   ALTS2   BE    OUTCL                                      I   5  2867  B 119 S             97
784  7 60   SOLVED  MCW   OUTPT&85,LMAINX                           I   7  2872  M I97 086           97
785  7 61           SW    READS                                      I   4  2879  , I10               97
786  7 62   ALTIO   BSS   REGEN,G                                   I   5  2883  B A44 G             98
787  7 63   TUNEL   BW    BSPT4,READS                                I   8  2888  V R04 I10 1         98
788  7 64   WALK    B     SAVCD                                      I   4  2896  B O98               98
789  7 65           B     ALTBY                                      I   4  2900  B U97               98
790  7 66   BSPT4   BW    REGL,XCARDS                                I   8  2904  V R27 I09 1         98
791  7 67           MN    @5@,TDF6&4                                 I   7  2912  D H56 768           98
792  7 68           B     NEWWRT                                     I   4  2919  B J35               99
793  7 69           B     REGL&5                                     I   4  2923  B R32               99
794  7 70   REGL    BSP   4                                          I   5  2927  U %U4 B             99
795  7 71           LCA   AREASV,186                                 I   7  2932  L 331 186           99
796  7 72           B     ALTBY                                      I   4  2939  B U97               99
797  7 73   PACKX   SBR   PACKS&3                                   I   4  2943  H ?04               99
798  7 74           SW    BALTR                                      I   4  2947  , I03               99
799  7 75           CW    SCNSW                                      I   4  2951  ) W18              100
800  7 76           S     INDEX3&1                                   I   4  2955  S 100              100
801  7 77           B     SCANX                                      I   4  2959  B N55              100
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
802  7 78           ZA    MAINX&18&X3,HLDA1#4                        I   7  2963  ? 0A9 I02          100
803  7 79           BW    PARKS,SCNSW                                I   8  2970  V R93 W18 1        100
804  7 80           B     SCANX                                      I   4  2978  B N55              100
805  7 81           ZA    MAINX&18&X3,HLDB                           I   7  2982  ? 0A9 I07          100
806  7 82           CW    BALTR#1                                    I   4  2989  ) I03              101
807  7 83   PARKS   CS    LMAINX                                     I   4  2993  / 086              101
808  7 84           SW    1                                          I   4  2997  , 001              101
809  7 85   PACKS   B     0                                          I   4  3001  B 000              101
810  7 86   *
811  7 87   *               ALTER  NUMBER  COMPARES  EQUAL
812  7 88   *
813  7 89   CHECK   BW    WRTAL,BALTR                                I   8  3005  V ?37 I03 1        101
814  7 90   DBLAL   C     OUTPT&83,HLDB#4                            I   7  3013  C I95 I07          101
815  7 91           BE    WRTAL                                      I   5  3020  B ?37 S            101
816  7 92           B     CTAPE                                      I   4  3025  B S22              102
817  7 93           NOP   TDF4A                                      I   4  3029  N A35              102
818  7 94           B     DBLAL                                      I   4  3033  B ?13              102
819  7 95   WRTAL   BLC   TUNEL                                     I   5  3037  B Q88 A            102
820  7 96           R                                                I   1  3042  1                  102
821  7 97           C     MAINX&17,@ALT@                             I   7  3043  C 018 H92          102
822  7 98           BE    HOMAL                                      I   5  3050  B Q12 S            102
823  7 99           C     MAINX&17,@JOB@                             I   7  3055  C 018 H95          103
824  8 00   ALTS3   BU    ALTS4E                                     I   5  3062  B ?75 /            103
825  8 01           B     NOPJB                                      I   4  3067  B 205              103
826  8 02           B     RSOLV                                      I   4  3071  B 175              103
827  8 03   ALTS4E  C     MAINX&17,@CTL@                             I   7  3075  C 018 H98          103
828  8 04   ALTS4   BE    CRDCL                                      I   5  3082  B 138 S            103
829  8 05           BW    TUFF,BALTR                                 I   8  3087  V A03 I03 1        104
830  8 06           CW    READS                                      I   4  3095  ) I10              104
831  8 07           B     ALTIO                                      I   4  3099  B Q83              104
832  8 08   TUFF    B     SAVXX                                      I   4  3103  B C19              104
833  8 09           CW    XCARDS                                     I   4  3107  ) I09              104
834  8 101          SBR   RSOLV&7,SOLVED                            I   7  3111  H 182 Q72          104
835  8 102          SBR   CHUCK&3                                   I   4  3118  H 234              104
836  8 10           MCW   @N@,NOSOL                                 I   7  3122  M I08 131          105
837  8 11           B     PROPRE                                     I   4  3129  B Q40              105
838  8 12   *
839  8 13   *               TDF  FOR  READING  86  CHARACTER  RECORDS
840  8 14   *
841  8 15   TDF4A   DCW   TUNEL                                     I   3  3135  Q88                105
842  8 16           RT    4,OUTPT                                    I   8  3136  M %U4 I12 R         105
843  8 17   *
844  8 18   *               REGENERATION  OF  DIOCS  AND  DTF
845  8 19   *
846  8 20   REGEN   BW    ORDN,XCARDS                                I   8  3144  V A85 I09 1        105
847  8 21           SBR   NEXREC&3,SPCAS                            I   7  3152  H 684 A74          105
848  8 22           SBR   ALDIO-1,SOFT                              I   7  3159  H B02 B68          106
849  8 23           CW    READS                                      I   4  3166  ) I10              106
850  8 24           B     FIND                                       I   4  3170  B 642              106
851  8 25   SPCAS   MCW   AREASV,LMAINX                             I   7  3174  M 331 086          106
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
852  8 26           SW    XCARDS#1                                     I   4  3181  , I09              106
853  8 27   ORDN    SBR   NEXREC&3,ALDIO                              I   7  3185  H 684 B03          106
854  8 28           SBR   DIFREC&3,ALDTF                             I   7  3192  H M09 C08          107
855  8 29           B     FIND                                         I   4  3199  B 642              107
856  8 30   ALDIO   CS    LMAINX                                       I   4  3203  / 086              107
857  8 31           BW    RDT4A,READS                                  I   8  3207  V B41 I10 1        107
858  8 32           BLC   LUNET                                       I   5  3215  B C34 A            107
859  8 33           R                                                  I   1  3220  1                  107
860  8 34           C     MAINX&17,@ALT@                               I   7  3221  C 018 H92          107
861  8 35           BU    SOFT                                         I   5  3228  B B68 /            108
862  8 36           B     SAVXX                                        I   4  3233  B C19              108
863  8 37           B     PACKX                                        I   4  3237  B R43              108
864  8 38   RDT4A   B     BYPSS                                        I   4  3241  B C49              108
865  8 39           C     OUTPT&83,HLDA1                               I   7  3245  C I95 I02          108
866  8 40   FINAL   BE    DBLCK                                        I   5  3252  B B72 S            108
867  8 41           SW    READS                                        I   4  3257  , I10              108
868  8 42   FINAL2  MCW   OUTPT&85,LMAINX                              I   7  3261  M I97 086          109
869  8 43   SOFT    B     GAMMA                                        I   4  3268  B 685              109
870  8 44   DBLCK   CW    READS#1                                      I   4  3272  ) I10              109
871  8 45           BW    FINAL2,BALTR                                 I   8  3276  V B61 I03 1        109
872  8 46   TRPCK   C     OUTPT&83,HLDB                                I   7  3284  C I95 I07          109
873  8 47           BE    ALDIO                                        I   5  3291  B B03 S            109
874  8 48           B     CTAPE                                        I   4  3296  B S22              109
875  8 49           NOP   TDF4A                                       I   4  3300  N A35              110
876  8 50           B     TRPCK                                        I   4  3304  B B84              110
877  8 51   *
878  8 52   *               DTF  ON  ALTER  MODE
879  8 53   *
880  8 54   ALDTF   SBR   SOFT&3,DELTA                                 I   7  3308  H B71 M10          110
881  8 55           B     ALDIO                                        I   4  3315  B B03              110
882  8 56   SAVXX   SBR   SAVXT&3                                      I   4  3319  H C33              110
883  8 57           MCW   LMAINX,AREASV                               I   7  3323  M 086 331          110
884  8 58   SAVXT   B     0                                            I   4  3330  B 000              110
885  8 59   LUNET   SW    READS                                        I   4  3334  , I10              111
886  8 60           MCW   @N@,FINAL                                   I   7  3338  M I08 B52          111
887  8 61           B     RDT4A                                        I   4  3345  B B41              111
888  8 62   BYPSS   SBR   BYPSX&3                                      I   4  3349  H C80              111
889  8 63           B     CTAPE                                        I   4  3353  B S22              111
890  8 64           NOP   TDF4A                                       I   4  3357  N A35              111
891  8 65           BCE   BYPSS&4,OUTPT&74,Y                           I   8  3361  B C53 I86 Y        111
892  8 66           BCE   BYPSS&4,OUTPT&74,Z                           I   8  3369  B C53 I86 Z        112
893  8 67   BYPSX   B     0                                            I   4  3377  B 000              112
894  8 68   *
895  8 69   *               DTF  TABLE  OF  OPERANDS
896  8 70   *
897  8 71           DCW   @@@                  FILETYP                  I   1  3381                     112
898  8 72           DCW   @001@                                        I   3  3384                     112
899  8 73           DCW   @INP@                      INPUT              I   3  3387                     112
900  8 74           DCW   @002@                                        I   3  3390                     112
901  8 75           DCW   @OUT@                      OUTPUT             I   3  3393                     112
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
902  8 76           DCW   @003@                                        I   3  3396                     113
903  8 77           DCW   @TAP@                      TAPE               I   3  3399                     113
904  8 78           DCW   @004@                                        I   3  3402                     113
905  8 79           DCW   @REA@                      READER             I   3  3405                     113
906  8 80           DCW   @005@                                        I   3  3408                     113
907  8 81           DCW   @PUN@                      PUNCH              I   3  3411                     113
908  8 82           DCW   @008@                                        I   3  3414                     113
909  8 83           DCW   @CHE@                                        I   3  3417                     114
910  8 84           DCW   @006@                                        I   3  3420                     114
911  8 85   FILXZ   DCW   @PRI@                      PRINTER            I   3  3423                     114
912  8 86           DCW   @@@                  MODEPAR                  I   1  3424                     114
913  8 87           DCW   @007@                                        I   3  3427                     114
914  8 88   MODXZ   DCW   @LOA@                                        I   3  3430                     114
915  8 89           DCW   @@@                  RECFORM                  I   1  3431                     114
916  8 90           DCW   @012@                                        I   3  3434                     115
917  8 91           DCW   @BLO@                      BLOCKED            I   3  3437                     115
918  8 92           DCW   @013@                                        I   3  3440                     115
919  8 93           DCW   @UNB@                      UNBLOCKED          I   3  3443                     115
920  8 94           DCW   @014@                                        I   3  3446                     115
921  8 95           DCW   @FIX@                           FIXED         I   3  3449                     115
922  8 96           DCW   @015@                                        I   3  3452                     115
923  8 97   RECXZ   DCW   @VAR@                      VARIABLE           I   3  3455                     116
924  8 98           DCW   @@@                  TYPELABEL                I   1  3456                     116
925  8 99           DCW   @081@                                        I   3  3459                     116
926  9 00           DCW   @STA@                      STANDARD           I   3  3462                     116
927  9 01           DCW   @082@                                        I   3  3465                     116
928  9 02           DCW   @NON@                      NONSTANDARD        I   3  3468                     116
929  9 03           DCW   @083@                                        I   3  3471                     116
930  9 04   TYPXZ   DCW   @TM @                      TM                 I   3  3474                     117
931  9 05           DCW   @@@                  CHECKLABEL               I   1  3475                     117
932  9 06           DCW   @084@                                        I   3  3478                     117
933  9 07           DCW   @ALL@                      ALL                I   3  3481                     117
934  9 08           DCW   @085@                                        I   3  3484                     117
935  9 09   CHEXZ   DCW   @IDE@                      IDENT              I   3  3487                     117
936  9 10           DCW   @@@                  REWIND                   I   1  3488                     117
937  9 11           DCW   @199@                                        I   3  3491                     118
938  9 12           DCW   @UNL@                      UNLOAD             I   3  3494                     118
939  9 13           DCW   @200@                                        I   3  3497                     118
940  9 14   REWXZ   DCW   @NOR@                      NOREWD             I   3  3500                     118
941  9 15           DCW   @@@                                          I   1  3501                     118
942  9 16           DCW   @201@                                        I   3  3504                     118
943  9 17           DCW   @9  @                                        I   3  3507                     118
944  9 18           DCW   @202@                                        I   3  3510                     119
945  9 19   OVEXZ   DCW   @12 @                                       I   3  3513                     119
946  9 20           DCW   @@@                                          I   1  3514                     119
947  9 21           DCW   @076@                                        I   3  3517                     119
948  9 22   TOTXZ   DCW   @REC@                                       I   3  3520                     119
949  9 23   *
950  9 24   *               DIOCS  OPERAND  TABLE
951  9 25   *
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
 952  9 26          DCW   @@@                                       I   1  3521                    119
 953  9 27          DCW   -MINUS3&4                                  I   3  3524  I9C               119
 954  9 28          DCW   @OUT@                                      I   3  3527                    120
 955  9 29          DCW   -MINUS2&4                                  I   3  3530  I9D               120
 956  9 30   TAPTB  DCW   @INP@                                      I   3  3533                    120
 957  9 31          DCW   @@@                                       I   1  3534                    120
 958  9 32          DCW   @045@                                      I   3  3537                    120
 959  9 33          DCW   @REL@                                      I   3  3540                    120
 960  9 34          DCW   @046@                                      I   3  3543                    120
 961  9 35          DCW   @STO@                                      I   3  3546                    121
 962  9 36          DCW   @006@                                      I   3  3549                    121
 963  9 37   FEATB  DCW   @OVE@                     OVERLAP          I   3  3552                    121
 964  9 38          DCW   @@@                                       I   1  3553                    121
 965  9 39          DCW   @007@                                      I   3  3556                    121
 966  9 40          DCW   @TAP@                     TAPE             I   3  3559                    121
 967  9 41          DCW   @008@                                      I   3  3562                    121
 968  9 42          DCW   @REA@                     READER           I   3  3565                    122
 969  9 43          DCW   @009@                                      I   3  3568                    122
 970  9 44          DCW   @PUN@                     PUNCH            I   3  3571                    122
 971  9 45          DCW   @010@                                      I   3  3574                    122
 972  9 46   IODTB  DCW   @PRI@                     PRINTER          I   3  3577                    122
 973  9 47          DCW   @@@                                       I   1  3578                    122
 974  9 48          DCW   @011@                                      I   3  3581                    122
