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

101                 JOB   FORTRAN COMPILER -- STMT NUMBERS FOUR -- PHASE 30
102                 CTL   6611
103         *
104         * THE THREE-CHARACTER EQUIVALENTS OF STATEMENT NUMBERS WHICH
105         * IDENTIFY STATEMENTS ARE MATCHED AGAINST THE STATEMENT NUMBER
106         * TABLE.  WHEN THE EQUIVALENT IS FOUND, THE SEQUENCE NUMBER
107         * GENERATED BY THE COMPILER FOR THAT STATEMENT IS SUBSTITUTED
108         * IN THE TABLE.  UNREFERENCED AND MULTI-DEFINED STATEMENT
109         * NUMBERS ARE NOTED.
110         *
111         X1      EQU   89                                                0089
112         X2      EQU   94                                                0094
113         X3      EQU   99                                                0099
114         *
115         * STUFF IN THE RESIDENT AREA
116         *
117         SEQTAB EQU   148  BOTTOM OF SEQUENCE NUMBER TABLE - 2           0148
118         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR           0184
119         *
120                EXT00   SNAPSH, LOADNX, CDOVLY                                                MACRO
121         SNAPSH EQU   333                                                0333                GEN
122         PHASLD EQU   381                                                0381                GEN
123         SNAPEX EQU   564                                                0564                GEN
124         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                     0700                GEN
125         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE      0700                GEN
126         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                       0704                GEN
127         TPERR  EQU   728                                                0728                GEN
128         *
129                EXT03   START, TOP OF PHASE 3                                                 MACRO
130         BEGIN3 EQU   838                                                0838                GEN
131         TOP3   EQU   2600                                               2600                GEN
132                EXT28   STUFF IN PHASE 28                                                     MACRO
133         TOPCD9 EQU   840   TOP OF CODE & 5 & X00 - 1                   0840                GEN
134         DIFF16 EQU   846   16 * (BOTTAB - 1 - TOPCD9)                  0846                GEN
135         BNDRY  EQU   849   TOPCD9 + 0.48 * (BOTTAB - 1 - TOPCD9)       0849                GEN
136         BOTTAB EQU   852   BOTTOM OF TABLES                             0852                GEN
137         MOVEDN EQU   853                                                0853                GEN
138         BEGN28 EQU   937   TOP OF CODE                                 0937                GEN
139                EXT29   STUFF IN PHASE 29                                                     MACRO
140         MOVE   EQU   937                                                0937                GEN
141         HASH   EQU   964                                                0964                GEN
142         SOUGHT EQU   1051                                               1051                GEN
143         SX1A   EQU   1054                                               1054                GEN
144         SEQCOD EQU   1062                                               1062                GEN
145         SAVBOT EQU   1065  BOTTOM OF I/O STRINGS, FORMAT, NUMBERS - 1  1065                GEN
146         TOOBIG EQU   1066                                               1066                GEN
147         SX1    EQU   1113                                               1113                GEN
148         BEGN29 EQU   1150                                               1150                GEN
149         SAUCE  EQU   3200                                               3200                GEN
150         *
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

151         110    DCW   @STNUM FOR@                                        9  0110                      1
152         *
153         PHAS30 LDPH  STNUM FOR,LOADAD,BEGN30,,,30                                                MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]                        GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                                            GEN
            *                                                                                        GEN
            * LOAD A BLOCK                                                                           GEN
            *                                                                                        GEN
154         )6J005 EQU   110  PHASE ID                                        0110                   GEN
155         )6K005 EQU   700  LOAD NEXT PHASE                                 0700                   GEN
156         )6L005 EQU   704  TAPE READ INSTRUCTION                           0704                   GEN
157         )6M005 EQU   728  TAPE ERROR HANDLER                              0728                   GEN
            *                                                                                        GEN
158                ORG   201                                                        0201
159         PHAS30 BSS   )8J005,G                                             5  0201  B 257 G     GEN      2   257
160                NOP     TO PATCH IN TRAPS FOR DEBUGGING                    1  0206  N           GEN      2
