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

                          FORTRAN COMPILER -- REPLACE PHASE ONE -- PHASE 51                          PAGE    1

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

 101               JOB   FORTRAN COMPILER -- REPLACE PHASE ONE -- PHASE 51
 102               CTL   6611
 103         *
 104         * OBJECT-TIME INSTRUCTIONS WHICH REFERENCE STATEMENT NUMBERS
 105         * ARE CORRECTED TO THE OBJECT-TIME ADDRESSES OF THE
 106         * STATEMENT.  SUBSCRIPT STRINGS ARE CLEANED UP.
 107         *
 108         X1     EQU   89                                                        0089
 109         X2     EQU   94                                                        0094
 110         X3     EQU   99                                                        0099
 111         *
 112         * STUFF IN THE RESIDENT AREA
 113         *
 114         PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                        0110
 115         SUBSCR EQU   116  WM CLEARED IF SUBSCRIPT CODE NEEDED                 0116
 116         SEQTAB EQU   148  BOTTOM OF SEQUENCE NUMBER TABLE - 2                 0148
 117         BOTFMT EQU   154  BOTTOM OF FORMAT STRINGS OR NUMBER TABLE - 1        0154
 118         NEGARY EQU   163  16000 - ARYSIZ                                      0163
 119         SNAPSH EQU   333  CORE DUMP SNAPSHOT                                  0333
 120         LOADNX EQU   700  LOAD NEXT OVERLAY                                   0700
 121         CLEARL EQU   707  CS AT START OF OVERLAY LOADER                       0707
 122         LOADXX EQU   793  EXIT FROM OVERLAY LOADER                           0793
 123         CLRBOT EQU   833  BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER          0833
 124         *
 125         * RUNTIME ROUTINES
 126         *
 127         ARITF  EQU   700 ARITHMETIC INTERPRETER                               0700
 128         *
 129               ORG   838                                                             0838
 130    838  BEGINN MCW   X3,SX3                                                 7  0838  M 099 S49           4
 131    845         MCW   SEQTAB,*&7                                           7  0845  M 148 858           4
 132    852         MCW   KGREAT,0                                             7  0852  M S50 000           4
 133    859         MCW   BOTFMT,X2                                            7  0859  M 154 094           4
 134    866         MCW   KGREAT,1600                                          7  0866  M S50 W00           4
 135    873  GETSUB BCE   FIND,0&X2,$  WITHIN TEN OF TOP OF SUBSCRIPT?   V3M4  8  0873  B S71 0!0 $          5
 136    881         CHAIN 9                                                                          MACRO
 137               BCE                                                         1  0881  B                GEN     5
 138               BCE                                                         1  0882  B                GEN     5
 139               BCE                                                         1  0883  B                GEN     5
 140               BCE                                                         1  0884  B                GEN     5
 141               BCE                                                         1  0885  B                GEN     5
 142               BCE                                                         1  0886  B                GEN     5
 143               BCE                                                         1  0887  B                GEN     6
 144               BCE                                                         1  0888  B                GEN     6
 145               BCE                                                         1  0889  B                GEN     6
 146    890  BOTEX  BCE   BOTTOM,0&X2,>  GREATER SIGN BELOW CODE?               8  0890  B |15 0!0 >          6
 147    898         CHAIN 9                                                                          MACRO
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
148                 BCE                                                     1  0898  B           GEN      6
149                 BCE                                                     1  0899  B           GEN      6
150                 BCE                                                     1  0900  B           GEN      6
151                 BCE                                                     1  0901  B           GEN      7
152                 BCE                                                     1  0902  B           GEN      7
153                 BCE                                                     1  0903  B           GEN      7
154                 BCE                                                     1  0904  B           GEN      7
155                 BCE                                                     1  0905  B           GEN      7
156                 BCE                                                     1  0906  B           GEN      7