 975  9 49          DCW   @STA@                     STANDARD         I   3  3584                    123
 976  9 50          DCW   @012@                                      I   3  3587                    123
 977  9 51          DCW   @NON@                     NONSTANDARD      I   3  3590                    123
 978  9 52          DCW   @013@                                      I   3  3593                    123
 979  9 53          DCW   @MIX@                     MIXED            I   3  3596                    123
 980  9 54          DCW   @014@                                      I   3  3599                    123
 981  9 55          DCW   @CHE@                     CHECK            I   3  3602                    123
 982  9 56          DCW   @015@                                      I   3  3605                    124
 983  9 57          DCW   @IDE@                     IDENT            I   3  3608                    124
 984  9 58          DCW   @026@                                      I   3  3611                    124
 985  9 59          DCW   @RDL@                                      I   3  3614                    124
 986  9 60          DCW   @016@                                      I   3  3617                    124
 987  9 61   LABTB  DCW   @TM @                     TM               I   3  3620                    124
 988  9 62          DCW   @@@                                       I   1  3621                    124
 989  9 63          DCW   @018@                                      I   3  3624                    125
 990  9 64          DCW   @1  @                     EXIT 1           I   3  3627                    125
 991  9 65          DCW   @019@                                      I   3  3630                    125
 992  9 66          DCW   @2  @                     EXIT 2           I   3  3633                    125
 993  9 67          DCW   @020@                                      I   3  3636                    125
 994  9 68          DCW   @3  @                     EXIT 3           I   3  3639                    125
 995  9 69          DCW   @021@                                      I   3  3642                    125
 996  9 70          DCW   @4  @                     EXIT 4           I   3  3645                    126
 997  9 71          DCW   @022@                                      I   3  3648                    126
 998  9 72          DCW   @5  @                     EXIT 5           I   3  3651                    126
 999  9 73          DCW   @023@                                      I   3  3654                    126
1000  9 74          DCW   @6  @                     EXIT 6           I   3  3657                    126
1001  9 75          DCW   @024@                                      I   3  3660                    126
```



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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
1002  9 76          DCW   @7  @                     EXIT 7           I   3  3663                    126
1003  9 77          DCW   @025@                                      I   3  3666                    127
1004  9 78   EXITB  DCW   @8  @                     EXIT 8           I   3  3669                    127
1005  9 79          DCW   @@@                                       I   1  3670                    127
1006  9 80          DCW   @027@                                      I   3  3673                    127
1007  9 81          DCW   @729@                     729              I   3  3676                    127
1008  9 82          DCW   @028@                                      I   3  3679                    127
1009  9 83   DRITB  DCW   @733@                     7330             I   3  3682                    127
1010  9 84          DCW   @@@                                       I   1  3683                    128
1011  9 85          DCW   @029@                                      I   3  3686                    128
1012  9 86          DCW   @NOR@                     NO RWED          I   3  3689                    128
1013  9 87          DCW   @030@                                      I   3  3692                    128
1014  9 88   RWDTB  DCW   @UNL@                     UNLOAD           I   3  3695                    128
1015  9 89          DCW   @@@                                       I   1  3696                    128
1016  9 90          DCW   @037@                                      I   3  3699                    128
1017  9 91          DCW   @REC@                     RECORD           I   3  3702                    129
1018  9 92          DCW   @038@                                      I   3  3705                    129
1019  9 93   COUTB  DCW   @HAS@                     HASH             I   3  3708                    129
1020  9 94          DCW   @@@                                       I   1  3709                    129
1021  9 95          DCW   @034@                                      I   3  3712                    129
1022  9 96          DCW   @CLE@                                      I   3  3715                    129
1023  9 97          DCW   @033@                                      I   3  3718                    129
1024  9 98          DCW   @PRO@                                      I   3  3721                    130
1025  9 99          DCW   @032@                                      I   3  3724                    130
1026 10 00   REATB  DCW   @SCA@                                      I   3  3727                    130
1027 10 01   *
1028 10 02   *              DTF  TABLE  OF  LABELS
1029 10 03   *
1030 10 04          DCW   @@@                                       I   1  3728                    130
1031 10 05          DCW   @OVE@               OVERFLOW              I   3  3731                    130
1032 10 06          DCW   @FOR@               FORMSCTL              I   3  3734                    130
1033 10 07          DCW   @COB@               COBOL                 I   3  3737                    130
1034 10 08          DCW   @VAR@               VARBUILD              I   3  3740                    131
1035 10 09          DCW   @CHA@               CHANDRIVE             I   3  3743                    131
1036 10 10          DCW   @FIL@               FILETYPE              I   3  3746                    131
1037 10 11          DCW   @MOD@               MODEPAR               I   3  3749                    131
1038 10 12          DCW   @CAR@               CARDPROC              I   3  3752                    131
1039 10 13          DCW   @ALT@               ALTTAPE               I   3  3755                    131
1040 10 14          DCW   @REC@               RECFORM               I   3  3758                    131
1041 10 15          DCW   @SIZ@               SIZEREC               I   3  3761                    132
1042 10 16          DCW   @PAD@               PADDING               I   3  3764                    132
1043 10 17          DCW   @BLO@               BLOCKSIZE             I   3  3767                    132
1044 10 18          DCW   @IOA@               IOAREAS               I   3  3770                    132
1045 10 19          DCW   @WOR@               WORKAREA              I   3  3773                    132
1046 10 20          DCW   @IND@               INDEXREC              I   3  3776                    132
1047 10 21          DCW   @EOF@               EOFADDR               I   3  3779                    132
1048 10 22          DCW   @WLR@               WLRADDR               I   3  3782                    133
1049 10 23          DCW   @TOT@               TOTALS                I   3  3785                    133
1050 10 24          DCW   @TYP@               TYPELABEL             I   3  3788                    133
1051 10 25          DCW   @CHE@               CHECKLABEL            I   3  3791                    133
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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

1052 10 26           DCW   @HEA@              HEADER               I   3  3794                    133
1053 10 27           DCW   @SER@              SERIALNUM            I   3  3797                    133
1054 10 28           DCW   @REE@              REELSER              I   3  3800                    133
1055 10 29   DTFLAB  DCW   @REW@              REWIND               I   3  3803                    134
1056 10 30   *
1057 10 31   *
1058 10 32   *              LABEL TABLE
1059 10 33   *
1060 10 34           DCW   @@@                                     I   1  3804                    134
1061 10 35           DCW   @TAP@              TAPEUSE              I   3  3807                    134
1062 10 36           DCW   @CHE@              CHECKPOINT           I   3  3810                    134
1063 10 37           DCW   @DIO@              DIOCSORG             I   3  3813                    134
1064 10 38           DCW   @FEA@              FEATURES             I   3  3816                    134
1065 10 39           DCW   @IOD@              IODEVICES            I   3  3819                    134
1066 10 40           DCW   @LAB@              LABELDEF             I   3  3822                    135
1067 10 41           DCW   @ALT@              ALTTAPE              I   3  3825                    135
1068 10 42           DCW   @EXI@              EXITS                I   3  3828                    135
1069 10 43           DCW   @VAR@              VARBUILD             I   3  3831                    135
1070 10 44           DCW   @COU@              COUNTS               I   3  3834                    135
1071 10 45           DCW   @DRI@              DRIVETYPE            I   3  3837                    135
1072 10 46           DCW   @RWD@              RWDOPTION            I   3  3840                    135
1073 10 47           DCW   @REA@              READERROR            I   3  3843                    136
1074 10 48   LBLTBL  DCW   @INP@              INPFXNO              I   3  3846                    136
1075 10 49           LTORG *                                       I            3847
                     DCW   @EX@                                    I   2  3848          LIT   136
                     DCW   @7@                                     I   1  3849          LIT   136
                     DCW   @1 8@                                   I   3  3852          LIT   136
                     DCW   @$@                                     I   1  3853          LIT   136
                     DCW   @ @                                     I   1  3854          LIT   136
                     DCW   @*@                                     I   1  3855          LIT   137
                     DCW   @5@                                     I   1  3856          LIT   137
                     DCW   @55555@                                 I   5  3861          LIT   137
                     DCW   @'@                                     I   1  3862          LIT   137
              SAVXL1 DCW   #03                                     I   3  3865          AREA  137
                     DCW   @, @                                    I   2  3867          LIT   137
                     DCW   @  @                                    I   2  3869          LIT   137
                     DCW   @1@                                     I   1  3870          LIT   138
                     DCW   @6@                                     I   1  3871          LIT   138
                     DCW   @     @                                 I   5  3876          LIT   138
                     DCW   @DTF@                                   I   3  3879          LIT   138
                     DCW   @33333@                                 I   5  3884          LIT   138
                     DCW   @52@                                    I   2  3886          LIT   138
              SAVX2I DCW   #03                                     I   3  3889          AREA  138
                     DCW   @ALT@                                   I   3  3892          LIT   139
                     DCW   @JOB@                                   I   3  3895          LIT   139
                     DCW   @CTL@                                   I   3  3898          LIT   139
              HLDA1I DCW   #04                                     I   4  3902          AREA  139
              BALTRI DCW   #01                                     I   1  3903          AREA  139
              HLDBI  DCW   #04                                     I   4  3907          AREA  139
                     DCW   @N@                                     I   1  3908          LIT   139
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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

              XCARDS DCW   #01                                     I   1  3909          AREA  140
              READSI DCW   #01                                     I   1  3910          AREA  140
1076 10 50   *
1077 10 51   *                  OUTPUT  AREA
1078 10 52   *
1079 10 53           ORG   3912                                    I            3912
1080 10 54   OUTPT   DA    1X86,G                                  I       3912 3997
1080                 DCW   @"@                                     I   1  3998          GMARK 141
1081 10 55   LOPUT   EQU   *                                       I       3998
1082 10 56           EX                                            I            B 000          142
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1083 10 57          JOB   1401 AUTOCODER-PASS 2-COPY DTF TABLE      -VERSION 3 I
1084 10 58          SFX   I                                                   I
1085 10 59          ORG   341                                                 I           0341
1086 10 60          DCW   @,@                                                 I   1  0341                   145
1087 10 61          DCW   @;@              EXITS   YES                        I   1  0342                   145
1088 10 62          DCW   @;@              COBOL   YES                        I   1  0343                   145
1089 10 63          DCW   #6                                                  I   6  0349                   145
1090 10 64          DCW   @;@           1    INPUT         1    FILETYPE      I   1  0350                   145
1091 10 65          DCW   @;@           2    OUTPUT        2                  I   1  0351                   145
1092 10 66          DCW   @;@           3    TAPE          3                  I   1  0352                   145
1093 10 67          DCW   @;@           4    READER        4                  I   1  0353                   146
1094 10 68          DCW   @;@           5    PUNCH         5                  I   1  0354                   146
1095 10 69          DCW   @;@           6    PRINTER       6                  I   1  0355                   146
1096 10 70          DCW   @;@           7    LOAD          7    MODEPAR       I   1  0356                   146
1097 10 71          DCW   @;@           8    CHECKPOINT     8   FEATURES      I   1  0357                   146
1098 10 72          DCW   @;@           9    NUMBER        9    CHANDRIVE     I   1  0358                   146
1099 10 73          DCW   @;@          10    NUMBER       10    CARDPROC      I   1  0359                   146
1100 10 74          DCW   @;@          11    NUMBER       11    ALTTAPE       I   1  0360                   147
1101 10 75          DCW   @;@          12    BLOCKED      12    RECFORM       I   1  0361                   147
1102 10 76          DCW   @;@          13    UNBLOCKED    13                  I   1  0362                   147
1103 10 77          DCW   @;@          14    MIXED        14                  I   1  0363                   147
1104 10 78          DCW   @;@          15    VARIABLE     15                  I   1  0364                   147
1105 10 79          DCW   @   ;@       16-19 NUMBER       16    SIZEREC       I   4  0368                   147
1106 10 80          DCW   @;@          29    NUMBER       17    PADDING       I   1  0369                   147
1107 10 81          DCW   @   ;@       21-24 NUMBER       18    BLOCKSIZE     I   4  0373                   148
1108 10 82          DCW   @         ;@   25-34    LABELS   19    IOAREAS       I  10  0383                   148
1109 10 83          DCW   @         ;@   35-44             20                  I  10  0393                   148
1110 10 84          DCW   @         ;@  45-54  LABEL       21    WORKAREA      I  10  0403                   148
1111 10 85          DCW   @;@          55    NUMBER       22    INDEXREG      I   1  0404                   148
1112 10 86          DCW   @         ;@  56-65  LABEL       23    EORADDR       I  10  0414                   149
1113 10 87          DCW   @         ;@   66-75  LABEL      24    WLRADDR       I  10  0424                   149
1114 10 88          DCW   @;@          76    RECORD       25    TOTALS        I   1  0425                   149
1115 10 89          DCW   @   ;@       77-80 HASH         26                  I   4  0429                   149
1116 10 90          DCW   @;@          81    STANDARD     27    TYPELABEL     I   1  0430                   149
1117 10 91          DCW   @;@          82    NONSTANDARD  28                  I   1  0431                   149
1118 10 92          DCW   @;@          83    TM           29                  I   1  0432                   149
1119 10 93          DCW   @;@          84    ALL          30    CHECKLABEL    I   1  0433                   150
1120 10 94          DCW   @;@          85    IDENT        31                  I   1  0434                   150
1121 10 95          DCW   @  ;@                                              I   3  0437                   150
1122 10 96          DCW   @    ;@                                            I   5  0442                   150
1123 10 97          DCW   @         ;@                                       I  10  0452                   150
1124 10 98          DCW   @    ;@       104-108 NUMBER     35    SERIALNUM     I   5  0457                   150
1125 10 99          DCW   @         ;@ 109-118            39    EX1ADDR       I  10  0467                   150
1126 11 00          DCW   @         ;@ 119-128            40    EX2ADDR       I  10  0477                   151
1127 11 01          DCW   @         ;@ 129-138            41    EX3ADDR       I  10  0487                   151
1128 11 02          DCW   @         ;@ 139-148            42    EX4ADDR       I  10  0497                   151
1129 11 03          DCW   @         ;@ 149-158            43    EX5ADDR       I  10  0507                   152
1130 11 04          DCW   @         ;@ 159-168            44    EX6ADDR       I  10  0517                   152
1131 11 05          DCW   @         ;@ 169-178            45    EX7ADDR       I  10  0527                   152
1132 11 06          DCW   @         ;@ 179-188            46    EX8ADDR       I  10  0537                   153
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1133 11 07          DCW   @         ;@ 189-198            47    VARBUILD      I  10  0547                   153