161         )0J005 EQU   *&1                                                  0207                   GEN
162                LCA   )9J005,)6J005                                        7  0207  L 281 110   GEN      2   281     110
163                BCE   )1J005,)6K005,1    Q: LOADING FROM CARDS?           8  0214  B 250 700 1 GEN      2   250     700
164                BCE   )1J005,)6L005&4,0  Q: LOADING FROM AUTOCODER TAPE?   8  0222  B 250 708 0 GEN      2   250     708
165                RTW   1,LOADAD          READ THE BLOCK                     8  0230  L %U1 /50 R GEN      2   %U1    1150
166                BER   )6M005            Q: TAPE ERROR?                     5  0238  B 728 L     GEN      3   728
167                CS    BEGN30,)9R005     ENTER THE BLOCK                    7  0243  / /50 285   GEN      3  1150     285
168         )1J005 CS    )6K005,)9R005     LOAD CARDS OR AUTOCODER TAPE       7  0250  / 700 285   GEN      3   700     285
169         )8J005 SW    )9R005                                             4  0257  , 285       GEN      3   285
170                MU    %T0,)8K005,W                                       8  0261  M %T0 273 W GEN      3   %T0     273
171                H     )0J005                                             4  0269  . 207       GEN      3   207
172         )8K005 EQU   *&1                                                  0273                   GEN
173         )9J005 DCW   @STNUM FOR@          PHASE ID                       9  0281                   GEN      4
174                DCW   #1                                                  1  0282                   GEN      4
175                DC    @30@          PHASE NUMBER                         2  0284                   GEN      4
176         )9R005 DCW   @}@                                                1  0285                   GEN      4
177                XFR   PHAS30                                                   B 201                        4   201
178         *
179                ORG   BEGN29                                                    1150
180         LOADAD EQU   *&1          LOAD ADDRESS                             1150
181  1 187  BEGN30 LCA   KB1,0&X2                                             7  1150  L V51 0!0           5  1551     000+2
182  1 194         SW    GM                                                   4  1157  , W44               5  1644
183  1 198         MCW   X1,X2                                               7  1161  M 089 094           5   089     094
184  1 205  NXSTMT BCE   DONE,0&X1,                                          8  1168  B U47 0|0           5  1447     000+1
185  1 213         MCW   0&X1,SEQCOD                                        7  1176  M 0|0 |62           5   000+1  1062
186  1 220         SAR   X1                                                 4  1183  Q 089               5   089
187  1 224         BCE   NOLABL,0&X1,}                                      8  1187  B U95 0|0 } GMARK   6  1495     000+1
188  1 232         B     HASH  COMPUTE HASH PROBE                           4  1195  B 964               6   964
189         * LOOKUP IN HASH TABLE
190  1 236         MCW   NOP,SWITCH                                         7  1199  M V52 T53           6  1552    1353
191  1 243  LOOKL1 MCW   0&X1,X3                                            7  1206  M 0|0 099           6   000+1   099
192  1 250         SAR   X1                                                 4  1213  Q 089               6   089
193  1 254         BW    LOOK2,1&X1                                         8  1217  V S57 0|1 1         6  1257     001+1
194  1 262         BCE   SWITCH,3&X1,<  BOTTOM OF THE TABLE                 8  1225  B T53 0|3 <         7  1353     003+1
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195  1 270         BCE   UNREF,1&X1,  PROBED HASH ENTRY IS EMPTY        8  1233  B T75 0|1           7  1375     001+1
196  1 278         C     3&X1,SOUGHT                                    7  1241  C 0|3 |51           7   003+1  1051
197  1 285         BU    LOOKL1                                         5  1248  B S06 /             7  1206
198  1 290         B     DOUBLE                                         4  1253  B U09               7  1409
199  1 294  LOOK2  C     0&X3,SOUGHT                                    7  1257  C 0?0 |51           7   000+3  1051
200  1 301         BU    LOOKL1                                         5  1264  B S06 /             8  1206
201  1 306         MZ    SEQCOD-1,SVZONE                                7  1269  Y |61 V53           8  1061    1553
202  1 313         MZ    *-4,SEQCOD-1                                   7  1276  Y S78 |61           8  1278    1061
203  1 320         MCW   SEQCOD,0&X3                                    7  1283  M |62 0?0           8  1062     000+3
204  1 327         SBR   X3                                             4  1290  H 099               8   099
205  1 331         CW    1&X3  NO WM IN LABEL TABLE MEANS DEFINED       4  1294  ) 0?1               8   001+3
206  1 335         MCW   3&X1,SEQCOD                                    7  1298  M 0|3 |62           9   003+1  1062
207  1 342         MZ    SVZONE,SEQCOD-1                                7  1305  Y V53 |61           9  1553    1061
208  1 349         MCW   SOUGHT,3&X1                                    7  1312  M |51 0|3           9  1051     003+1
209  1 356         CW    1&X1  NO WM IN HASH TABLE MEANS DEFINED         4  1319  ) 0|1               9   001+1
210  1 360  LOOK3  MCW   SX1A,X1                                        7  1323  M |54 089           9  1054     089