157    907          SBR   X2                                                4  0907  H 094               7
158    911          B     GETSUB                                            4  0911  B 873               8
159    915  GETSB2  BCE   SUBTOP,0&X2,$  TOP OF SUBSCRIPT?                  8  0915  B 931 0!0 $         8
160    923          SBR   X2                                                4  0923  H 094               8
161    927          B     GETSB2                                            4  0927  B 915               8
162    931  SUBTOP  MN    0&X2                                              4  0931  D 0!0               8
163    935          SAR   X2                                                4  0935  Q 094               8
164    939          BCE   SUBBOT,0&X2,$  WITHIN 16 OF BOTTOM OF SUBSCRIPT?  8  0939  B 966 0!0 $         8
165    947          CHAIN 15                                                                MACRO
166                 BCE                                                     1  0947  B           GEN      9
167                 BCE                                                     1  0948  B           GEN      9
168                 BCE                                                     1  0949  B           GEN      9
169                 BCE                                                     1  0950  B           GEN      9
170                 BCE                                                     1  0951  B           GEN      9
171                 BCE                                                     1  0952  B           GEN      9
172                 BCE                                                     1  0953  B           GEN      9
173                 BCE                                                     1  0954  B           GEN     10
174                 BCE                                                     1  0955  B           GEN     10
175                 BCE                                                     1  0956  B           GEN     10
176                 BCE                                                     1  0957  B           GEN     10
177                 BCE                                                     1  0958  B           GEN     10
178                 BCE                                                     1  0959  B           GEN     10
179                 BCE                                                     1  0960  B           GEN     10
180                 BCE                                                     1  0961  B           GEN     11
181    962          B     GETSUB                                            4  0962  B 873               11
182    966  SUBBOT  CW    SUBSCR                                            4  0966  ) 116               11
183    970  DEC3    MN    0&X2                                              4  0970  D 0!0               11
184    974          MN                                                      1  0974  D                   11
185    975          MN                                                      1  0975  D                   11
186    976          SAR   X2                                                4  0976  Q 094               11
187    980          SW    1&X2                                              4  0980  , 0!1               12
188    984          BCE   DEC1,0&X2,$                                       8  0984  B |03 0!0 $         12
189    992          MZ    *-4,2&X2                                          7  0992  Y 994 0!2           12
190    999          B     DEC3                                              4  0999  B 970               12
191  1 003  DEC1    MN    0&X2                                              4  1003  D 0!0               12
192  1 007          SAR   X2                                                4  1007  Q 094               12
193  1 011          B     GETSUB                                            4  1011  B 873               12
194  1 015  BOTTOM  MCW   APASS2,BOTEX&3                                    7  1015  M S53 893           13
195  1 022          MCW   X3,X2                                             7  1022  M 099 094           13
196  1 029          B     GETSUB                                            4  1029  B 873               13
197  1 033  PASS2X  BCE   DONE,0&X3,                                       8  1033  B S10 0?0           13
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 041          MCW   X3,LINK&6                                            7  1041  M 099 /37           13
199  1 048          C     0&X3                                                 4  1048  C 0?0               13
200  1 052          SBR   X2                                                   4  1052  H 094               14
201  1 056          SBR   X3                                                   4  1056  H 099               14
202  1 060          BCE   TARITF,1&X3,|  TOP OF ARITHMETIC ASSIGNMENT          8  1060  B /74 0?1 |         14
203  1 068  TESTWM BW    PASS2X,4&X2                                          8  1068  V |33 0!4 1         14
204  1 076          BWZ                                                        1  1076  V                   14