1134 11 08          DCW   @;@          199  UNLOAD       37    REWIND        I   1  0548                   153
1135 11 09          DCW   @;@          200  NOREWD       38                  I   1  0549                   153
1136 11 10          DCW   @;@           9      201               OVERFLOW      I   1  0550                   153
1137 11 11          DCW   @;@          12      202                             I   1  0551                   153
1138 11 12          DCW   @  ;@        203-205  NUMBER          REELSEQ       I   3  0554                   153
1139 11 13          DCW   @;@               206                FORMCTL       I   1  0555                   154
1140 11 14          DCW   #9                                                  I   9  0564                   154
1141 11 15          DCW   @;@           216     ADDRESS        OVERFLOW      I   1  0565                   154
1142 11 16          DCW   @ @                                                 I   1  0566                   154
1143 11 17          DCW   @ @                                                 I   1  0567                   154
1144 11 18   DTFGM   DCW   @}@                                                I   1  0568                GMARK  154
1145 11 19          EX                                                        I           B 000              155
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1146 11 20           JOB   1401 AUTOCODER-PASS 2-ALTER OVERLAY  -VERSION 3 I
1147 11 21           SFX   I                                               I
1148 11 22           ORG   101                                             I            0101
1149 11 23   *
1150 11 24   *
1151 11 25   *               CTL  CARD  ON  TAPE  4
1152 11 26   *
1153 11 27   PUNCH   CW    GMOVL2                                          I   4  0101  ) 332              158
1154 11 28           BSP   1                                               I   5  0105  U %U1 B            158
1155 11 29           BSP   1                                               I   5  0110  U %U1 B            158
1156 11 30           B     ALTER                                           I   4  0115  B P63              158
1157 11 31   OUTCL   MCW   OUTPT&85,LMAINX                                 I   7  0119  M I97 086          158
1158 11 32           BSS   PREPS2,C                                        I   5  0126  B 662 C            158
1159 11 33   NOSOL   SBR   RSOLV&7,NOALTB                                 I   7  0131  H 182 Q20          158
1160 11 34   *
1161 11 35   *               CTL  CARD  FROM  CARDS
1162 11 36   *
1163 11 37   CRDCL   BCE   LEAVE,MAINX&23,1                                I   8  0138  B 167 024 1        159
1164 11 38           MN    MAINX&21,*&8                                    I   7  0146  D 022 160          159
1165 11 39           BCE   LEAVE,@456@,                                    I   8  0153  B 167 237          159
1166 11 40           CHAIN 2                                               I                        MACRO
1167                 BCE                                                   I   1  0161  B           GEN    159
1168                 BCE                                                   I   1  0162  B           GEN    159
1169 11 41           B     LETBE                                           I   4  0163  B 171              159
1170 11 42   LEAVE   S     SPECL                                           I   4  0167  S 337              159
1171 11 43   LETBE   B     NOPCL                                           I   4  0171  B 183              160
1172 11 44   RSOLV   B     WRTREC                                          I   4  0175  B 721              160
1173 11 45           B     WRTAL                                           I   4  0179  B ?37              160
1174 11 46   *
1175 11 47   NOPCL   SBR   NPCLX&3                                        I   4  0183  H 204              160
1176 11 48           MCW   @N@,ALTS2                                       I   7  0187  M 238 Q67          160
1177 11 49           MCW   @N@,ALTS4                                       I   7  0194  M 238 ?82          160
1178 11 50   NPCLX   B     0                                               I   4  0201  B 000              160
1179 11 51   NOPJB   SBR   NPJBX&3                                        I   4  0205  H 219              161
1180 11 52           SW    ALTS1&4,ALTS3&4                                 I   7  0209  , Q51 ?66          161
1181 11 53   NPJBX   B     0                                               I   4  0216  B 000              161
1182 11 54   NOTER   MCW   OUTPT&85,LMAINX                                 I   7  0220  M I97 086          161
1183 11 55           B     WRTREC                                          I   4  0227  B 721              161
1184 11 56   CHUCK   B     NOALTB                                          I   4  0231  B Q20              161
1185 11 57           LTORG *                                               I            0235
                     DCW   @456@                                           I   3  0237              LIT    161
                     DCW   @N@                                             I   1  0238              LIT    162
1186 11 58           ORG   246                                             I            0246
1187 11 59           DA    1X86                                            I       0246 0331
1188 11 60   AREASV  EQU   *                                               I       0331
1189 11 61   GMOVL2  DCW   @}@                                             I   1  0332              GMARK  163
1190 11 62           EX                                                    I            B 000              164
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 SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1191 11 63           JOB   1401 AUTOCODER - PASS 2 - END OVERLAY -VERSION 3 I
1192 11 64           SFX   I                                               I
1193 11 65           ORG   341                                             I            0341
1194 11 66   OVLY3   MN    @5@,TDF6&4                                      I   7  0341  D 432 768          167
1195 11 73           SBR   LONG&3,@N@                                     I   7  0348  H J60 433          167
1196 11 74           LCA   186,LMAINX                                     I   7  0355  L 186 086          167
1197 11 75           B     NEWWRT                                          I   4  0362  B J35              167
1198 11 76           CW    OUTPT&80                                        I   4  0366  ) I92              167
1199 11 77           SW    GMOVL4                                          I   4  0370  , 606              167
1200 11 78           MCW   GMWMRK,GMOVL4                                  I   7  0374  M 773 606          168
1201 11 79           B     CTAPE                                           I   4  0381  B S22              168
1202 11 80           NOP   TDF9                                           I   4  0385  N 412              168
1203 11 81           CW    GMOVL4                                          I   4  0389  ) 606              168
1204 11 82           RWD   5                                               I   5  0393  U %U5 R            168
1205 11 83           B     CTAPE                                           I   4  0398  B S22              168
1206 11 84           NOP   TDFSYS                                         I   4  0402  N 423              168
1207 11 85           B     1900                                            I   4  0406  B Z00              169
1208 11 86   TDF9    DCW   #3                                             I   3  0412                     169
1209 11 87           WTW   5,OVLY4                                        I   8  0413  L %U5 434 W        169
1210 11 88   TDFSYS  DCW   #3                                             I   3  0423                     169
1211 11 89           RTW   1,1650                                         I   8  0424  L %U1 W50 R        169
1212 11 92   *
1213 11 93           LTORG *                                               I            0432
                     DCW   @5@                                             I   1  0432              LIT    169
                     DCW   @N@                                             I   1  0433              LIT    169
1214 11 94   OVLY4   EQU   *&1                                            I       0434
1215 11 95           SFX   X                                               X
1216 11 96   *    END OF JOB
1217 11 97   *
1218 11 98           C     CALLTX,BLANKS-2                                 X   7  0434  C !73 W14          170
1219 11 99           BE    STENDX                                          X   5  0441  B 450 S            170
1220 12 00           B     SUREXX                                          X   4  0446  B T08              170
1221 12 01   STENDX  B     SBROTX                                          X   4  0450  B O33              170
1222 12 02           RWD   5                                               X   5  0454  U %U5 R            170
1223 12 03           BSP   1                                               X   5  0459  U %U1 B            170
1224 12 04           BSP   1                                               X   5  0464  U %U1 B            170
1225 12 05           WTM   6                                               X   5  0469  U %U6 M            171
1226 12 06           RWD   6                                               X   5  0474  U %U6 R            171
1227 12 07           MCW   SYMNMX,MAINX&2                                  X   7  0479  M W01 003          171
1228 12 08           LCA   LOPUT&1,MAINX&35                               X   7  0486  L I98 036          171
1229 12 09           WT    5,MAINX                                         X   8  0493  M %U5 001 W        171
1230 12 10           WTM   5                                               X   5  0501  U %U5 M            171
1231 12 11           RWD   4                                               X   5  0506  U %U4 R            172
1232 12 12           CW    LIPUT&1,MAINX&35                                X   7  0511  ) 187 036          172
1233 12 13           CW    100                                             X   4  0518  ) 100              172
1234 12 14   BYPASX  RT    1,3997                                          X   8  0522  M %U1 I97 R        172
1235 12 15           SW    LOPUT&1                                         X   4  0530  , I98              172
1236 12 16           BEF   CBSP2X                                          X   5  0534  B 543 K            172
1237 12 17           B     BYPASX                                          X   4  0539  B 522              172
1238 12 18   CBSP2X  RT    1,3997                                          X   8  0543  M %U1 I97 R        173
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1239 12 19          SW    LOPUT&1                                      X   4  0551  , I98             173
1240 12 20          S     &1,CBSP1X                                    X   7  0555  S 605 604          173
1241 12 21          BM    CBSP3X,CBSP1X                                X   8  0562  V 574 604 K        173
1242 12 22          B     CBSP2X                                       X   4  0570  B 543             173
1243 12 23    *
1244 12 24    *  LOAD PASS 3
1245 12 25    *
1246 12 26    CBSP3X CS    PARTB                                        X   4  0574  / 466             173
1247 12 27           CS                                                X   1  0578  /                 173
1248 12 28           CS                                                X   1  0579  /                 174
1249 12 29           B     CTAPE                                       X   4  0580  B W50             174
1250 12 30           NOP   TDFEOJ                                      X   4  0584  N 594             174
1251 12 31           B     2465                                        X   4  0588  B M65             174
1252 12 32    TDFEOJ DCW   CCHALT                                      X   3  0594  Y34               174
1253 12 33           RTW   1,2210                                      X   8  0595  L %U1 K10 R       174
1254 12 34    CBSP1X DCW   @11@                                       X   2  0604                    174
1255 12 35    *
1256 12 36           LTORG *                                           X          0605
                     DCW   &1                                         X   1  0605            LIT   175
1257 12 37    GMOVL4 DCW   @}@                                        X   1  0606            GMARK 175
1258 12 38           EX                                                X          B 000             176
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1259 12 39           JOB   1401 AUTOCODER - PASS 2 - ALTER ASSEMBLY - VERSION 3 X
1260 12 40    *
1261 12 41    *   AREA DEFINITIONS
1262 12 42    *
1263 12 43           SFX   B                                          B
1264 12 44           ORG   1                                          B          0001
1265 12 45           DA    1X86     MAIN                              B     0001 0086                    ADDR
1266 12 46           EQU   *        LMAIN                             B     0086
1267 12 47           ORG   87                                         B          0087
1268 12 48           DCW   000      INDEX1                            B   3 0089                   179
1269 12 49           DC    00                                         B   2 0091                   179
1270 12 50           DCW   000      INDEX2                            B   3 0094                   179
1271 12 51           DC    00                                         B   2 0096                   179
1272 12 52           DCW   000      INDEX3                            B   3 0099                   179
1273 12 53           DC    00                                         B   2 0101                   179
1274 12 54           ORG   100                                        B          0100
1275 12 55           DC    @}@                                        B   1 0100            GMARK  180
1276 12 56           DA    1X86     INPUT                             B     0101 0186
1277 12 57           DC    @}@       LIPUT&1                          B   1 0187            GMARK  181
1278 12 58           DC    0        ZEROX                             B   1 0188                   181
1279 12 59           DC    0        CARDSX                            B   1 0189                   181
1280 12 60           DCW   @***@    HLDSBX                            B   3 0192                   181
1281 12 61    *
1282 12 62    *         INITIALIZATION
1283 12 63    *
1284 12 64           ORG   101                                        B          0101
1285 12 65    VOICE  CS    CALLTX                                     B   4 0101  / !73            182
1286 12 66           CS                                               B   1 0105  /                182
1287 12 67    IOCALT CS    LMAINX                                     B   4 0106  / 086            182
1288 12 68           B     CTAPEX                                     B   4 0110  B W50            182
1289 12 69           NOP   TDFIO5                                     B   4 0114  N 132            182
1290 12 70           BCE   IOCEOF,MAINXX&73,N                         B   8 0118  B 141 074 N       182
1291 12 71           B     YOURS                                      B   4 0126  B 541            182
1292 12 72    TDFIO5 DCW   &IOCEOF                                    B   3 0132  141              183
1293 12 73           RT    5,MAINXX                                   B   8 0133  M %U5 001 R      183
1294 12 74    IOCEOF MCW   @1@,HAPPYX&4                               B   7 0141  M 172 N74         183
1295 12 75           MCW   @/086@                                     B   4 0148  M 176            183
1296 12 76           B     OKAY                                       B   4 0152  B 467            183
1297 12 77    STRING CS    LMAINX                                     B   4 0156  / 086            183
1298 12 78           B     CTAPEX                                     B   4 0160  B W50            183
1299 12 79           NOP   TDFIO5                                     B   4 0164  N 132            184
1300 12 80           B     HAPPYX&5                                   B   4 0168  B N75            184
1301 12 81           LTORG *                                          B          0172
                     DCW   @1@                                        B   1 0172            LIT   184
                     DCW   @/086@                                     B   4 0176            LIT   184
1302 12 82    *
1303 12 83    *   PARAMETER TABLE
1304 12 84    *
1305 12 85           ORG   201                                        B          0201
1306 12 86           DA    1X266                                      B     0201 0466
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1307 12 87           261,266  PARTBB                                B      0466             FIELD
1308 12 88   *
1309 12 89   *    PROCESS EX
1310 12 90   *
1311 12 91   OKAY   SBR   SWITCH&3,CMALTB                           B   7  0467  H L04 510          185
1312 12 92   EXSET  C     CALLTX,BLANKS-2    Q. ANY CALLS          B   7  0474  C !73 W14          185
1313 12 93          BE    PREEM                                     B   5  0481  B 506 S            185
1314 12 94   ALTSA  B     SUREXX                                    B   4  0486  B T08              185
1315 12 95          B     PREEM                                     B   4  0490  B 506              185
1316 12 96   LORGS  C     CALLTX,BLANKS-2    Q. ANY CALLS          B   7  0494  C !73 W14          185
1317 12 97          BU    HAULIT                                    B   5  0501  B S64 /            185
1318 12 98   PREEM  B     CARDS                                     B   4  0506  B 525              186
1319 12 99   *
1320 13 00   *     INPUT ROUTINE
1321 13 01   *
1322 13 02   CMALT  BSS   LSTCD,C            Q.  NO ALTERS         B   5  0510  B 686 C            186
1323 13 03          BSS   LSTCD,A            Q. NO MORE ALTERS     B   5  0515  B 686 A            186
1324 13 04          CS    LMAINX                                    B   4  0520  / 086              186
1325 13 05          R                                               B   1  0524  1                  186
1326 13 06   CARDS  SBR   PREEM&3,SBROTX                            B   7  0525  H 509 O33          186
1327 13 07          MCW   @SCR@,CHARCR                              B   7  0532  M '15 U62          186
1328 13 08          MCW                                             B   1  0539  M                  187
1329 13 09          MCW                                             B   1  0540  M                  187