211  1 367  NOLABB SBR   X1,4&X1  BACK HERE FROM NOLABL                 7  1330  H 089 0|4           9   089     004+1
212  1 374         MCW   SEQCOD                                         4  1337  M |62              10  1062
213  1 378         B     MOVE                                           4  1341  B 937              10   937
214  1 382         B     MOVE                                           4  1345  B 937              10   937
215  1 386         B     NXSTMT                                         4  1349  B /68              10  1168
216           *
217  1 390  SWITCH NOP   UNREF  GOT HERE TWICE?                         4  1353  N T75              10  1375
218  1 394         MCW   BRANCH,SWITCH                                  7  1357  M V54 T53          10  1554    1353
219  1 401         MCW   BNDRY,X1                                       7  1364  M 849 089          10   849     089
220  1 408         B     LOOKL1                                         4  1371  B S06              11  1206
221           *
222  1 412  UNREF  CS    332                                            4  1375  / 332              11   332
223  1 416         CS                                                   1  1379  /                  11
224  1 417         MN    SEQCOD,250                                     7  1380  D |62 250          11  1062     250
225  1 424         MN                                                   1  1387  D                  11
226  1 425         MN                                                   1  1388  D                  11
227  1 426         MCW   ERR19                                          4  1389  M W01              11  1601
228  1 430         W                                                    1  1393  2                  12
229  1 431         BCV   *&5                                           5  1394  B U03 @            12  1403
230  1 436         B     *&3                                            4  1399  B U05              12  1405
231  1 440         CC    1                                              2  1403  F 1                12
232  1 442         B     UNREF2                                         4  1405  B U88              12  1488
233           *
234  1 446  DOUBLE CS    332                                            4  1409  / 332              12   332
235  1 450         CS                                                   1  1413  /                  12
236  1 451         SW    GLOBER                                         4  1414  , 184              13   184
237  1 455         MN    SEQCOD,245                                     7  1418  D |62 245          13  1062     245
238  1 462         MN                                                   1  1425  D                  13
239  1 463         MN                                                   1  1426  D                  13
240  1 464         MCW   ERR20                                          4  1427  M W43              13  1643
241  1 468         W                                                    1  1431  2                  13
242  1 469         BCV   *&5                                           5  1432  B U41 @            13  1441
243  1 474         B     *&3                                            4  1437  B U43              14  1443
244  1 478         CC    1                                              2  1441  F 1                14
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 480          B     LOOK3                                               4  1443  B T23               14  1323
246          *
247  1 484  DONE    MCW   SAVBOT,X3                                          7  1447  M |65 099           14  1065     099
248  1 491          LCA   GM,0&X3                                            7  1454  L W44 0?0           14  1644     000+3
249  1 498          SBR   X3                                                 4  1461  H 099               14   099
250  1 502          SBR   SEQTAB                                            4  1465  H 148               14   148
251  1 506          CS    0&X2                                               4  1469  / 0!0               15   000+2
252  1 510          MCW   SX1,X1                                             7  1473  M /13 089           15  1113     089
253  1 517          SW    0&X2                                               4  1480  , 0!0               15   000+2
254  1 558          B     LOADNX                                             4  1484  B 700               15   700
255          *
256  1 562  UNREF2  MCW   SX1A,X1                                           7  1488  M |54 089           15  1054     089
257  1 569  NOLABL  BCE   *&5,SEQCOD-3,D  DO STATEMENT?                      8  1495  B V07 |59 D         15  1507    1059
258  1 577          B     NOLABB                                             4  1503  B T30               15  1330
259  1 581          MCW   SAVBOT,X3                                          7  1507  M |65 099           16  1065     099
260  1 588          MCW   SEQCOD,0&X3                                        7  1514  M |62 0?0           16  1062     000+3
261  1 595          SBR   X3                                                 4  1521  H 099               16   099
262  1 599          BCE   TOOBIG,0&X3,<                                      8  1525  B |66 0?0 <         16  1066     000+3
263  1 607          MCW   SAVBOT,SEQCOD                                      7  1533  M |65 |62           16  1065    1062
264  1 614          SBR   SAVBOT,1&X3                                       7  1540  H |65 0?1           17  1065     001+3
