```
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                      JOB   FORTRAN COMPILER -- COMPUTED GOTO PHASE -- PHASE 40
  102                      CTL   6611
  103            *
  104            * STATEMENTS WITH TWO TO TEN EXITS GENERATE IN-LINE INSTRUCTIONS.
  105            *
  106            X1     EQU   89                                                     0089
  107            X2     EQU   94                                                     0094
  108            X3     EQU   99                                                     0099
  109            *
  110            * STUFF IN THE RESIDENT AREA
  111            *
  112            PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                      0110
  113            GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR               0184
  114            SNAPSH EQU   333  CORE DUMP SNAPSHOT                                0333
  115            LOADNX EQU   700  LOAD NEXT OVERLAY                                 0700
  116            CLEARL EQU   707  CS AT START OF OVERLAY LOADER                     0707
  117            CDOVLY EQU   769  1 IF RUNNING FROM CARDS, N IF FROM TAPE           0769
  118            *
  119                      ORG   838                                                        0838
  120            LOADDD EQU   *&1        LOAD ADDRESS                                0838
  121  838 BEGINN SW    GM,GM2                                            7  0838  , S95 T09         4
  122  845 LOOP   BW    DONE,0&X1                                         8  0845  V T20 0|0 1       4
  123  853        MCW   0&X1,SEQNO                                        7  0853  M 0|0 T62         4
  124  860        MCW   SEQNO,SEQNO2                                      7  0860  M T62 T12         4
  125  867        MCW   RBRACK,1&X1                                       7  0867  M T63 0|1         4
  126  874        SBR   TSTBRK&6,1&X1                                     7  0874  H |78 0|1         5
  127  881        C     0&X1                                             4  0881  C 0|0             5
  128  885        SAR   X1                                               4  0885  Q 089             5
  129  889        C     2&X1,KT  COMPUTED GOTO STATEMENT?                 7  0889  C 0|2 T64         5
  130  896        BU    ALMOST    NO                                     5  0896  B T13 /           5
  131  901        S     W2                                               4  0901  S T66             5
  132  905 COUNT  MN    0&X1                                             4  0905  D 0|0             5
  133  909        MN                                                     1  0909  D                 6
  134  910        MN                                                     1  0910  D                 6
  135  911        SAR   X1                                               4  0911  Q 089             6
  136  915        A     KP1,W2                                           7  0915  A T67 T66         6
  137  922        C     W2,KP11  ELEVEN WAYS YET?                         7  0922  C T66 T69         6
  138  929        BE    SYNTAX   YES, SYNTAX ERROR                        5  0929  B S23 S           6
  139  934        C     0&X1,KCOMMA                                      7  0934  C 0|0 T70         6
  140  941        BU    COUNT     COUNT BRANCHES                         5  0941  B 905 /           7
  141  946        MN    0&X1                                             4  0946  D 0|0             7
  142  950        SAR   X1                                               4  0950  Q 089             7
  143  954        B     GETADR                                           4  0954  B /14             7
  144  958        LCA   SEQNO2,0&X3                                       7  0958  L T12 0?0         7
  145  965        LCA   BRANCH&3                                         4  0965  L T59             7
  146  969        LCA                                                    1  0969  L                 7
  147  970        LCA                                                    1  0970  L                 8
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SEQ PG LIN  LABEL  OP     OPERANDS                              SFX CT  LOCN  INSTRUCTION TYPE  CARD

148    971         SBR    X3                                      4 0971  H 099                    8
149    975         SBR    X1,1&X1                                 7 0975  H 089 0|1                8
150         *
151         * GENERATE BCE INSTRUCTIONS TO TEST SELECTOR
152         *
153    982  GENBCE BW     ENDSTM,4&X1                             8 0982  V |53 0|4 1              8
154    990         SW     BCE-6                                   4 0990  , T44                    8
155    994         MN     W2,BCE                                  7 0994  D T66 T50                8
156  1 001         MCW    W3                                      4 1001  M T02                    8
157  1 005         MCW    6&X1                                    4 1005  M 0|6                    9
158  1 009         SAR    X1                                      4 1009  Q 089                    9
159  1 013         CW     BCE-6                                   4 1013  ) T44                    9
160  1 017         MZ     X2ZONE,BCE-5                            7 1017  Y T71 T45                9