1330 13 10   YOURS  C     MAINXX&17,@ALT@                           B   7  0541  C 018 '18          187
1331 13 11          BCE   TREAD,MAINXX&5,*                         B   8  0548  B 697 006 *        187
1332 13 12          BU    TREAD                                     B   5  0556  B 697 /            187
1333 13 13          S     INDEX1&1                                  B   4  0561  S 090              187
1334 13 14          B     SCANXX                                    B   4  0565  B M19              187
1335 13 15          ZA    MAINXX&18&X1,HLDA1#4                      B   7  0569  ? 0/9 '22          188
1336 13 16   ALTR4  B     CTAPEX             GET NEXT RECORD        B   4  0576  B W50              188
1337 13 17          NOP   TDFRAL                                    B   4  0580  N 922              188
1338 13 18          MCW   @R@,OUTPTX&84                             B   7  0584  M '23 I96          188
1339 13 19          SW    LOPUTX&1                                  B   4  0591  , I98              188
1340 13 20          C     OUTPTX&83,HLDA1                           B   7  0595  C I95 '22          188
1341 13 21   CALTR  BE    ALTR3              Q. ALTER NUMBER EQUAL TO B   5  0602  B 631 S            188
1342 13 22          C     OUTPTX&17,@END@    NUMBER ON ALTER CARD   B   7  0607  C I29 '26          189
1343 13 23          BE    ENDST              NO. WRITE TAPE         B   5  0614  B '02 S            189
1344 13 24          B     CTAPEX                                    B   4  0619  B W50              189
1345 13 245         SFX   X                                         X
1346 13 25          NOP   TDF6                                      X   4  0623  N O24              189
1347 13 255         SFX   B                                         B
1348 13 26          B     ALTR4                                     B   4  0627  B 576              189
1349 13 27   ALTR3  BCE   ALTR5,MAINXX&19&X1,,                      B   8  0631  B 651 0S0 ,        189
1350 13 28          B     CTAPEX           Q. DELETION              B   4  0639  B W50              189
1351 13 285         SFX   X                                         X
1352 13 29          NOP   TDF6                                      X   4  0643  N O24              190
1353 13 295         SFX   B                                         B
1354 13 30          B     SWITCH                                    B   4  0647  B L01              190
1355 13 31   ALTR5  B     SCANXX                                    B   4  0651  B M19              190
1356 13 32          ZA    MAINXX&18&X1,HLDA1                        B   7  0655  ? 0/9 '22          190
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1357 13 33   ALTR6  C     OUTPTX&83,HLDA1                           B   7  0662  C I95 '22          190
1358 13 34          BE    MACRO              DELETE UNTIL SECOND ALTER B   5  0669  B 931 S            190
1359 13 35          B     CTAPEX             NUMBER IS REACHED      B   4  0674  B W50              190
1360 13 36          NOP   TDFRAL                                    B   4  0678  N 922              191
1361 13 37          B     ALTR6                                     B   4  0682  B 662              191
1362 13 38   LSTCD  MCW   @N@,CALTR                                 B   7  0686  M '27 602          191
1363 13 39          B     ALTR4                                     B   4  0693  B 576              191
1364 13 40   *
1365 13 41   *              MAJOR PROCESSING
1366 13 42   *
1367 13 43   TREAD  SW    1                                         B   4  0697  , 001              191
1368 13 44          SBR   BRNCHX&3,SWITCH                           B   7  0701  H O99 L01          191
1369 13 45          BCE   HOMEXX,MAINXX&5,*                        B   8  0708  B O48 006 *        191
1370 13 46          C     MAINXX&17,@MLC@                           B   7  0716  C 018 '30          192
1371 13 47          BE    HOMEXX                                    B   5  0723  B O48 S            192
1372 13 48          C     MAINXX&17,@CHA@                           B   7  0728  C 018 '33          192
1373 13 49          BE    CHAINX                                    B   5  0735  B H11 S            192
1374 13 50          C     MAINXX&17,@ENT@    Q. ENTER CARD          B   7  0740  C 018 '36          192
1375 13 51          BE    ENTST                                     B   5  0747  B 879 S            192
1376 13 52   SWMA1  C     MAINXX&17,@MA @    Q. MODIFY ADDRESS MACRO B   7  0752  C 018 '39          193
1377 13 53   SWMA2  BE    MASETX                                    B   5  0759  B U33 S            193
1378 13 54          C     MAINXX&17,@EX @    Q. EX CARD             B   7  0764  C 018 '42          193
1379 13 55          BE    EXSET                                     B   5  0771  B 474 S            193
1380 13 56          C     MAINXX&17,@END@    Q. END CARD            B   7  0776  C 018 '26          193
1381 13 57          BE    ENDSTX                                    B   5  0783  B U78 S            193
1382 13 58          C     MAINXX&18,WHOOPS   Q. CALL STATEMENT      B   7  0788  C 019 W05          194
1383 13 59          BE    CALLNX                                    B   5  0795  B J51 S            194
1384 13 60          C     MAINXX&19,INCLDX                          B   7  0800  C 020 U59          194
1385 13 61          BE    CALLNX                                    B   5  0807  B J51 S            194
1386 13 62          C     MAINXX&19,LITORG-1                        B   7  0812  C 020 T57          194
1387 13 63          BE    LORGS                                     B   5  0819  B 494 S            194
1388 13 64          SBR   INDEX3,TABLEI      Q. GET, PUT, OPEN OR CLOSE B   7  0824  H 099 T74          195
1389 13 65   COMIOC C     MAINXX&17,0&X3                            B   7  0831  C 018 070          195
1390 13 66          SBR   INDEX3                                    B   4  0838  H 099              195
1391 13 67          BE    MSUBTX                                    B   5  0842  B P00 S            195
1392 13 68          BCE   OUTIOC,0&X3,#                             B   8  0847  B 859 070 #        195
1393 13 69          B     COMIOC                                    B   4  0855  B 831              195
1394 13 70   OUTIOC BCE   HOMEXX,MAINXX&19,                        B   8  0859  B O48 020          196
1395 13 71          BCE   HOMEXX,MAINXX&15,                        B   8  0867  B O48 016          196
1396 13 72          B     MSUBTX             NO, MACRO              B   4  0875  B P00              196
1397 13 73   *
1398 13 74   *     PROCESS FIXED FORM RECORD
1399 13 75   *
1400 13 76   ENTST  B     SBROTX                                    B   4  0879  B O33              196
1401 13 77          R                                               B   1  0883  1                  196
1402 13 78          BCE   ENTST,MAINXX&7,*                         B   8  0884  B 879 008 *        196
1403 13 79          C     MAINXX&15,@END@    Q. END CARD            B   7  0892  C 016 '26          197
1404 13 80          BE    ENDSTX                                    B   5  0899  B U78 S            197
1405 13 81          C     MAINXX&15,@ENT@    Q. NEW MODE            B   7  0904  C 016 '36          197
1406 13 82          BU    ENTST                                     B   5  0911  B 879 /            197
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1407 13 83           B     PREEM                                        B  4  0916  B 506              197
1408 13 84   TDFRAL DCW   000                                          B  3  0922                     197
1409 13 85           DCW   @M%U4I12R@                                  B  8  0930                     197
1410 13 86   *
1411 13 87   *    DELETE ENTIRE MACRO
1412 13 88   *
1413 13 89   MACRO  BCE   OUTMC,OUTPTX&74,R                            B  8  0931  B 943 I86 R        198
1414 13 90           B     SWITCH                                       B  4  0939  B L01              198
1415 13 91   OUTMC  B     CTAPEX                                       B  4  0943  B W50              198
1416 13 92           NOP   TDFRAL                                      B  4  0947  N 922              198
1417 13 93           C     OUTPTX&19,BLANKS                             B  7  0951  C I31 W16          198
1418 13 94   MCOUT  BE    OUTMC                                        B  5  0958  B 943 S            198
1419 13 95           MCW   @N@,MCOUT                                    B  7  0963  M '27 958          198
1420 13 96           BCE   OUTMC,OUTPTX&74,S                            B  8  0970  B 943 I86 S        199
1421 13 97           BCE   OUTMC,OUTPTX&74,C                            B  8  0978  B 943 I86 C        199
1422 13 98           BSP   4                                            B  5  0986  U %U4 B            199
1423 13 99           MCW   OUTMC,MCOUT                                  B  7  0991  M 943 958          199
1424 14 00           B     CMALT                                        B  4  0998  B 510              199
1425 14 01   *
1426 14 02   *   PROCESS END CARD
1427 14 03   *
1428 14 04   ENDST  MCW   LOPUTX,LMAINX                                B  7  1002  M I97 086          199
1429 14 05           B     ENDSTX                                       B  4  1009  B U78              200
1430 14 06           LTORG *                                            B         1013
                     DCW   @SCR@                                      B  3  1015              LIT    200
                     DCW   @ALT@                                      B  3  1018              LIT    200
                HLDA1B DCW   #04                                      B  4  1022              AREA   200
                     DCW   @R@                                        B  1  1023              LIT    200
                     DCW   @END@                                      B  3  1026              LIT    200
                     DCW   @N@                                        B  1  1027              LIT    200
                     DCW   @MLC@                                      B  3  1030              LIT    201
                     DCW   @CHA@                                      B  3  1033              LIT    201
                     DCW   @ENT@                                      B  3  1036              LIT    201
                     DCW   @MA @                                      B  3  1039              LIT    201
                     DCW   @EX @                                      B  3  1042              LIT    201
1431 14 07   GM2XXX DCW   @}@                                         B  1  1043              GMARK  201
1432 14 08   NUORIG EQU   *&1                                         B        1044
1433 14 09           EX                                               B           B 000              202
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1434 14 10           JOB   1401 AUTOCODER - PASS 2 - INITIAL ASSEMBLY VERSION 3 B
1435 14 11   *
1436 14 12   *        AREA DEFINITION
1437 14 13   *
1438 14 14           SFX   A                                            A
1439 14 15           ORG   1                                            A           0001
1440 14 16   MAINXX DA    1X86                                         A     0001  0086                    ADDR
1441 14 17           ORG   87                                           A           0087
1442 14 18           DCW   @000@                                        A  3  0089                     205
1443 14 19           DC    00                                           A  2  0091                     205
1444 14 20           DCW   @000@                                        A  3  0094                     205
1445 14 21           DC    00                                           A  2  0096                     205
1446 14 22           DCW   @000@                                        A  3  0099                     205
1447 14 23           DC    00                                           A  2  0101                     205
1448 14 24           ORG   101                                          A           0101
1449 14 25           DA    1X86          INPUTX                         A     0101  0186
1450 14 26   LIPUTX EQU   *                                            A     0186
1451 14 27           DC    @}@                                          A  1  0187              GMARK  206
1452 14 28   ZEROXX DC    0                                            A  1  0188                     206
1453 14 29   CARDSX DC    0                                            A  1  0189                     206
1454 14 30   HLDSBX DCW   @***@                                        A  3  0192                     206
1455 14 31   *
1456 14 32   *    INITIALIZATION
1457 14 33   *
1458 14 34           ORG   100                                          A           0100
1459 14 35           DC    @}@                                          A  1  0100              GMARK  207
1460 14 36   START  CS    CALLTX                                       A  4  0101  / !73              207
1461 14 37           CS                                                 A  1  0105  /                  207
1462 14 371          BCE   *&5,CARDSX,1                                A  8  0106  B 118 189 1        207
1463 14 372          B     RED                                          A  4  0114  B 132              207
1464 14 373          MCW   @N@,RHO&1                                    A  7  0118  M 959 764          208
1465 14 374          MCW   @N@,TSTEN&5                                  A  7  0125  M 959 780          208
1466 14 38   RED     SW    NTPER&4                                      A  4  0132  , 885              208
1467 14 39           SW    TSTEN&4                                      A  4  0136  , 779              208
1468 14 40           SW    OUTS2&4                                      A  4  0140  , 762              208
1469 14 41           BCE   READT,IOCSAV-3,*                            A  8  0144  B 467 H07 *        208
1470 14 42           MCW   @N@,SWMA1                                    A  7  0152  M 959 526          209
1471 14 43           MCW   @N@,SWMA2                                    A  7  0159  M 959 533          209
1472 14 44           B     READT                                        A  4  0166  B 467              209
1473 14 45           ORG   201                                          A           0201
1474 14 46           DA    1X266                                        A     0201  0466
1475 14 47   PARTBX       261,266                                      A     0466              FIELD
1476 14 48   *
1477 14 49   *   MAJOR PROCESSING
1478 14 50   *
1479 14 51   READT  B     TWEDB              GET NEXT RECORD           A  4  0467  B 653              210
1480 14 52   TREAD  SW    1                                            A  4  0471  , 001              210
1481 14 53           SBR   BRNCHX&3,READT                             A  7  0475  H O99 467          210
1482 14 54           BCE   OUTS2,MAINXX&5,*   Q, COMMENTS CARD        A  8  0482  B 758 006 *        210
1483 14 55           C     MAINXX&19,@CHAIN@                          A  7  0490  C 020 964          210
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1484 14 56           BE    CHAINX                                       A  5  0497  B H11 S           210
1485 14 57           C     MAINXX&19,@MLCWA@                            A  7  0502  C 020 969         211
1486 14 58           BE    OUTS2                                        A  5  0509  B 758 S           211
1487 14 59           C     MAINXX&17,@ENT@     Q. ENTER CARD            A  7  0514  C 018 972         211
1488 14 60           BE    ENTST                                        A  5  0521  B 795 S           211
1489 14 61   SWMA1   C     MAINXX&19,@MA   @   Q. MODIFY ADDRESS MACRO  A  7  0526  C 020 977         211
1490 14 62   SWMA2   BE    MASETX                                       A  5  0533  B U33 S           211
1491 14 63           C     MAINXX&19,@EX   @   Q. EX CARD               A  7  0538  C 020 982         212
1492 14 64           BE    EXSET                                        A  5  0545  B 857 S           212
1493 14 65           C     MAINXX&17,@END@     Q. END CARD              A  7  0550  C 018 985         212
1494 14 66           BE    ENDSTX                                       A  5  0557  B U78 S           212
1495 14 67           C     MAINXX&18,WHOOPS                             A  7  0562  C 019 W05         212
1496 14 68           BE    CALLNX              Q. CALL STATEMENT        A  5  0569  B J51 S           212
1497 14 69           C     MAINXX&19,INCLDX                             A  7  0574  C 020 U59         213
1498 14 70           BE    CALLNX                                       A  5  0581  B J51 S           213
1499 14 71           C     MAINXX&19,@LTORG@                            A  7  0586  C 020 990         213
1500 14 72           BE    LORGS               Q. LTORG CARD            A  5  0593  B 918 S           213
1501 14 73           SBR   INDEX3,TABLEI                                A  7  0598  H 099 T74         213
1502 14 74   FEW     C     MAINXX&17,0&X3                               A  7  0605  C 018 070         213
1503 14 75           SBR   INDEX3                                       A  4  0612  H 099             214
1504 14 76           BE    MSUBTX                                       A  5  0616  B P00 S           214
1505 14 77           BCE   MANY,0&X3,#                                  A  8  0621  B 633 070 #       214
1506 14 78           B     FEW                                          A  4  0629  B 605             214
1507 14 79   MANY    BCE   OUTS2,MAINXX&19,                             A  8  0633  B 758 020         214
1508 14 80           BCE   OUTS2,MAINXX&15,                             A  8  0641  B 758 016         214
1509 14 81           B     MSUBTX              NO. MACRO                A  4  0649  B P00             215
1510 14 82   *
1511 14 83   *     INPUT ROUTINE
1512 14 84   *
1513 14 85   TWEDB   SBR   TWDB1&3                                      A  4  0653  H 696             215
1514 14 86           CS    LMAINX                                       A  4  0657  / 086             215
1515 14 87           B     RTWED                                        A  4  0661  B 677             215
1516 14 88   CHART   C                                                  A  1  0665  C                 215
1517 14 89           BSS   EOF4,A              Q. LAST CARD             A  5  0666  B 934 A           215
1518 14 90           R                                                  A  1  0671  1                 215
1519 14 91           SSB   TWDB1,1                                      A  5  0672  K 693 1           216
1520 14 92   RTWED   B     CTAPEX                                       A  4  0677  B W50             216