205  1 077          BWZ                                                        1  1077  V                   14
206  1 078          BM    NOLINK,3&X2                                          8  1078  V /42 0!3 K         14
207  1 086          C     4&X2,A277X3                                          7  1086  C 0!4 S56           15
208  1 093          BE    PASS2X                                               5  1093  B |33 S             15
209  1 098          BWZ   ADDLNK,3&X2,B                                        8  1098  V /17 0!3 B         15
210  1 106  BUMPX2 SBR   X2,3&X2                                              7  1106  H 094 0!3           15
211  1 113          B     TESTWM                                               4  1113  B |68               15
212  1 117  ADDLNK MCW   4&X2,X1  WHY NOT JUST MA 4&X2,LINK&6 ???             7  1117  M 0!4 089           15
213  1 124          MZ    *-6,*&6  X1 TAG                                      7  1124  Y /24 /36           16
214  1 131  LINK   SBR   4&X2,0                                               7  1131  H 0!4 000           16
215  1 138          B     BUMPX2                                               4  1138  B /06               16
216  1 142  NOLINK MCW   4&X2,X1                                              7  1142  M 0!4 089           16
217  1 149          MA    NEGARY,X1                                            7  1149  # 163 089           16
218  1 156          MCW   0&X1,X1                                             7  1156  M 0|0 089           16
219  1 163          MCW   X1,4&X2                                             7  1163  M 089 0!4           17
220  1 170          B     BUMPX2                                               4  1170  B /06               17
221  1 174  TARITF BW    *&5,2&X3  NEED TO LOOK FOR BRANCH TO ARITF?          8  1174  V /86 0?2 1         17
222  1 182          B     PASS2X                                               4  1182  B |33               17
223  1 186  FARITF C     0&X3  FIND THE BRANCH TO ARITF                       4  1186  C 0?0               17
224  1 190          SBR   X3                                                   4  1190  H 099               17
225  1 194          C     4&X3,BARITF&3  BRANCH TO ARITHMETIC INTERPRETER?     7  1194  C 0?4 S60           17
226  1 201          BE    PASS2X         YES                                   5  1201  B |33 S             18
227  1 206          B     FARITF         NO, LOOK AGAIN                        4  1206  B /86               18
228  1 210  DONE   MCW   SX3,X3                                               7  1210  M S49 099           18
229  1 217          BSS   SNAPSH,C                                             5  1217  B 333 C             18
230  1 222          SBR   LOADXX&3,934                                        7  1222  H 796 934           18
231  1 229          SBR   CLEARL&3,GMWM                                        7  1229  H 710 S96           18
232  1 236          LCA   LOAD52,PHASID                                        7  1236  L S70 110           19
233  1 243          B     LOADNX                                               4  1243  B 700               19
234  1 249  SX3    DCW   #3                                                   3  1249                      19
235  1 250  KGREAT DCW   @>@  GREATER THAN SIGN                               1  1250                      19
236  1 253  APASS2 DSA   PASS2X                                               3  1253  |33                 19
237  1 256  A277X3 DSA   277&X3                                              3  1256  2G7                 19
238  1 257  BARITF B     ARITF                                                4  1257  B 700               19
239  1 270  LOAD52 DCW   @LOAD 52B&C@                                        10  1270                      20
240  1 271  FIND   BCE   BOTEX,0&X2,>    GREATER SIGN BELOW CODE?       V3M4  8  1271  B 890 0!0 >         20
241  1 279          BCE   SUBTOP,0&X2,$   TOP OF SUBSCRIPT?              V3M4  8  1279  B 931 0!0 $         20
242  1 287          SBR   X2                                             V3M4  4  1287  H 094               20
243  1 291          BIN   FIND,                                          V3M4  5  1291  B S71               20
244  1 296  GMWM   DCW   @}@                                                1  1296              GMARK   20
245                 EX    BEGINN                                                     B 838                 21
246                 END                                                              / 000 080
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
A277X3	1256	ADDLNK	1117	APASS2	1253	ARITF	700	BARITF	1257	BEGINN	838	BOTEX	890
BOTFMT	154	BOTTOM	1015	BUMPX2	1106	CLEARL	707	CLRBOT	833	DEC1	1003	DEC3	970
DONE	1210	FARITF	1186	FIND	1271	GETSB2	915	GETSUB	873	GMWM	1296	KGREAT	1250
LINK	1131	LOAD52	1270	LOADNX	700	LOADXX	793	NEGARY	163	NOLINK	1142	PASS2X	1033
PHASID	110	SEQTAB	148	SNAPSH	333	SUBBOT	966	SUBSCR	116	SUBTOP	931	SX3	1249
TARITF	1174	TESTWM	1068	X1	89	X2	94	X3	99				