161  1 024         MZ     *-4,BCE-2                               7 1024  Y |26 T48                9
162  1 031         LCA    BCE,0&X3                                7 1031  L T50 0?0                9
163  1 038         SBR    X3                                      4 1038  H 099                    9
164  1 042         S      KP1,W2                                  7 1042  S T67 T66               10
165  1 049         B      GENBCE                                  4 1049  B 982                   10
166         *
167  1 053  ENDSTM LCA    GM,0&X3                                 7 1053  L S95 0?0               10
168  1 060         SBR    X3                                      4 1060  H 099                   10
169  1 064  BOTTOM C      0&X1  BOTTOM OF LOOP -- GET DOWN TO     4 1064  C 0|0                   10
170  1 068         SAR    X1      BOTTOM OF STATEMENT             4 1068  Q 089                   10
171  1 072  TSTBRK BCE    LOOP,0,]  NOT TOO BIG IF BRACKET NOT CLOBBERED  8 1072  B 845 000 ]     10
172  1 080         CS     332                                     4 1080  / 332                   11
173  1 084         CS                                             1 1084  /                       11
174  1 085         CC     1                                       2 1085  F 1                     11
175  1 087         MCW    ERROR2,270                              7 1087  M U07 270               11
176  1 094         W                                              1 1094  2                       11
177  1 095         CC     1                                       2 1095  F 1                     11
178  1 097         BCE    HALT,CDOVLY,1                           8 1097  B /10 769 1             11
179  1 105         RWD    1                                       5 1105  U %U1 R                 12
180  1 110  HALT   H      HALT                                    4 1110  . /10                   12
181         *
182         * VERIFY THAT THE FIELD AFTER THE BRANCHES IS AN ADDRESS,
183         * THAT IS, THE DIGIT PART OF ALL THREE CHARACTERS IS IN
184         * THE RANGE 0-9.  MOVE IT TO W3.
185         *
186  1 114  GETADR SBR    GETADX&3                                4 1114  H S22                   12
187  1 118         S      W1                                      4 1118  S U08                   12
188  1 122  GETCH  MN     0&X1,TSTDGT&7                           7 1122  D 0|0 /55               12
189  1 129         SAR    X1                                      4 1129  Q 089                   12
190  1 133         BCE    OKADR,W1,B  TESTED ALL THREE CHARACTERS? 8 1133  B /81 U08 B            12
191  1 141         A      KP1,W1                                  7 1141  A T67 U08               13
192  1 148  TSTDGT BCE    GETCH,DIGITS,0  NUMERIC PART IS A DIGIT? 8 1148  B /22 U18 0            13
193  1 156         B                                              1 1156  B                       13
194  1 157         B                                              1 1157  B                       13
195  1 158         B                                              1 1158  B                       13
196  1 159         B                                              1 1159  B                       13
197  1 160         B                                              1 1160  B                       13
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SEQ PG LIN  LABEL  OP    OPERANDS                            SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  1 161         B                                           1  1161  B                    14
199  1 162         B                                           1  1162  B                    14
200  1 163         B                                           1  1163  B                    14
201  1 164         B                                           1  1164  B                    14
202  1 165  GETGM  BCE   SYNTAX,0&X1,}                         8  1165  B S23 0|0 } GMARK     14
203  1 173         SBR   X1                                    4  1173  H 089                14
204  1 177         B     GETGM                                 4  1177  B /65                14
205  1 181  OKADR  BM    *&5,2&X1                              8  1181  V /93 0|2 K           15
206  1 189         B     GETGM                                 4  1189  B /65                15
207  1 193         MZ    KB1,2&X1                              7  1193  Y U19 0|2            15
208  1 200         MCW   3&X1,W3                               7  1200  M 0|3 T02           15
209  1 207         C     0&X1,GM                               7  1207  C 0|0 S95           15
210  1 214         BU    GETGM                                 5  1214  B /65 /             15
211  1 219  GETADX B     0                                     4  1219  B 000               16
212              *
213  1 223  SYNTAX BWZ   *&5,SEQNO,2                           8  1223  V S35 T62 2         16
214  1 231         B     *&9                                   4  1231  B S43               16
215  1 235         BWZ   *&15,SEQNO-2,2                        8  1235  V S57 T60 2         16
216  1 243         MCW   SEQNO,X2                              7  1243  M T62 094           16
217  1 250         MCW   0&X2,SEQNO                            7  1250  M 0!0 T62           16
