```
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         LOADDD EQU   *&1          LOAD ADDRESS                            0838
 131    838  BEGINN MCW   X3,SX3                                             7  0838  M 099 S49           4
 132    845         MCW   SEQTAB,*&7                                         7  0845  M 148 858           4
 133    852         MCW   KGREAT,0                                           7  0852  M S50 000           4
 134    859         MCW   BOTFMT,X2                                          7  0859  M 154 094           4
 135    866         MCW   KGREAT,1600                                        7  0866  M S50 W00           4
 136    873  GETSUB BCE   GETSB2,0&X2,$  WITHIN TEN OF TOP OF SUBSCRIPT?     8  0873  B 915 0!0 $         5
 137    881         CHAIN 9                                                                 MACRO
 138               BCE                                                      1  0881  B           GEN     5
 139               BCE                                                      1  0882  B           GEN     5
 140               BCE                                                      1  0883  B           GEN     5
 141               BCE                                                      1  0884  B           GEN     5
 142               BCE                                                      1  0885  B           GEN     5
 143               BCE                                                      1  0886  B           GEN     5
 144               BCE                                                      1  0887  B           GEN     6
 145               BCE                                                      1  0888  B           GEN     6
 146               BCE                                                      1  0889  B           GEN     6
 147    890  BOTEX  BCE   BOTTOM,0&X2,>  GREATER SIGN BELOW CODE?            8  0890  B |15 0!0 >         6
```

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

148    898         CHAIN 9                                                                                MACRO
149                BCE                                                          1  0898  B           GEN      6
150                BCE                                                          1  0899  B           GEN      6
151                BCE                                                          1  0900  B           GEN      6
152                BCE                                                          1  0901  B           GEN      7
153                BCE                                                          1  0902  B           GEN      7
154                BCE                                                          1  0903  B           GEN      7
155                BCE                                                          1  0904  B           GEN      7
156                BCE                                                          1  0905  B           GEN      7
157                BCE                                                          1  0906  B           GEN      7
158    907         SBR   X2                                                     4  0907  H 094                7
159    911         B     GETSUB                                                 4  0911  B 873                8
160    915  GETSB2 BCE   SUBTOP,0&X2,$  TOP OF SUBSCRIPT?                       8  0915  B 931 0!0 $          8
161    923         SBR   X2                                                     4  0923  H 094                8
162    927         B     GETSB2                                                 4  0927  B 915                8
163    931  SUBTOP MN    0&X2                                                   4  0931  D 0!0                8
164    935         SAR   X2                                                     4  0935  Q 094                8
165    939         BCE   SUBBOT,0&X2,$  WITHIN 16 OF BOTTOM OF SUBSCRIPT?       8  0939  B 966 0!0 $          8
166    947         CHAIN 15                                                                               MACRO
167                BCE                                                          1  0947  B           GEN      9
168                BCE                                                          1  0948  B           GEN      9
169                BCE                                                          1  0949  B           GEN      9
170                BCE                                                          1  0950  B           GEN      9
171                BCE                                                          1  0951  B           GEN      9
172                BCE                                                          1  0952  B           GEN      9
173                BCE                                                          1  0953  B           GEN      9
174                BCE                                                          1  0954  B           GEN     10
175                BCE                                                          1  0955  B           GEN     10
176                BCE                                                          1  0956  B           GEN     10
177                BCE                                                          1  0957  B           GEN     10
178                BCE                                                          1  0958  B           GEN     10
179                BCE                                                          1  0959  B           GEN     10
180                BCE                                                          1  0960  B           GEN     10
181                BCE                                                          1  0961  B           GEN     11
182    962         B     GETSUB                                                 4  0962  B 873               11
183    966  SUBBOT CW    SUBSCR                                                 4  0966  ) 116               11
184    970  DEC3   MN    0&X2                                                   4  0970  D 0!0               11
185    974         MN                                                           1  0974  D                   11
186    975         MN                                                           1  0975  D                   11
187    976         SAR   X2                                                     4  0976  Q 094               11