1521 14 93           NOP   TDF4                                         A  4  0681  N 699             216
1522 14 94           BCE   CHANGE,MAINXX&73,N                           A  8  0685  B 708 074 N       216
1523 14 95   TWDB1   B     TREAD                                        A  4  0693  B 471             216
1524 14 96   TDF4    DCW   &EOF4                                       A  3  0699  934               216
1525 14 97           DCW   @M%U5001R@                                   A  8  0707                    216
1526 14 98   CHANGE  CW    CHART,TSTEN&4                                A  7  0708  ) 665 779         217
1527 14 99           MN    @4@,TDF4&4                                   A  7  0715  D 991 703         217
1528 15 00           CW    OUTS2&4,NTPER&4                              A  7  0722  ) 762 885         217
1529 15 01           C     CALLTX,BLANK                                 A  7  0729  C !73 999         217
1530 15 02           BE    HOOHA                                        A  5  0736  B 745 S           217
1531 15 03           B     SUREXX                                       A  4  0741  B T08             217
1532 15 04   HOOHA   MCW   @SCR@,CHARCR                                A  7  0745  M 994 U62         218
1533 15 05           MCW                                                A  1  0752  M                 218
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1534 15 06           MCW                                                A  1  0753  M                 218
1535 15 07           B     TWDB1                                        A  4  0754  B 693             218
1536 15 08   *
1537 15 09   *     READ RELEASE
1538 15 10   *
1539 15 11   OUTS2   BSS   OUTSBX,C                                     A  5  0758  B O41 C           218
1540 15 12   RHO     NOP                                                A  1  0763  N                 218
1541 15 13           MCW   @8@,RHO                                      A  7  0764  M 995 763         218
1542 15 14           B     OUTSBX                                       A  4  0771  B O41             219
1543 15 15   *
1544 15 16   *    FIXED FORM RECORDS
1545 15 17   *
1546 15 18   TSTEN   BSS   ENTST,C             Q. TAPE INPUT            A  5  0775  B 795 C           219
1547 15 19           SRF                       NO. START RAD FEED       A  1  0780  8                 219
1548 15 20           SBR   NOSIR&3,ANTST                                A  7  0781  H 917 803         219
1549 15 21           MCW   @N@,BUT1XX                                   A  7  0788  M 959 O37         219
1550 15 22   ENTST   B     SBROTX                                       A  4  0795  B O33             219
1551 15 23           B     TWEDB                                        A  4  0799  B 653             219
1552 15 24   ANTST   MCW   @B@,BUT1XX                                   A  7  0803  M 996 O37         220
1553 15 25           SBR   NOSIR&3,TREAD                                A  7  0810  H 917 471         220
1554 15 26           BCE   TSTEN,MAINXX&7,*                             A  8  0817  B 775 008 *       220
1555 15 27           C     MAINXX&15,@END@     Q. END CARD              A  7  0825  C 016 985         220
1556 15 28           BE    ENDSTX                                       A  5  0832  B U78 S           220
1557 15 29           C     MAINXX&15,@ENT@     Q. NEW MODE              A  7  0837  C 016 972         221
1558 15 30           BU    TSTEN                                        A  5  0844  B 775 /           221
1559 15 31           B     SBROTX                                       A  4  0849  B O33             221
1560 15 32           B     READT                                        A  4  0853  B 467             221
1561 15 33   *
1562 15 34   *    PROCESS EX
1563 15 35   *
1564 15 36   EXSET   C     CALLTX,BLANK#3      Q. ANY CALLS             A  7  0857  C !73 999         221
1565 15 37           BE    OUTS2                                        A  5  0864  B 758 S           221
1566 15 38           B     SUREXX                                       A  4  0869  B T08             221
1567 15 39           B     SBROTX                                       A  4  0873  B O33             222
1568 15 40           B     READT                                        A  4  0877  B 467             222
1569 15 41   *
1570 15 42   *    READ RELEASE REDUNDANCY ROUTINE
1571 15 43   *
1572 15 44   NTPER   BSS   YESIR,C             Q. TAPE INPUT            A  5  0881  B 896 C           222
1573 15 45           R                                                  A  1  0886  1                 222
1574 15 46           SS    1                                            A  2  0887  K 1               222
1575 15 47           MCW   @N@,RHO                                      A  7  0889  M 959 763         222
1576 15 48   YESIR   SBR   COMETS&3,CRWRED                              A  7  0896  H X65 X71         222
1577 15 49           SBR   CCONPR&3,NOSIR                               A  7  0903  H X70 914         223
1578 15 50           B     CRWRED                                       A  4  0910  B X71             223
1579 15 51   NOSIR   B     TREAD                                        A  4  0914  B 471             223
1580 15 52   *
1581 15 53   *     PROCESS LTORG
1582 15 54   *
1583 15 55   LORGS   C     CALLTX,BLANK        Q. ANY CALLLS            A  7  0918  C !73 999         223
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 SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1584 15 56           BU    HAULIT                                             A  5  0925  B S64 /            223
1585 15 57           B     OUTS2                                              A  4  0930  B 758              223
1586 15 58   EOF4    CS    LMAINX                                             A  4  0934  / 086              223
1587 15 59           SW    1                                                  A  4  0938  , 001              224
1588 15 60           MCW   @END$$$@,MAINXX&18                                A  7  0942  M '05 019          224
1589 15 61           B     ENDSTX                                             A  4  0949  B U78              224
1590 15 62   ANTPER  DCW   &NTPERA                                            A  3  0955  881                224
1591 15 63   ACRWED  DCW   &CRWRED                                            A  3  0958  X71                224
1592 15 64           LTORG *                                                  A           0959
                     DCW   @N@                                              A  1  0959              LIT   224
                     DCW   @CHAIN@                                          A  5  0964              LIT   224
                     DCW   @MLCWA@                                          A  5  0969              LIT   225
                     DCW   @ENT@                                            A  3  0972              LIT   225
                     DCW   @MA   @                                          A  5  0977              LIT   225
                     DCW   @EX   @                                          A  5  0982              LIT   225
                     DCW   @END@                                            A  3  0985              LIT   225
                     DCW   @LTORG@                                          A  5  0990              LIT   225
                     DCW   @4@                                              A  1  0991              LIT   225
                     DCW   @SCR@                                            A  3  0994              LIT   226
                     DCW   @8@                                              A  1  0995              LIT   226
                     DCW   @B@                                              A  1  0996              LIT   226
             BLANKA  DCW   #03                                              A  3  0999              AREA  226
                     DCW   @END$$$@                                         A  6  1005              LIT   226
1593 15 65   *
1594 15 66   *   MAIN LINE PROCESSING ANNEX
1595 15 67   *
1596 15 68           SFX   X                                                X
1597 15 69           ORG   NUORIG                                           X           1044
1598 15 70   EOF1B   RWD   1                                                X  5  1044  U %U1 R            227
1599 15 71           S     PREVS                                            X  4  1049  S H72              227
1600 15 72           B     SWITCH                                           X  4  1053  B L01              227
1601 15 73   *
1602 15 74   *   PROCESS LOZENGED FIELD  6 - 20
1603 15 75   *
1604 15 76   LOZENG  BM    MLBLZ,MAINX&2&X1   Q. INTERNAL LEVEL             X  8  1057  V D68 0'3 K       227
1605 15 77           B     LABEL                                            X  4  1065  B /19             227
1606 15 78           MCW   BLANKS,MAINX&4&X1                                 X  7  1069  M W16 0'5          227
1607 15 79           MCW   INDEX1,SAVX1#3                                   X  7  1076  M 089 W11          227
1608 15 80           MCW   INDEX3,INDEX2                                    X  7  1083  M 099 094          228
1609 15 81           B     SBGRD                                            X  4  1090  B G46              228
1610 15 82           A     SAVX1,INDEX1                                     X  7  1094  A W11 089          228
1611 15 83           MCW   0&X3,MAINX&X1                                    X  7  1101  M 0?0 0'1          228
1612 15 84           MCW   SAVX1,INDEX1                                     X  7  1108  M W11 089          228
1613 15 85           B     UPENGL                                           X  4  1115  B A48              228
1614 15 86   *
1615 15 87   *   LOCATE PARAMETERS
1616 15 88   *
1617 15 89   LABEL   SBR   LEXIT&3                                          X  4  1119  H S63              229
1618 15 90           MCW   BLANKS#5,INDEX3                                  X  7  1123  M W16 099          229
1619 15 91           MCW   BLANKS,CNTP                                      X  7  1130  M W16 W19          229
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 SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1620 15 92           MN    MAINX&1&X1,CNTP                                  X  7  1137  D 0'2 W19          229
1621 15 93   CIRCL    S     &1,CNTP                                          X  7  1144  S W17 W19          229
1622 15 94           BM    TENSR,CNTP                                       X  8  1151  V /70 W19 K       230
1623 15 95           A     @3@,INDEX3                                       X  7  1159  A W18 099          230
1624 15 96           B     CIRCL                                            X  4  1166  B /44              230
1625 15 97   TENSR   BCE   CHZON,DECTB-2&X3,0                               X  8  1170  B !74 UI0 0       230
1626 15 98           MCW   BLANKS,CNTP#1                                    X  7  1178  M W16 W19          230
1627 15 99           MCW   DECTB&X3,INDEX3                                  X  7  1185  M UI2 099          231
1628 16 00           MN    MAINX&2&X1,CNTP                                  X  7  1192  D 0'3 W19          231
1629 16 01   MOVINP  S     &1,CNTP                                          X  7  1199  S W17 W19          231
1630 16 02           MCW   0&X3,0&X3                                        X  7  1206  M 0?0 0?0          231
1631 16 03           SAR   WAREA#3                                          X  4  1213  Q W22              231
1632 16 04           BCE   CHZON,0&X3,,       Q. MISSING PARAMETER          X  8  1217  B !74 0?0 ,       232
1633 16 05           BM    PUTIN,CNTP         Q. PARAMETER LOCATED          X  8  1225  V S44 W19 K       232
1634 16 06           MCW   WAREA,INDEX3                                     X  7  1233  M W22 099         232
1635 16 07           B     MOVINP                                           X  4  1240  B /99             232
1636 16 08   PUTIN   BCE   CHZON,0&X3,;                                     X  8  1244  B !74 0?0 ;       232
1637 16 09           BWZ   DELET,MAINX&2&X1,S                               X  8  1252  V D41 0'3 S       233
1638 16 10   LEXIT   B     0                                                X  4  1260  B 000              233
1639 16 11   *
1640 16 12   *    PROCESS LTORG
1641 16 13   *
1642 16 14   HAULIT  MCW   @ORG  @,MAINX&19   REPLACE LTORG WITH ORG         X  7  1264  M W27 020          233
1643 16 15           MCW   @L@,MAINX&74                                     X  7  1271  M W28 075          233
1644 16 16           B     SBROT                                            X  4  1278  B O33              233
1645 16 17           B     EXITC                                            X  4  1282  B D79              233
1646 16 18           CS    LMAIN                                            X  4  1286  / 086              233
1647 16 19           MCW   LITORG,MAINX&20    GENERATE LTORG*               X  7  1290  M T58 021          234
1648 16 20           MCW   CHARCC,MAINX&74                                  X  7  1297  M U61 075          234
1649 16 21           B     WHYYY                                            X  4  1304  B K97              234
1650 16 22   *
1651 16 23   *              PREPARATION FOR LTORG,EX,EX OR IOCS
1652 16 24   *
1653 16 25   SUREX   SBR   SIMPLE&3                                         X  4  1308  H T41              234
1654 16 26           SW    1                                                X  4  1312  , 001              234
1655 16 27           CS    LIPUTX                                           X  4  1316  / 186              234
1656 16 28           LCA   LMAINX,LIPUTX                                    X  7  1320  L 086 186          234
1657 16 29           B     EXITCX                                           X  4  1327  B D79              235
1658 16 30           LCA   LIPUTX,LMAINX                                    X  7  1331  L 186 086          235
1659 16 31   SIMPLE  B     0                                                X  4  1338  B 000              235
1660 16 32   TDFEXT  DCW   &RWDEXT                                          X  3  1344  D83                235
1661 16 33           DCW   @M%U1001R@                                       X  8  1352                     235
1662 16 34   LITORG  DCW   @LTORG*@                                         X  6  1358                     235
1663 16 35   *
1664 16 36   *   IOCS TABLE
1665 16 37   *
1666 16 38           DCW   @#@                                              X  1  1359                     235
1667 16 39           DCW   @RLS@                                            X  3  1362                     236
1668 16 40           DCW   @GET@                                            X  3  1365                     236
1669 16 41           DCW   @PUT@                                            X  3  1368                     236
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

1670 16 42          DCW   @DTF@                                    X  3  1371                    236
1671 16 43   TABLEI DCW   @OPE@                                    X  3  1374                    236
1672 16 44   *
1673 16 45   *  GENERATE UNKNOWN MACRO CARD
1674 16 46   *
1675 16 47   NOROT  SBR   NROTC&3                                  X  4  1375  H U14             236
1676 16 48          CS    LMAINX                                   X  4  1379  / 086             236
1677 16 49          MCW   @B@,MAINX&85                             X  7  1383  M W29 086          237
1678 16 50          MCW   @UNKNOWN@,MAINX&19                      X  7  1390  M W36 020          237
1679 16 51          MCW   CHARCC,MAINX&74                         X  7  1397  M U61 075          237
1680 16 52          MCW   @*@,MAINX&5                            X  7  1404  M W37 006          237
1681 16 53   NROTC  B     0                                        X  4  1411  B 000              237
1682 16 54   POTS   MCW   @B@,SWITCH                              X  7  1415  M W29 L01          237
1683 16 55          MCW   @N@,NEXTCD                             X  7  1422  M W38 N66          238
1684 16 56          B     COOKER                                   X  4  1429  B E90              238
1685 16 57   *
1686 16 58   *   MODIFY ADDRESS MACRO
1687 16 59   *
1688 16 60   MASET  MCW   CHARCR,MAINX&74                         X  7  1433  M U62 075          238
1689 16 61          B     SBROTX                                   X  4  1440  B O33              238
1690 16 62          MCW   @D@,MAINX&17                            X  7  1444  M W39 018          238
1691 16 63          B     SGC                                      X  4  1451  B P18              238
1692 16 64   INCLDX DCW   @INCLD@                                  X  5  1459                    238
1693 16 65   CHARCS DCW   @Z@                                      X  1  1460                    239
1694 16 66   CHARCC DCW   @Y@                                      X  1  1461                    239
1695 16 67   CHARCR DCW   @W@                                      X  1  1462                    239
1696 16 68   KINGS  B     NOROT                                    X  4  1463  B T75              239
1697 16 69          MCW   HLDSB,MAINX&10                          X  7  1467  M 192 011          239
1698 16 70          B     WHYYY                                    X  4  1474  B K97              239
1699 16 71   ENDSTX B     CTAPE                                    X  4  1478  B W50              239
1700 16 72          NOP   TDF5                                     X  4  1482  N V89              240
1701 16 73          B     OVLY4I                                   X  4  1486  B 434              240
1702 16 74   DECTB  DCW   &PARTB                                   X  3  1492  466                240
1703 16 75          DA    9X3                                      X     1493   1519
1704 16 76   ENDDC  EQU   *                                        X     1519
1705 16 77   MOVEC  LCA   @;@,0&X3                                X  7  1520  L W40 0?0          241
1706 16 78          SBR   INDEX3                                   X  4  1527  H 099              241
1707 16 79          A     @3@,INDEX2&1                             X  7  1531  A W18 095          242
1708 16 80          BCE   MIDLE,INDEX2&1,3                        X  8  1538  B H22 095 3        242
1709 16 81   LOWER  A     @1@,INDEX1                               X  7  1546  A W41 089          242
1710 16 82          SW    MAINX&20&X1                              X  4  1553  , 0S1              242
1711 16 83          BCE   MOVEC,MAINX&20&X1,,                     X  8  1557  B V20 0S1 ,        242
1712 16 84   WEEDD  MCW   INDEX2&1,IOCSAV                         X  7  1565  M 095 H10          243
1713 16 85          B     WEEDBX                                   X  4  1572  B N39              243