218  1 257         CS    332                                   4  1257  / 332               17
219  1 261         CS                                          1  1261  /                   17
220  1 262         SW    GLOBER                                4  1262  , 184               17
221  1 266         MN    SEQNO,247                             7  1266  D T62 247           17
222  1 273         MN                                          1  1273  D                   17
223  1 274         MN                                          1  1274  D                   17
224  1 275         MCW   ERR34                                 4  1275  M U63               17
225  1 279         W                                           1  1279  2                   18
226  1 280         BCV   *&5                                   5  1280  B S89 @             18
227  1 285         B     *&3                                   4  1285  B S91               18
228  1 289         CC    1                                     2  1289  F 1                 18
229  1 291         B     BOTTOM                                4  1291  B |64               18
230              *
231  1 295  GM     DC    @}@                                   1  1295           GMARK       18
232  1 299         DCW   @T840@                                4  1299                       18
233  1 302  W3     DCW   #3                                    3  1302                       18
234  1 305         DCW   #3                                    3  1305                       19
235  1 308         DCW   #3                                    3  1308                       19
236  1 309  GM2    DC    @}@                                   1  1309           GMARK       19
237  1 312  SEQNO2 DC    #3                                    3  1312                       19
238              *
239  1 313  ALMOST SBR   X1,5&X1                               7  1313  H 089 0|5           19
240  1 320  DONE   BSS   SNAPSH,C                              5  1320  B 333 C             19
241  1 325         SBR   CLEARL&3,GMWM                         7  1325  H 710 U69           19
242  1 332         LCA   GOMSK,PHASID                          7  1332  L U68 110           19
243  1 339         B     LOADNX                                4  1339  B 700               20
244              *
245  1 350  BCE    DCW   @BXXXXXXA@  BCE  XXX,XXX,A            8  1350                       20
246  1 351         NOP   1001                                  4  1351  N |01               20
247  1 355         H                                           1  1355  .                   20
```

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

248  1 356  BRANCH B     15992&X3                                           4 1356  B IIB               20
249  1 362  SEQNO  DCW   #3                                                 3 1362                      20
250  1 363  RBRACK DCW   @]@                                                1 1363                      20
251  1 364  KT     DCW   @T@   COMPUTED GOTO STATEMENT CODE                 1 1364                      21
252  1 366  W2     DCW   #2                                                 2 1366                      21
253  1 367  KP1    DCW   &1                                                 1 1367                      21
254  1 369  KP11   DCW   &11                                               2 1369                      21
255  1 370  KCOMMA DCW   @,@                                                1 1370                      21
256  1 371  X2ZONE DCW   @K@                                                1 1371                      21
257  1 407  ERROR2 DCW   @MESSAGE 2 - OBJECT PROGRAM TOO LARGE@            36 1407                      22
258  1 408  W1     DCW   #1                                                 1 1408                      22
259  1 418  DIGITS DCW   @0123456789@                                      10 1418                      23
260  1 419  KB1    DCW   #1                                                 1 1419                      23
261  1 463  ERR34  DCW   @ERROR 34 - COMPUTED GO TO SYNTAX, STATEMENT @    44 1463                      25
262  1 468  GOMSK  DCW   @GOMSK@                                            5 1468                      25
263  1 469  GMWM   DCW   @}@                                                1 1469             GMARK    25
264              ORG   201                                                         0201
265     203        DSA   LOADDD    LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM     3 0203  838                26
266              EX    BEGINN                                                      B 838              27
267              END                                                              / 000 080
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SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ALMOST	1313	BCE	1350	BEGINN	838	BOTTOM	1064	BRANCH	1356	CDOVLY	769	CLEARL	707
COUNT	905	DIGITS	1418	DONE	1320	ENDSTM	1053	ERR34	1463	ERROR2	1407	GENBCE	982
GETADR	1114	GETADX	1219	GETCH	1122	GETGM	1165	GLOBER	184	GM	1295	GM2	1309
GMWM	1469	GOMSK	1468	HALT	1110	KB1	1419	KCOMMA	1370	KP1	1367	KP11	1369
KT	1364	LOADDD	838	LOADNX	700	LOOP	845	OKADR	1181	PHASID	110	RBRACK	1363
SEQNO	1362	SEQNO2	1312	SNAPSH	333	SYNTAX	1223	TSTBRK	1072	TSTDGT	1148	W1	1408
W2	1366	W3	1302	X1	89	X2	94	X2ZONE	1371	X3	99		