188    980         SW    1&X2                                                   4  0980  , 0!1               12
189    984         BCE   DEC1,0&X2,$                                            8  0984  B |03 0!0 $         12
190    992         MZ    *-4,2&X2                                               7  0992  Y 994 0!2           12
191    999         B     DEC3                                                   4  0999  B 970               12
192  1 003  DEC1   MN    0&X2                                                   4  1003  D 0!0               12
193  1 007         SAR   X2                                                     4  1007  Q 094               12
194  1 011         B     GETSUB                                                 4  1011  B 873               12
195  1 015  BOTTOM MCW   APASS2,BOTEX&3                                         7  1015  M S53 893           13
196  1 022         MCW   X3,X2                                                  7  1022  M 099 094           13
197  1 029         B     GETSUB                                                 4  1029  B 873               13
```

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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 033  PASS2X BCE   DONE,0&X3,                                           8  1033  B S10 0?0           13
199  1 041         MCW   X3,LINK&6                                           7  1041  M 099 /37           13
200  1 048         C     0&X3                                                4  1048  C 0?0               13
201  1 052         SBR   X2                                                  4  1052  H 094               14
202  1 056         SBR   X3                                                  4  1056  H 099               14
203  1 060         BCE   TARITF,1&X3,|  TOP OF ARITHMETIC ASSIGNMENT         8  1060  B /74 0?1 |         14
204  1 068  TESTWM BW    PASS2X,4&X2                                         8  1068  V |33 0!4 1         14
205  1 076         BWZ                                                       1  1076  V                   14
206  1 077         BWZ                                                       1  1077  V                   14
207  1 078         BM    NOLINK,3&X2                                         8  1078  V /42 0!3 K         14
208  1 086         C     4&X2,A277X3                                         7  1086  C 0!4 S56           15
209  1 093         BE    PASS2X                                              5  1093  B |33 S             15
210  1 098         BWZ   ADDLNK,3&X2,B                                       8  1098  V /17 0!3 B         15
211  1 106  BUMPX2 SBR   X2,3&X2                                            7  1106  H 094 0!3           15
212  1 113         B     TESTWM                                              4  1113  B |68               15
213  1 117  ADDLNK MCW   4&X2,X1  WHY NOT JUST MA 4&X2,LINK&6 ???           7  1117  M 0!4 089           15
214  1 124         MZ    *-6,*&6  X1 TAG                                     7  1124  Y /24 /36           16
215  1 131  LINK   SBR   4&X2,0                                             7  1131  H 0!4 000           16
216  1 138         B     BUMPX2                                              4  1138  B /06               16
217  1 142  NOLINK MCW   4&X2,X1                                            7  1142  M 0!4 089           16
218  1 149         MA    NEGARY,X1                                           7  1149  # 163 089           16
219  1 156         MCW   0&X1,X1                                            7  1156  M 0|0 089           16
220  1 163         MCW   X1,4&X2                                            7  1163  M 089 0!4           17
221  1 170         B     BUMPX2                                              4  1170  B /06               17
222  1 174  TARITF BW    *&5,2&X3  NEED TO LOOK FOR BRANCH TO ARITF?         8  1174  V /86 0?2 1         17
223  1 182         B     PASS2X                                              4  1182  B |33               17
224  1 186  FARITF C     0&X3  FIND THE BRANCH TO ARITF                      4  1186  C 0?0               17
225  1 190         SBR   X3                                                  4  1190  H 099               17
226  1 194         C     4&X3,BARITF&3  BRANCH TO ARITHMETIC INTERPRETER?     7  1194  C 0?4 S60           17
227  1 201         BE    PASS2X         YES                                  5  1201  B |33 S             18
228  1 206         B     FARITF         NO, LOOK AGAIN                       4  1206  B /86               18
229  1 210  DONE   MCW   SX3,X3                                             7  1210  M S49 099           18
230  1 217         BSS   SNAPSH,C                                            5  1217  B 333 C             18
231  1 222         SBR   LOADXX&3,934                                       7  1222  H 796 934           18
232  1 229         SBR   CLEARL&3,GMWM                                       7  1229  H 710 S71           18
233  1 236         LCA   LOAD52,PHASID                                       7  1236  L S70 110           19
234  1 243         B     LOADNX                                              4  1243  B 700               19
235  1 249  SX3    DCW   #3                                                  3  1249                      19
236  1 250  KGREAT DCW   @>@  GREATER THAN SIGN                              1  1250                      19
237  1 253  APASS2 DSA   PASS2X                                             3  1253  |33                 19
238  1 256  A277X3 DSA   277&X3                                            3  1256  2G7                 19
239  1 257  BARITF B     ARITF                                               4  1257  B 700               19
240  1 270  LOAD52 DCW   @LOAD 52B&C@                                      10  1270                      20
241  1 271  GMWM   DCW   @}@                                                1  1271            GMARK     20
242                ORG   201                                                       0201
243    203         DSA   LOADDD    LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM    3  0203  838                 21
244                EX    BEGINN                                                    B 838               22
245                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	GETSB2	915	GETSUB	873	GMWM	1271	KGREAT	1250	LINK	1131
LOAD52	1270	LOADDD	838	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				