1714 16 86          MCW   IOCSAV,INDEX2&1                         X  7  1576  M H10 095          243
1715 16 87          B     COMSN                                    X  4  1583  B P79              243
1716 16 88   TDF5   DCW   #3                                       X  3  1589                    243
1717 16 89          RTW   5,OVLY4I                                X  8  1590  L %U5 434 R        243
1718 16 90   NEWEST DC    0                                        X  1  1598                    243
1719 16 91   SYMNM  DCW   @000@                                    X  3  1601                    243
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

1720 16 92   WHOOPS DCW   @CALL@                                  X  4  1605                    244
1721 16 93   ADDCAL DCW   &CALLTX                                 X  3  1608  !73               244
1722 16 94          LTORG *                                       X           1609
             SAVX1X DCW   #03                                     X  3  1611             AREA   244
             BLANKS DCW   #05                                     X  5  1616             AREA   244
                    DCW   &1                                      X  1  1617             LIT    244
                    DCW   @3@                                     X  1  1618             LIT    244
             CNTPX  DCW   #01                                     X  1  1619             AREA   244
             WAREAX DCW   #03                                     X  3  1622             AREA   245
                    DCW   @ORG  @                                 X  5  1627             LIT    245
                    DCW   @L@                                     X  1  1628             LIT    245
                    DCW   @B@                                     X  1  1629             LIT    245
                    DCW   @UNKNOWN@                               X  7  1636             LIT    245
                    DCW   @*@                                     X  1  1637             LIT    245
                    DCW   @N@                                     X  1  1638             LIT    245
                    DCW   @D@                                     X  1  1639             LIT    246
                    DCW   @;@                                     X  1  1640             LIT    246
                    DCW   @1@                                     X  1  1641             LIT    246
1723 16 95          ORG   1649                                    X           1649
1724 16 96   GM1    DCW   @)@                                     X  1  1649             GMARK  247
1725 16 97          EX                                            X           B 000              248
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1726 16 98          JOB   1401 AUTOCODER - PASS 2 - MACRO-GENERATOR- VERSION 3 X
1727 16 99          SFX   X                                                 X
1728 17 00   *
1729 17 01   *   GENERALIZED TAPE INPUT/OUTPUT ROUTINE
1730 17 02   *
1731 17 03          ORG   1650                                              X            1650
1732 17 04   CTAPEX SBR   INDEX2                                           X   4  1650  H 094              251
1733 17 05          SBR   CCONPR&3                                          X   4  1654  H X70              251
1734 17 06          MCW   3&X2,INDEX2                                       X   7  1658  M 0!3 094          251
1735 17 07          MCW   8&X2,CTAPEC&7                                     X   7  1665  M 0!8 X29          251
1736 17 08          MCW   0&X2,CEORC&3                                      X   7  1672  M 0!0 X41          251
1737 17 09          SW    CCOMPR&4                                          X   4  1679  , X47             251
1738 17 10          MCW   7&X2,CCOMPR&6                                     X   7  1683  M 0!7 X49          252
1739 17 11          A     @12@,CCOMPR&6                                     X   7  1690  A Y93 X49          252
1740 17 12          CW    CCOMPR&4                                          X   4  1697  ) X47             252
1741 17 13          MN    CTAPEC&3,CHALT&6                                  X   7  1701  D X25 Y55          252
1742 17 14          MN    CTAPEC&7,CHALT&6                                  X   7  1708  D X29 Y55          252
1743 17 15          MCW   @9@,CERRCT#1                                     X   7  1715  M Y94 Y95          252
1744 17 16   CTAPEC RT    0,0                                               X   8  1722  M %U0 000 R        253
1745 17 17          BCE   COMETS,CTAPEC&7,W                                 X   8  1730  B X62 X29 W       253
1746 17 18   CEORC  BEF   0                                                 X   5  1738  B 000 K           253
1747 17 19   CCOMPR BCE   CTAPEC,0,}                                       X   8  1743  B X22 000 } GMARK  253
1748 17 20          B                                                       X   1  1751  B                 253
1749 17 21          B                                                       X   1  1752  B                 253
1750 17 22          B                                                       X   1  1753  B                 253
1751 17 23          B                                                       X   1  1754  B                 254
1752 17 24          B                                                       X   1  1755  B                 254
1753 17 25          B                                                       X   1  1756  B                 254
1754 17 26          B                                                       X   1  1757  B                 254
1755 17 27          B                                                       X   1  1758  B                 254
1756 17 28          B                                                       X   1  1759  B                 254
1757 17 29          B                                                       X   1  1760  B                 254
1758 17 30          B                                                       X   1  1761  B                 255
1759 17 31   COMETS BER   CRWRED                                           X   5  1762  B X71 L           255
1760 17 32   CCONPR B     0                                                 X   4  1767  B 000             255
1761 17 33   CRWRED S     @1@,CERRCT                                        X   7  1771  S Y96 Y95          255
1762 17 34          MN    CTAPEC&3,*&4                                      X   7  1778  D X25 X88          255
1763 17 35          BSP   0                                                 X   5  1785  U %U0 B           255
1764 17 36          BCE   CTROW,CTAPEC&7,W                                 X   8  1790  B Y10 X29 W       255
1765 17 37          BM    CHALT,CERRCT                                      X   8  1798  V Y49 Y95 K       256
1766 17 38          B     CTAPEC                                            X   4  1806  B X22             256
1767 17 39   CTROW  A     @1@,CERASC#2                                      X   7  1810  A Y96 Y98          256
1768 17 40          SKP   6                                                 X   5  1817  U %U6 E           256
1769 17 41          BCE   CCHALT,CERASC-1,5                                X   8  1822  B Y34 Y97 5       256
1770 17 42          B     CTAPEC-7                                          X   4  1830  B X15             256
1771 17 43   CCHALT S     CERASC                                            X   4  1834  S Y98             257
1772 17 44          H     0,202                                             X   7  1838  . 000 202         257
1773 17 45          B     CTAPEC-7                                          X   4  1845  B X15             257
1774 17 46   CHALT  H     0,200                                             X   7  1849  . 000 200         257
1775 17 47          BSS   CTAPEC-7,E                                       X   5  1856  B X15 E           257
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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

1776 17 48          MCW   CTAPEC&7,*&8                                      X   7  1861  M X29 Y75          257
1777 17 49          RT    0,0                                               X   8  1868  M %U0 000 R        258
1778 17 50          H     0,201                                             X   7  1876  . 000 201         258
1779 17 51          B     CCONPR                                            X   4  1883  B X67             258
1780 17 52   HEADR  DCW   @HEADR@                                           X   5  1891                    258
1781 17 53          LTORG *                                                 X            1892
                    DCW   @12@                                            X   2  1893             LIT    258
                    DCW   @9@                                             X   1  1894             LIT    258
             CERRCT DCW   #01                                             X   1  1895             AREA   258
                    DCW   @1@                                             X   1  1896             LIT    259
             CERASC DCW   #02                                             X   2  1898             AREA   259
1782 17 54   *
1783 17 55   *   INITIALIZATION
1784 17 56   *
1785 17 57          ORG   1900                                              X            1900
1786 17 58   STARTX MCW   340,IOCSAV                                       X   7  1900  M 340 H10          260
1787 17 59          MCW                                                     X   1  1907  M                 260
1788 17 595         MCW   NORDRL,HOLE#1                                    X   7  1908  M W12 !55         260
1789 17 60          B     CTAPE                                             X   4  1915  B W50             260
1790 17 61          NOP   TDFSS                                            X   4  1919  N Z68             260
1791 17 62          CW    GM1                                               X   4  1923  ) W49             260
1792 17 63          SW    3998                                              X   4  1927  , I98             260
1793 17 64          MCW   LIPUT&1,3998                                     X   7  1931  M 187 I98         261
1794 17 65          CW    3995,3997                                         X   7  1938  ) I95 I97         261
1795 17 66          BSS   ALTERX,B                                         X   5  1945  B Z77 B           261
1796 17 67          RWD   1                                                 X   5  1950  U %U1 R           261
1797 17 675         MCW   HOLE,CARDSX                                      X   7  1955  M !55 189         261
1798 17 68          B     STARTA                                            X   4  1962  B 101             261
1799 17 69   TDFSS  DCW   &CCHALT                                          X   3  1968  Y34               261
1800 17 70          DCW   @L%U1001R@                                       X   8  1976                    262
1801 17 71   ALTERX B     CTAPEX                                            X   4  1977  B W50             262
1802 17 72          NOP   TDFSS                                            X   4  1981  N Z68             262
1803 17 73          CW    GM2XXX                                            X   4  1985  ) '43             262
1804 17 74          RWD   1                                                 X   5  1989  U %U1 R           262
1805 17 75          MCW   IOCSAV,SYMNM                                     X   7  1994  M H10 W01         262
1806 17 76          MCW   &IOCALT,SWITCH&3                                 X   7  2001  M !58 L04         262
1807 17 77          SBR   HAPPY&3,STRING                                   X   7  2008  H N73 156         263
1808 17 78          MCW   @N@,OUTSB                                         X   7  2015  M !59 O41         263
1809 17 79          MCW   @N@,BUT1X                                         X   7  2022  M !59 O37         263
1810 17 80          MCW   @N@,BUT2X                                         X   7  2029  M !59 O89         263
1811 17 81          BCE   VOICEB,IOCSAV-3,*                                X   8  2036  B 101 H07 *       263
1812 17 82          MCW   @N@,SWMA2B                                        X   7  2044  M !59 759         264
1813 17 83          B     VOICEB                                            X   4  2051  B 101             264
1814 17 84          LTORG *                                                 X            2055
             HOLEX  DCW   #01                                             X   1  2055             AREA   264
                    DCW   &IOCALT                                         X   3  2058  106        ADCON  264
                    DCW   @N@                                             X   1  2059             LIT    264
1815 17 85          ORG   1900                                              X            1900
1816 17 86          DA    1X174                                             X       1900   2073
1817 17 87   CALLT  EQU   *                                                 X       2073
```

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

1818 17 88   *
1819 17 89   *  PROCESS MISSING PARAMETERS WITH REGARD TO ZONE
1820 17 90   *
1821 17 91   CHZON  BWZ   SLASH,MAINX&2&X1,S                          X   8  2074  V J08 0'3 S        265
1822 17 92           BWZ   DELET,MAINX&2&X1,B                        X   8  2082  V D41 0'3 B        265
1823 17 93           MCW   @B@,MAINX&85                              X   7  2090  M H44 086          265
1824 17 94   ZONBR  CW    MAINX&X1,MAINX&3&X1                       X   7  2097  ) 0'1 0'4          265
1825 17 95   ZONCH  B     DEFND                                     X   4  2104  B ?41              265
1826 17 96   SLASH  MCW   BLANKS-2,MAINX&2&X1                       X   7  2108  M W14 0'3          266
1827 17 97           B     ZONBR                                     X   4  2115  B !97              266
1828 17 98   SUBSET MCW   @N@,SWITCH                                X   7  2119  M H45 L01          266
1829 17 99           MCW   @B@,NEXTCD                                X   7  2126  M H44 N66          266
1830 18 00           MCW   CHARCS,MAINX&74                           X   7  2133  M U60 075          266
1831 18 01           B     CALIT                                     X   4  2140  B J58              266
1832 18 02   MASKS  MCW   @B@,NOCAL                                 X   7  2144  M H44 K20          267
1833 18 03   *
1834 18 04   *  PROCESSING CALL STATEMENT
1835 18 05   *
1836 18 06   CALLN  MCW   CHARCR,MAINX&74                           X   7  2151  M U62 075          267
1837 18 07   CALIT  MCW   ADDCAL,INDEX2      BEGIN SCAN OF CALL TABLE  X   7  2158  M W08 094          267
1838 18 08           SW    MAINXX&20                                 X   4  2165  , 021              267
1839 18 09   YSCALX BCE   XXXX,INDEX2-2,Y    Q. CALL TABLE EXCEEDED    X   8  2169  B K90 092 Y        267
1840 18 10           C     0&X2,@   @                                X   7  2177  C 0!0 H48          268
1841 18 11           BE    SPADEX                                    X   5  2184  B K09 S            268
1842 18 12           C     0&X2,MAINX&22                             X   7  2189  C 0!0 023          268
1843 18 13           SAR   INDEX2                                    X   4  2196  Q 094              268
1844 18 14           BE    QUEEN                                     X   5  2200  B K16 S            268
1845 18 15           B     YSCALX                                    X   4  2205  B J69              268
1846 18 16   SPADEX MCW   MAINX&22,0&X2                            X   7  2209  M 023 0!0          268
1847 18 17   QUEEN  CW    MAINXX&20                                 X   4  2216  ) 021              269
1848 18 18   NOCALX NOP   SKELCX                                    X   4  2220  N R17              269
1849 18 19           B     SBROT                                     X   4  2224  B O33              269
1850 18 20           BCE   SWITCH,MAINX&19,D  Q. INCLD STATEMENT     X   8  2228  B L01 020 D        269
1851 18 21   *
1852 18 22   *   LOAD PARAMETES INTO TABLE
1853 18 23   *
1854 18 24           MCW   MAINX&10,PARTB                            X   7  2236  M 011 466          269
1855 18 25           SBR   INDEX3                                    X   4  2243  H 099              269
1856 18 26           S     INDEX1&1                                  X   4  2247  S 090              269
1857 18 27   DIMNDX B     SCANXX                                    X   4  2251  B M19              270
1858 18 28           SW    1                                         X   4  2255  , 001              270
1859 18 29           LCA   MAINX&18&X1,0&X3                         X   7  2259  L 0/9 0?0          270
1860 18 30           SBR   INDEX3                                    X   4  2266  H 099              270
1861 18 31           BCE   HEARTX,MAINX&19&X1,                       X   8  2270  B L09 0S0          270
1862 18 32           BCE   WEEDBX,MAINX&19&X1,,                      X   8  2278  B N39 0S0 ,        270
1863 18 33           B     DIMNDX                                    X   4  2286  B K51              270
1864 18 34   XXXX   MCW   @7@,MAINX&85                              X   7  2290  M H49 086          271
1865 18 35   WHYYY  B     SBROT                                     X   4  2297  B O33              271
1866 18 36   SWITCH B     READTA                                    X   4  2301  B 467              271
1867 18 37           B     POTS                                      X   4  2305  B U15              271
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1868 18 38   *
1869 18 39   *   GENERATE BRANCH AND DCW,S
1870 18 40   *
1871 18 41   HEARTX LCA   @ @,0&X3                                  X   7  2309  L H50 0?0          271
1872 18 42           CS    LMAINX                                    X   4  2316  / 086              271
1873 18 43           MCW   PARTB,MAINX&10                           X   7  2320  M 466 011          271
1874 18 44           MCW   PARTB-6,MAINX&24                          X   7  2327  M 460 025          272
1875 18 45           SAR   INDEX3                                    X   4  2334  Q 099              272
1876 18 46           MCW   @B@,MAINX&15                              X   7  2338  M H44 016          272
1877 18 47   SLAM   MCW   CHARCC,MAINX&74                           X   7  2345  M U61 075          272
1878 18 48           MCW   INDEX3,SAVXL2#3                           X   7  2352  M 099 H53          272
1879 18 49           MCW   SAVXL2,INDEX3                             X   7  2359  M H53 099          272
1880 18 50           CW    MAINX&23                                  X   4  2366  ) 024              273
1881 18 51           B     SBROT                                     X   4  2370  B O33              273
1882 18 52           CS    LMAINX                                    X   4  2374  / 086              273
1883 18 53           BCE   SWITCH,0&X3,                              X   8  2378  B L01 0?0          273
1884 18 54           MCW   @DCW@,MAINX&17                            X   7  2386  M H56 018          273
1885 18 55           MCW   INDEX3,INDEX2                             X   7  2393  M 099 094          273
1886 18 56           B     SBGRDX                                    X   4  2400  B G46              273
1887 18 57           MCW   0&X3,MAINX&20&X1                          X   7  2404  M 0?0 0S1          274
1888 18 58           SAR   INDEX3                                    X   4  2411  Q 099              274
1889 18 59           B     SLAM                                      X   4  2415  B L45              274
1890 18 60   *
1891 18 61   *     SCAN FOR COMMA, TWO BLANKS, OR AN @
1892 18 62   *
1893 18 63   SCANXX SBR   CLUBS&3                                   X   4  2419  H N12              274
1894 18 64   SCANL  SW    MAINX&20                                  X   4  2423  , 021              274
1895 18 65           BCE   SCNAT,MAINX&20&X1,@                       X   8  2427  B N13 0S1 @        274
1896 18 66           BCE   CETWMS,MAINX&20&X1,,                      X   8  2435  B M98 0S1 ,        274
1897 18 67           C     MAINX&20&X1,@  @                          X   7  2443  C 0S1 H58          275
1898 18 68           BE    CLUBS                                     X   5  2450  B N09 S            275
1899 18 69   CXIT1  A     @1@,INDEX1                                X   7  2455  A H59 089          275
1900 18 70           C     INDEX1,@52@                               X   7  2462  C 089 H61          275
1901 18 71           BU    SCANL                                     X   5  2469  B M23 /            275
1902 18 72           C     MAINX&71,@  @                             X   7  2474  C 072 H58          275
1903 18 73           BE    CLUBS                                     X   5  2481  B N09 S            276
1904 18 74           BCE   CLUBS,MAINX&71,                          X   8  2486  B N09 072          276
1905 18 75           B     CXIT                                      X   4  2494  B N02              276
1906 18 76   CETWMS SW    MAINX&21&X1                               X   4  2498  , 0S2              276
1907 18 77   CXIT   A     @1@,INDEX1                                X   7  2502  A H59 089          276
1908 18 78   CLUBS  B     0                                         X   4  2509  B 000              276
1909 18 79   SCNAT  ZA    @510@,INDEX1&1                            X   7  2513  ? H64 090          276
1910 18 80   ATLOK  BCE   CXIT1,MAINX&20&X1,@                       X   8  2520  B M55 0S1 @        277
1911 18 81           S     &10,INDEX1&1                              X   7  2528  S H66 090          277
1912 18 82           B     ATLOK                                     X   4  2535  B N20              277
1913 18 83   *
1914 18 84   *  OBTAIN MORE PARAMETERS FROM ADDITIONAL RECORDS
1915 18 85   *
1916 18 86   WEEDBX SBR   WEDXT&3                                   X   4  2539  H O21              277
1917 18 87           B     NEWEED                                    X   4  2543  B N54              277
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1918 18 88   WEDDBX A     @1@,INDEX1                                   X  7  2547  A H59 089          277
1919 18 89   NEWEED C     INDEX1,@52@                                  X  7  2554  C 089 H61          278
1920 18 90          BU    LOOPW                                        X  5  2561  B O06 /            278
1921 18 91   NEXTCD NOP   CALLCD                                       X  4  2566  N G80              278
1922 18 92   HAPPY  B     TWEDBA            READ NEXT RECORD           X  4  2570  B 653              278
1923 18 93          NOP                                               X  1  2574  N                  278
1924 18 94          MCW   CHARCR,MAINX&74                             X  7  2575  M U62 075          278
1925 18 95   THRU   B     SBROTX                                       X  4  2582  B O33              278
1926 18 96          BCE   HAPPY,MAINX&5,*                            X  8  2586  B N70 006 *        279
1927 18 97          S     INDEX1&1                                     X  4  2594  S 090              279
1928 18 98          BCE   MOVEC,MAINX&20,,   Q. FIRST PARAMETER MISSING X  8  2598  B V20 021 ,      279
1929 18 99   LOOPW  BCE   WEDDBX,MAINX&20&X1,                         X  8  2606  B N47 0S1          279
1930 19 00          SW    MAINX&20&X1                                  X  4  2614  , 0S1              279
1931 19 01   WEDXT  B     0                                            X  4  2618  B 000              279
1932 19 02   TDF6   DCW   &CCHALT                                      X  3  2624  Y34                279
1933 19 03          DCW   @M%U6I12W@                                  X  8  2632                     280
1934 19 04   *
1935 19 05   *   OUTPUT ROUTINE
1936 19 06   *
1937 19 07   SBROTX SBR   BRNCH&3                                      X  4  2633  H O99              280
1938 19 08   BUT1X  B     HOMEX                                        X  4  2637  B O48              280
1939 19 09   OUTSB  MCW   ANTPER,COMETS&3                              X  7  2641  M 955 X65          280
1940 19 10   HOMEX  MCW   LMAIN,LOPUT                                 X  7  2648  M 086 I97          280
1941 19 11          BCE   BUT2X,OUTPT&73,*                            X  8  2655  B O89 I85 *        280
1942 19 12          MCW   BLANKS-3,OUTPT&73                           X  7  2663  M W13 I85          281
1943 19 13          SW    LOPUT&1                                      X  4  2670  , I98              281
1944 19 14          MCW   LIPUT&1,LOPUT&1                            X  7  2674  M 187 I98          281
1945 19 15          B     CTAPEX                                       X  4  2681  B W50              281
1946 19 16          NOP   TDF6                                         X  4  2685  N O24              281
1947 19 17   BUT2X  MCW   ACRWED,COMETS&3                            X  7  2689  M 958 X65          281
1948 19 18   BRNCH  B     0                                            X  4  2696  B 000              281
1949 19 19   *
1950 19 20   *  PROCESS PARAMETERS FOR SUBSTITUTION
1951 19 21   *
1952 19 22   MSUBTX MCW   @R@,MAINX&74                                 X  7  2700  M H67 075          282
1953 19 23          B     SBROTX                                       X  4  2707  B O33              282
1954 19 24          A     @1@,SYMNM                                    X  7  2711  A H59 W01          282
1955 19 25   SGC    MCW   MAINX&17,HLDSB                              X  7  2718  M 018 192          282
1956 19 26          S     ENDDC                                        X  4  2725  S V19              282
1957 19 27          CHAIN 8                                            X                      MACRO
1958                S                                                  X  1  2729  S                  GEN    282
1959                S                                                  X  1  2730  S                  GEN    282
1960                S                                                  X  1  2731  S                  GEN    283
1961                S                                                  X  1  2732  S                  GEN    283
1962                S                                                  X  1  2733  S                  GEN    283
1963                S                                                  X  1  2734  S                  GEN    283
1964                S                                                  X  1  2735  S                  GEN    283
1965                S                                                  X  1  2736  S                  GEN    283
1966 19 28          S     INDEX2&2                                     X  4  2737  S 096              283
1967 19 29          A     @3@,INDEX2&1                                 X  7  2741  A H68 095          284
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1968 19 30          MCW   MAINX&10,PARTB                               X  7  2748  M 011 466          284
1969 19 31          SBR   INDEX3                                       X  4  2755  H 099              284
1970 19 32          S     INDEX1&1                                     X  4  2759  S 090              284
1971 19 33          BCE   BTREND,MAINX&20,                            X  8  2763  B Q25 021          284
1972 19 34          BCE   MOVEC,MAINX&20,,                            X  8  2771  B V20 021 ,        284
1973 19 35   COMSN  A     @3@,INDEX2&1                                 X  7  2779  A H68 095          285
1974 19 36          BCE   ABOVE,INDEX2&1,3                           X  8  2786  B H33 095 3        285
1975 19 37   BELOW  B     SCANXX                                       X  4  2794  B M19              285
1976 19 38          LCA   MAINX&18&X1,0&X3                           X  7  2798  L 0/9 07?          285
1977 19 39          SBR   INDEX3                                       X  4  2805  H 099              285
1978 19 40          BCE   MOVEC,MAINX&20&X1,,                         X  8  2809  B V20 0S1 ,        285
1979 19 41          BCE   WEEDD,MAINX&19&X1,,                         X  8  2817  B V65 0S0 ,        286
1980 19 42   BTREND LCA   @,@,0&X3                                    X  7  2825  L H69 07?          286
1981 19 43          CS    LMAINX                                       X  4  2832  / 086              286
1982 19 44          C     PREVS#3,HLDSB                                X  7  2836  C H72 192          286
1983 19 45          MCW   @999@,PREVS                                  X  7  2843  M H75 H72          286
1984 19 46          BE    HARMN                                        X  5  2850  B R65 S            286
1985 19 47          BH    RDTP1                                        X  5  2855  B Q65 U            287
1986 19 48   EOF1   RWD   1                                            X  5  2860  U %U1 R            287
1987 19 49   *
1988 19 50   *              SUBSTITUTIONS
1989 19 51   *
1990 19 52   RDTP1  SW    100                                          X  4  2865  , 100              287
1991 19 53          B     CTAPE                                        X  4  2869  B W50              287
1992 19 54          NOP   TDFLIB                                       X  4  2873  N B18              287
1993 19 55          C     MAINX&19,HEADR                               X  7  2877  C 020 Y91          287
1994 19 56          BU    RDTP1                                        X  5  2884  B Q65 /            287
1995 19 57          C     MAINX&7,@999@                                X  7  2889  C 008 H75          288
1996 19 58          BE    KINGS                                        X  5  2896  B U63 S            288
1997 19 59          C     MAINX&7,HLDSB                                X  7  2901  C 008 192          288
1998 19 60          BU    RDTP1                                        X  5  2908  B Q65 /            288
1999 19 61          B     HARMN                                        X  4  2913  B R65              288
2000 19 62   SKELC  MCW   @N@,NOCAL                                    X  7  2917  M H45 K20          288
2001 19 63          MCW   CHARCS,MAINX&74                              X  7  2924  M U60 075          289
2002 19 64          B     SBROT                                        X  4  2931  B O33              289
2003 19 65          BCE   HARMN,MAINX&19,D                            X  8  2935  B R65 020 D        289
2004 19 66          MCW   @B    @,MAINX&19                             X  7  2943  M H80 020          289
2005 19 67   BOUTS  CW    ZEROX                                        X  4  2950  ) 188              289
2006 19 68          MCW   CHARCC,MAINX&74                              X  7  2954  M U61 075          289
2007 19 69          B     SBROTX                                       X  4  2961  B O33              290
2008 19 70   HARMN  CS    LMAINX                                       X  4  2965  / 086              290
2009 19 71          SW    1,100                                        X  7  2969  , 001 100          290
2010 19 72          MCW   LIPUT&1,100                                 X  7  2976  M 187 100          290
2011 19 73          B     CTAPEX                                       X  4  2983  B W50              290
2012 19 74          NOP   TDFLB2                                       X  4  2987  N B29              290
2013 19 75          C     MAINX&19,HEADR                               X  7  2991  C 020 Y91          290
2014 19 76          MCW   MAINX&7,PREVS                                X  7  2998  M 008 H72          291
2015 19 77          BE    SWITCH                                       X  5  3005  B L01 S            291
2016 19 78          C     MAINX&7,@)00@                                X  7  3010  C 008 H83          291
2017 19 79          BU    LZFND                                        X  5  3017  B ?26 /            291
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2018 19 80          SW    ZEROX                                      X  4  3022  , 188             291
2019 19 81   *
2020 19 82   *  RIGHT TO LEFT SCAN FOR LOZENGES
2021 19 83   *
2022 19 84   LZFND  ZA    @690@,INDEX1&1                             X  7  3026  ? H86 090         291
2023 19 85   LOZSC  BCE   LZCNT,MAINX&X1,)                           X  8  3033  B B38 0'1 )       292
2024 19 86   DEFND  S     &10,INDEX1&1                               X  7  3041  S H66 090         292
2025 19 87          C     INDEX1,@15@                                X  7  3048  C 089 H88         292
2026 19 88          BU    LOZSC                                      X  5  3055  B ?33 /           292
2027 19 89          S     INDEX1&1                                   X  4  3060  S 090             292
2028 19 90   CLEANC B     SCANXX                                     X  4  3064  B M19             292
2029 19 91          CW    MAINX&20,MAINX&20&X1                       X  7  3068  ) 021 0S1         293
2030 19 92          C     INDEX1,@51@                                X  7  3075  C 089 H90         293
2031 19 93          BL    ENDCLN                                     X  5  3082  B A26 T           293
2032 19 94          C     MAINX&20&X1,@  @                           X  7  3087  C 0S1 H58         293
2033 19 95          BU    CLEANC                                     X  5  3094  B ?64 /           293
2034 19 96          BCE   ENDCLN,MAINX&5,*                          X  8  3099  B A26 006 *       293
2035 19 97          SW    MAINX&20&X1                                X  4  3107  , 0S1             294
2036 19 98          MCW   BLANKS-4,MAINXX&71                         X  7  3111  M W12 072         294
2037 19 99          MCW   MAINXX&71                                  X  4  3118  M 072             294
2038 20 00          CW    MAINXX&20&X1                               X  4  3122  ) 0S1             294
2039 20 01   *
2040 20 02   *   RIGHT TO LEFT SCAN FOR LOZENGES  6 - 20
2041 20 03   *
2042 20 04   ENDCLN MCW   @015@,INDEX1                               X  7  3126  M H93 089         294
2043 20 05          SBR   ZONCH&3,UPENGL                            X  7  3133  H J07 A48         294
2044 20 06   ENGLOZ BCE   LOZENG,MAINX&X1,)                         X  8  3140  B '57 0'1 )       295
2045 20 07   UPENGL S     &10,INDEX1&1                               X  7  3148  S H66 090         295
2046 20 08          C     INDEX1,@04@                                X  7  3155  C 089 H95         295
2047 20 09          BU    ENGLOZ                                     X  5  3162  B A40 /           295
2048 20 10   OUTSD  SBR   ZONCH&3,DEFND                              X  7  3167  H J07 ?41         295
2049 20 11   SHIFTL NOP   PARTB,MAINX&10                            X  7  3174  N 466 011         296
2050 20 12          MCW   @N@,SHIFTL                                 X  7  3181  M H45 A74         296
2051 20 13          C     MAINX&18,WHOOPS                            X  7  3188  C 019 W05         296
2052 20 14          BE    MASKS                                      X  5  3195  B J44 S           296
2053 20 15          C     MAINX&19,INCLD                             X  7  3200  C 020 U59         296
2054 20 16          BE    MASKS                                      X  5  3207  B J44 S           296
2055 20 17          B     BOUTS                                      X  4  3212  B R50             297
2056 20 18   TDFLIB DCW   &KINGS                                     X  3  3218  U63               297
2057 20 19          DCW   @M%U1001R@                                 X  8  3226                   297
2058 20 20   TDFLB2 DCW   &EOF1B                                     X  3  3229  '44               297
2059 20 21          DCW   @M%U1001R@                                 X  8  3237                   297
2060 20 22   *
2061 20 23   *   PROCESS LOZENGED FIELDS  21  -  72
2062 20 24   *
2063 20 25   LZCNT  BCE   DEFND,MAINX&1&X1,                          X  8  3238  B ?41 0'2         297
2064 20 26          SW    MAINX&X1,MAINX&3&X1                        X  7  3246  , 0'1 0'4         298
2065 20 27          BM    SYSTM,MAINX&2&X1                           X  8  3253  V C56 0'3 K       298
2066 20 28          B     LABEL                                      X  4  3261  B /19             298
2067 20 29          MCW   INDEX3,SAVX3#3                            X  7  3265  M 099 H98         298
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2068 20 30          S     INDEX3,WAREA                               X  7  3272  S 099 W22         298
2069 20 31          MZ    BLANKS,WAREA                               X  7  3279  Y W16 W22         299
2070 20 32          MCW   @I99@,INDEX3                              X  7  3286  M I01 099         299
2071 20 33          S     WAREA,INDEX3                               X  7  3293  S W22 099         299
2072 20 34          MCW   @I@,INDEX3-2                              X  7  3300  M I02 097         299
2073 20 35          C     INDEX3,@I9F@                               X  7  3307  C 099 I05         299
2074 20 36          BL    SPTYP                                      X  5  3314  B C78 T           300
2075 20 37          MCW   MAINX&76&X3,MAINX&72                       X  7  3319  M 0G7 073         300
2076 20 38          SBR   MOVE3&6                                   X  4  3326  H C47             300
2077 20 39   LMN    CW    MAINX&3&X1                                 X  4  3330  ) 0'4             300
2078 20 40          MCW   SAVX3,INDEX3                             X  7  3334  M H98 099         300
2079 20 41   MOVE3  MCW   0&X3,0                                     X  7  3341  M 0?0 000         300
2080 20 42          CW    MAINX&X1                                   X  4  3348  ) 0'1             300
2081 20 43          B     DEFND                                      X  4  3352  B ?41             301
2082 20 44   SYSTM  MCW   MAINX&68,MAINX&71                         X  7  3356  M 069 072         301
2083 20 45          MCW   SYMNM                                      X  4  3363  M W01             301
2084 20 46          CW    MAINX&X1,MAINX&3&X1                        X  7  3367  ) 0'1 0'4         301
2085 20 47          B     DEFND                                      X  4  3374  B ?41             301
2086 20 48   *
2087 20 49   *  SPECIALIZED PROCESSING OF ONE AND TWO CHARACTER OPERANDS
2088 20 50   *
2089 20 51   SPTYP  LCA   MAINX&72,OUTPT&72                         X  7  3378  L 073 I84         301
2090 20 52          CW    MAINX&X1,MAINX&3&X1                        X  7  3385  ) 0'1 0'4         302
2091 20 53          MCW   BLANKS-2,MAINX&71                         X  7  3392  M W14 072         302
2092 20 54          BCE   HOUSE,INDEX3,H                             X  8  3399  B D22 099 H       302
2093 20 55          MCW   OUTPT&72,MAINX&71                          X  7  3407  M I84 072         302
2094 20 56          SBR   MOVE3&6                                    X  4  3414  H C47             302
2095 20 57          B     SPOUT                                      X  4  3418  B D33             302
2096 20 58   HOUSE  MCW   OUTPT&72,MAINX&70                         X  7  3422  M I84 071         303
2097 20 59          SBR   MOVE3&6                                    X  4  3429  H C47             303
2098 20 60   SPOUT  CW    OUTPT&3&X1                                 X  4  3433  ) I/5             303
2099 20 61          B     LMN                                        X  4  3437  B C30             303
2100 20 62   DELET  BW    LBLMV,ZEROX                                X  8  3441  V D53 188 1       303
2101 20 63          B     HARMN                                      X  4  3449  B R65             303
2102 20 64   LBLMV  MCW   @M@,SHIFTL                                X  7  3453  M I06 A74         303
2103 20 65          CW    ZEROX                                      X  4  3460  ) 188             304
2104 20 66          B     HARMN                                      X  4  3464  B R65             304
2105 20 67   MLBLZ  MCW   SYMNM,MAINX&10                            X  7  3468  M W01 011         304
2106 20 68          B     OUTSD                                      X  4  3475  B A67             304
2107 20 69   *
2108 20 70   *  PULL IN CALLED ROUTINES AT LTORG, END OR EXECUTE CARDS
2109 20 71   *
2110 20 72   EXITC  SBR   CEXIT1&3                                  X  4  3479  H G45             304
2111 20 73   RWDEXT RWD   1                                         X  5  3483  U %U1 R           304
2112 20 74   CWPRC  CW    NEWEST                                     X  4  3488  ) V98             304
2113 20 75   TPRD1  SW    100                                        X  4  3492  , 100             305
2114 20 76          MCW   LIPUT&1,100                              X  7  3496  M 187 100         305
2115 20 77          B     CTAPEX                                     X  4  3503  B W50             305
2116 20 78          NOP   TDFEXT                                    X  4  3507  N T44             305
2117 20 79          C     MAINX&19,HEADR                             X  7  3511  C 020 Y91         305
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2118 20 80          BU    TPRD1                                      X  5  3518  B D92 /           305
2119 20 81   SOLUT   C     MAINX&7,@999@                              X  7  3523  C 008 H75         305
2120 20 82          BE    EOF1A                                      X  5  3530  B F56 S           306
2121 20 83   OPPENT MCW   ADDCAL,INDEX1                             X  7  3535  M W08 089         306
2122 20 84   PRTNER BCE   TPRD1,INDEX1-2,Y                          X  8  3542  B D92 087 Y       306
2123 20 85          SW    MAINX&5                                    X  4  3550  , 006             306
2124 20 86          C     0&X1,MAINX&7                               X  7  3554  C 0'0 008         306
2125 20 87          SAR   INDEX1                                     X  4  3561  Q 089             306
2126 20 88          BU    PRTNER                                     X  5  3565  B E42 /           307
2127 20 89          BW    TPRD1,1&X1                                 X  8  3570  V D92 0'1 1       307
2128 20 90          CW    MAINX&5                                    X  4  3578  ) 006             307
2129 20 91          SW    1&X1                                       X  4  3582  , 0'1             307
2130 20 92          SW    NEWEST                                     X  4  3586  , V98             307
2131 20 93   COOKER B     CTAPEX                                     X  4  3590  B W50             307
2132 20 94          NOP   TDFEXT                                    X  4  3594  N T44             307
2133 20 95          C     MAINX&18,WHOOPS                            X  7  3598  C 019 W05         308
2134 20 96          BE    SUBSET                                     X  5  3605  B J19 S           308
2135 20 97          C     MAINX&19,INCLD                             X  7  3610  C 020 U59         308
2136 20 98          BE    SUBSET                                     X  5  3617  B J19 S           308
2137 20 99          C     MAINX&19,HEADR                             X  7  3622  C 020 Y91         308
2138 21 00          BE    SOLUT                                      X  5  3629  B E23 S           308
2139 21 01          MCW   CHARCC,MAINX&74                           X  7  3634  M U61 075         309
2140 21 02          LCA   LOPUT&1,100                               X  7  3641  L I98 100         309
2141 21 03          B     SBROT                                      X  4  3648  B O33             309
2142 21 04          B     COOKER                                     X  4  3652  B E90             309
2143 21 05   EOF1A  MCW   ADDCAL,INDEX1                             X  7  3656  M W08 089         309
2144 21 06   COMBL  BCE   CEXIT,INDEX1-2,Y                          X  8  3663  B G26 087 Y       309
2145 21 07          C     0&X1,@   @                                 X  7  3671  C 0'0 H48         310
2146 21 08          SAR   INDEX1                                     X  4  3678  Q 089             310
2147 21 09          BE    CEXIT                                      X  5  3682  B G26 S           310
2148 21 10          BW    COMBL,1&X1                                 X  8  3687  V F63 0'1 1       310
2149 21 11          BW    RWDEXT,NEWEST                              X  8  3695  V D83 V98 1       310
2150 21 12   *
2151 21 13   *  CREATE COMMENTS CARD FOR UNKNOWN  SUBROUTINES
2152 21 14   *
2153 21 15   UNKNWN B     NOROT                                      X  4  3703  B T75             310
2154 21 16          SW    1&X1                                       X  4  3707  , 0'1             311
2155 21 17          MCW   3&X1,MAINX&10                              X  7  3711  M 0'3 011         311
2156 21 18          B     SBROT                                      X  4  3718  B O33             311
2157 21 19          B     COMBL                                      X  4  3722  B F63             311
2158 21 20   CEXIT  CS    CALLT                                      X  4  3726  / !73             311
2159 21 21          CS                                               X  1  3730  /                 311
2160 21 22          CW    100                                        X  4  3731  ) 100             311
2161 21 23          MCW   @999@,PREVS                                X  7  3735  M H75 H72         312
2162 21 24   CEXIT1 B     0                                          X  4  3742  B 000             312
2163 21 25   SBGRD  SBR   GRAND&3                                    X  4  3746  H G57             312
2164 21 26          S     INDEX1&1                                   X  4  3750  S 090             312
2165 21 27   GRAND  BW    0,0&X2                                     X  8  3754  V 000 0!0 1       312
2166 21 28          S     @10@,INDEX2&1                              X  7  3762  S I08 095         312
2167 21 29          A     @1@,INDEX1                                 X  7  3769  A H59 089         313
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2168 21 30          B     GRAND                                      X  4  3776  B G54             313
2169 21 31   CALLCD CS    LMAINX                                     X  4  3780  / 086             313
2170 21 32          B     CTAPE                                      X  4  3784  B W50             313
2171 21 33          NOP   TDFEXT                                    X  4  3788  N T44             313
2172 21 34          MCW   CHARCS,MAINX&74                           X  7  3792  M U60 075         313
2173 21 35          SW    1                                          X  4  3799  , 001             313
2174 21 36          B     THRU                                       X  4  3803  B N82             314
2175 21 37   IOCSAV DCW   #4                                         X  4  3810                   314
2176 21 38   CHAINX MCW   @R@,MAINX&74                              X  7  3811  M H67 075         314
2177 21 39          B     WHYYY                                      X  4  3818  B K97             314
2178 21 40   MIDLE  MCW   INDEX3,DECTB&X2                           X  7  3822  M 099 UR2         314
2179 21 41          B     LOWER                                      X  4  3829  B V46             314
2180 21 42   ABOVE  MCW   INDEX3,DECTB&X2                           X  7  3833  M 099 UR2         314
2181 21 43          B     BELOW                                      X  4  3840  B P94             315
2182 21 44          LTORG *                                          X           3844
                    DCW   @B@                                        X  1  3844          LIT    315
                    DCW   @N@                                        X  1  3845          LIT    315
                    DCW   @   @                                      X  3  3848          LIT    315
                    DCW   @7@                                        X  1  3849          LIT    315
                    DCW   @ @                                        X  1  3850          LIT    315
              SAVXL2 DCW   #03                                       X  3  3853          AREA   315
                    DCW   @DCW@                                      X  3  3856          LIT    316
                    DCW   @  @                                       X  2  3858          LIT    316
                    DCW   @1@                                        X  1  3859          LIT    316
                    DCW   @52@                                       X  2  3861          LIT    316
                    DCW   @510@                                      X  3  3864          LIT    316
                    DCW   &10                                        X  2  3866          LIT    316
                    DCW   @R@                                        X  1  3867          LIT    316
                    DCW   @3@                                        X  1  3868          LIT    317
                    DCW   @,@                                        X  1  3869          LIT    317
              PREVSX DCW   #03                                       X  3  3872          AREA   317
                    DCW   @999@                                      X  3  3875          LIT    317
                    DCW   @B    @                                    X  5  3880          LIT    317
                    DCW   @)00@                                      X  3  3883          LIT    317
                    DCW   @690@                                      X  3  3886          LIT    317
                    DCW   @15@                                       X  2  3888          LIT    318
                    DCW   @51@                                       X  2  3890          LIT    318
                    DCW   @015@                                      X  3  3893          LIT    318
                    DCW   @04@                                       X  2  3895          LIT    318
              SAVX3X DCW   #03                                       X  3  3898          AREA   318
                    DCW   @I99@                                      X  3  3901          LIT    318
                    DCW   @I@                                        X  1  3902          LIT    318
                    DCW   @I9F@                                      X  3  3905          LIT    319
                    DCW   @M@                                        X  1  3906          LIT    319
                    DCW   @10@                                       X  2  3908          LIT    319
2183 21 45   *
2184 21 46   *  OUTPUT AREA
2185 21 47   *
2186 21 48          ORG   3912                                       X           3912
2187 21 49   OUTPT  DA    1X86,G                                     X     3912  3997
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2187                DCW   @"@                                       X   1  3998             GMARK  320
2188 21 50   LOPUT  EQU   *-1                                       X      3997
2189 21 51          EX                                              X           B 000              321
2190 21 52          END   START                                     X           / Z00 080
```


SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ABOVEX	3833	ACRWED	958	ACTOUT	1143	ACTSCN	1113	ACTUAL	2089	ADDCAL	1608	AGREEI	1935
ALDIOI	3203	ALDTFI	3308	ALLDIO	2347	ALPHAI	2430	ALTBYI	1497	ALTERI	2763	ALTERX	1977
ALTIOI	2883	ALTR3B	631	ALTR4B	576	ALTR5B	651	ALTR6B	662	ALTS1I	2847	ALTS2E	2860
ALTS2I	2867	ALTS3I	3062	ALTS4E	3075	ALTS4I	3082	ALTSAB	486	ANTPER	955	ANTSTA	803
AREASV	331	ATLOKX	2520	B	86	BALTRI	3903	BELOWX	2794	BETTER	2376	BLANKA	999
BLANKS	1616	BLKFDI	1097	BLORBI	1572	BLOWAI	1602	BLUEI	627	BOUTSX	2950	BRNCHX	2696
BRTBLI	886	BSPT4I	2904	BTREND	2825	BUT1XX	2637	BUT2XX	2689	BYPASX	522	BYPSSI	3349
BYPSXI	3377	CALITX	2158	CALLCD	3780	CALLNX	2151	CALLTX	2073	CALTRB	602	CARDSB	525
CARDSX	189	CBSP1X	604	CBSP2X	543	CBSP3X	574	CCHALT	1834	CCOMPR	1743	CCONPR	1767
CEORCX	1738	CERASC	1898	CERRCT	1895	CETWMS	2498	CEXIT1	3742	CEXITX	3726	CHAINX	3811
CHAIRI	2663	CHALTX	1849	CHANGE	708	CHARCC	1461	CHARCR	1462	CHARCS	1460	CHARTA	665
CHECKI	3005	CHEXZI	3487	CHTAPI	1187	CHUCKI	231	CHZONX	2074	CIRCLX	1144	CLEANC	3064
CLUBSI	2610	CLUBSX	2509	CMALTB	510	CMCTLI	157	CNTPX	1619	COMBLK	2312	COMBLX	3663
COMEQI	984	COMETS	1762	COMIOC	831	COMPRI	851	COMSNX	2779	CONTIN	2301	COOKER	3590
COUTBI	3708	CRDCLI	138	CRDOUT	2168	CRWRED	1771	CTAPEC	1722	CTAPEI	1222	CTAPEX	1650
CTROWX	1810	CWPRCX	3488	CXIT1X	2455	CXITX	2502	DBLALI	3013	DBLCKI	3272	DECTBX	1492
DEFNDX	3041	DELETX	3441	DELTAI	2410	DIFREC	2406	DIMNDX	2251	DIOCSB	576	DIOSBI	1147
DIVIDE	568	DRITBI	3682	DTFBRI	1727	DTFGMI	568	DTFINT	1650	DTFLAB	3803	DTFNDI	713
DTFNMI	2391	DTFOUT	2446	DTFTAB	349	EITHER	333	ENDCLN	3126	ENDDCX	1519	ENDDIO	622
ENDDTF	567	ENDSTB	1002	ENDSTX	1478	ENGLOZ	3140	ENTSTA	795	ENTSTB	879	EOF1AX	3656
EOF1BX	1044	EOF1X	2860	EOF4A	934	EXIRBI	2031	EXISBI	992	EXITBI	3669	EXITCX	3479
EXSETA	857	EXSETB	474	FDBLKI	1090	FEATBI	3552	FEWA	605	FILENM	349	FILXZI	3423
FINAL2	3261	FINALI	3252	FINDI	642	FOUNDI	1105	GAMMAI	685	GM1X	1649	GM2XXX	1043
GMOVL2	332	GMOVL4	606	GMWMRK	773	GOODI	2197	GOTITI	670	GRANDX	3754	HALTI	1921
HAPPYX	2570	HARMNX	2965	HAULIT	1264	HEADRX	1891	HEARBI	2537	HEARTX	2309	HLDA1B	1022
HLDA1I	3902	HLDBI	3907	HLDSBX	192	HOLEX	2055	HOMALI	2812	HOMEXX	2648	HOOHAA	745
HOUSEX	3422	ICHALT	1407	ICOMPR	1315	ICONPR	1340	IEORCI	1310	IERASC	1643	IERRCT	1641
IHALTI	1422	INCLDX	1459	INDEX1	89	INDEX2	94	INDEX3	99	INDRBI	2071	IOARBI	1947
IOCALT	106	IOCEOF	141	IOCSAV	3810	IODTBI	3577	IOMETS	1335	IRWRED	1344	ITAPEC	1294
ITROWI	1383	KDIOCS	1571	KINGSX	1463	LABDIO	580	LABDTF	350	LABELX	1119	LABTBI	3620
LBLMVX	3453	LBLTBL	3846	LEAVEI	167	LENGTH	743	LETBEI	171	LEXITX	1260	LIPUTX	186
LITORG	1358	LMAINX	86	LMNX	3330	LODPAR	2219	LONGI	2157	LOOPWX	2606	LOPUTI	3998
LOPUTX	3997	LORGSA	918	LORGSB	494	LOWERX	1546	LOZENG	1057	LOZSCX	3033	LSTCDB	686
LSTPAR	2675	LUNETI	3334	LZCNTX	3238	LZFNDX	3026	MACROB	931	MAINXI	1	MAINXX	1
MANYA	633	MASETX	1433	MASKSX	2144	MCOUTB	958	MIDLEX	3822	MINUS2	2	MINUS3	3
MLBLZX	3468	MODXZI	3430	MOVE3X	3341	MOVECX	1520	MOVINP	1199	MSUBTX	2700	NEWEED	2554
NEWEST	1598	NEWSCN	1006	NEWWRT	2135	NEXREC	681	NEXTCD	2566	NOALTB	2820	NOCALX	2220
NOPCLI	183	NOPJBI	205	NORDRL	1612	NOROTX	1375	NOSIRA	914	NOSOLI	131	NOTERI	220
NPCLXI	201	NPJBXI	216	NROTCX	1411	NTPERA	881	NUMERC	1541	NUORIG	1044	NWEXTI	1101
NWSCNL	1021	OKAYB	467	OPDARI	1626	OPDFND	2687	OPDRTN	2625	OPDSCN	2614	OPPENT	3535
ORDNI	3185	OTHERI	101	OUTCLI	119	OUTIOC	859	OUTMCB	943	OUTPTI	3912	OUTPTX	3912
OUTS2A	758	OUTSBX	2641	OUTSDX	3167	OVEJKI	2020	OVERBI	2006	OVERI	1649	OVEXZI	3513
OVLAY2	2732	OVLY3I	341	OVLY4I	434	PACKSI	3001	PACKXI	2943	PARKSI	2993	PARTBX	466
PASS2I	1506	PASSII	1460	POTSX	1415	PREEMB	506	PREPS2	662	PREVSX	3872	PROPRE	2840
PRTNER	3542	PUNCHI	101	PUTINX	1244	QUEENX	2216	RDT4AI	3241	RDTP1X	2865	READSI	3910
READTA	467	REASBI	1173	REATBI	3727	RECXZI	3455	REDA	132	REDEXT	806	REDREC	774
REGENI	3144	REGLI	2927	REWXZI	3500	RHOA	763	RIVERI	2494	RNDTFI	2516	ROBINI	623
RSOLVI	175	RTWEDA	677	RTWEDI	798	RWDEXT	3483	RWDTBI	3695	SAVCDI	2698	SAVX1X	1611
SAVX2I	3889	SAVX3X	3898	SAVXL1	3865	SAVXL2	3853	SAVXTI	3330	SAVXXI	3319	SBGRDX	3746
SBROTX	2633	SCANLI	2559	SCANLX	2423	SCANXI	2555	SCANXX	2419	SCNATX	2513	SCNSWI	1618
SEARCH	2108	SEEKI	1692	SEEKOP	2636	SETDSW	2505	SETITI	2602	SETWMS	2606	SGCX	2718
SHIFTL	3174	SHORTI	750	SIMPLE	1338	SKELCX	2917	SLAMX	2345	SLASHX	2108	SOFTI	3268
SOLUTX	3523	SOLVED	2872	SPADEX	2209	SPCASI	3174	SPECLI	337	SPOUTX	3433	SPTYPX	3378
STARTA	101	STARTI	101	STARTX	1900	STENDX	450	STRING	156	SUBSET	2119	SUREXX	1308
SVCDXI	2717	SWITCH	2301	SWMA1A	526	SWMA1B	752	SWMA2A	533	SWMA2B	759	SYMNMI	340
SYMNMX	1601	SYSTMX	3356	TABLEI	1374	TAPTBI	3533	TDF1I	2723	TDF4A	699	TDF4AI	3135
TDF4I	812	TDF5X	1589	TDF6I	764	TDF6X	2624	TDF9I	412	TDFEOJ	594	TDFEXT	1344
TDFIO5	132	TDFLB2	3229	TDFLIB	3218	TDFRAL	922	TDFSSX	1968	TDFSYS	423	TENSRX	1170
THRUI	634	THRUX	2582	TOTJKI	1995	TOTRBI	1981	TOTXZI	3520	TPRD1X	3492	TREADA	471

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TREADB    697    TRPCKI   3284    TSTENA    775    TUFFI    3103    TUNELI   2888    TWDB1A    693    TWEDBA    653
TYPXZI   3474    UNKNWN   3703    UPENGL   3148    UPPERI    821    VOICEB    101    WALKI    2896    WAREAX   1622
WEDDBX   2547    WEDXTX   2618    WEEDBX   2539    WEEDDX   1565    WHOMI     677    WHOOPS   1605    WHYYYX   2297
WKAREA   2390    WRTALI   3037    WRTEXT    758    WRTREC    721    XCARDS   3909    XXXXX    2290    YESIRA    896
YOURSB    541    YSCALX   2169    ZEROXX    188    ZONBRX   2097    ZONCHX   2104
     *****  **     3 Errors                                                                          ERROR
```