265  1 621          B     NOLABB                                             4  1547  B T30               17  1330
266  1 625  KB1     DCW   #1                                                 1  1551                      17
267  1 626  NOP     NOP                                                      1  1552  N                   17
268  1 627  SVZONE  DCW   #1                                                 1  1553                      17
269  1 628  BRANCH  B                                                        1  1554  B                   17
270  1 675  ERR19   DCW   @ERROR 19 - UNREFERENCED STMT NUMBER, STATEMENT @  47  1601                      19
271  1 717  ERR20   DCW   @ERROR 20 - DOUBLY DEFINED STMT, STATEMENT @       42  1643                      21
272  1 725  GM      DC    @}@                                                1  1644        GMARK   21
273  1 726  GMWM    DCW   @}@                                                1  1645        GMARK   21
274                 XFR   BEGN30                                                   B /50               21  1150
275          CLRME   CLRA  BEGIN3,GMWM,C                                                  MACRO
             *       CLRA  CLRBOT,CLRTOP[,SS,HERE,GWMAD]                                  GEN
             *                                                                            GEN
             * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                          GEN
             *                                                                            GEN
276                 ORG   201                                                      0201
             *                                                                            GEN
             * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                    GEN
             *                                                                            GEN
277          CLRME   EQU   *&1                                                    0201    GEN
278                 BSS   SNAPSH,C                                             5  0201  B 333 C     GEN     22   333
279          )0J006 CS    GMWM         CLEAR FROM CLRTOP                        4  0206  / W45       GEN     22  1645
280                 SBR   )0J006&3                                             4  0210  H 209       GEN     22   209
281                 SBR   )0L006&6                                             4  0214  H 255       GEN     22   255
282                 C     )0J006&3,)0M006   DOWN TO CLRBOT & X00?              7  0218  C 209 266   GEN     22   209     266
283                 BU    )0J006                                               5  0225  B 206 /     GEN     22   206
             *                                                                            GEN
             * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                      GEN
             *                                                                            GEN
284          )0K006 C     )0L006&6,)0N006                                      7  0230  C 255 269   GEN     22   255     269
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

285                 BU    )0L006                                        5  0237  B 249 /     GEN     23   249
286                 CS    LOADNX,)0Q006  LOAD THE NEXT BLOCK AT 1       7  0242  / 700 276   GEN     23   700     276
287         )0L006  LCA   )0P006,0-0     CLEAR WITH BLANK AND WORD MARK 7  0249  L 270 000   GEN     23   270     000
288                 SBR   )0L006&6                                      4  0256  H 255       GEN     23   255
289                 B     )0K006                                        4  0260  B 230       GEN     23   230
290         )0M006  DSA   )0R006         CLRBOT & X00 - 1              3  0266  899         GEN     23   899
291         )0N006  DSA   BEGIN3         CLRBOT                        3  0269  838         GEN     23   838
292         )0P006  DCW   #1                                           1  0270              GEN     24
293                 DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP 5  0275              GEN     24
294         )0Q006  DCW   @}@                                          1  0276              GEN     24
295                 ORG   BEGIN3&X00                                          0900
296         )0R006  EQU   *           CLRBOT & X00 - 1                    0899              GEN
297                 XFR   CLRME                                                 B 201               24   201
```

| SYMBOL | ADDRESS | SYMBOL | ADDRESS | SYMBOL | ADDRESS | SYMBOL | ADDRESS | SYMBOL | ADDRESS | SYMBOL | ADDRESS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| )0J005 | 0207: 0 | )0J006 | 0206: 0 | )0K006 | 0230: 0 | )0L006 | 0249: 0 | )0M006 | 0266: 0 | )0N006 | 0269: 0 |
| )0P006 | 0270: 0 | )0Q006 | 0276: 0 | )0R006 | 0899: 0 | )1J005 | 0250: 0 | )6J005 | 0110: 0 | )6K005 | 0700: 0 |
| )6L005 | 0704: 0 | )6M005 | 0728: 0 | )8J005 | 0257: 0 | )8K005 | 0273: 0 | )9J005 | 0281: 0 | )9R005 | 0285: 0 |
| BEGIN3 | 0838: 0 | BEGN28 | 0937: 0 | BEGN29 | 1150: 0 | BEGN30 | 1150: 0 | BNDRY | 0849: 0 | BOTTAB | 0852: 0 |
| BRANCH | 1554: 0 | CDOVLY | 0700: 0 | CLRME | 0201: 0 | DIFF16 | 0846: 0 | DONE | 1447: 0 | DOUBLE | 1409: 0 |
| ERR19 | 1601: 0 | ERR20 | 1643: 0 | GLOBER | 0184: 0 | GM | 1644: 0 | GMWM | 1645: 0 | HASH | 0964: 0 |
| KB1 | 1551: 0 | LOADAD | 1150: 0 | LOADNX | 0700: 0 | LOOK2 | 1257: 0 | LOOK3 | 1323: 0 | LOOKL1 | 1206: 0 |
| MOVE | 0937: 0 | MOVEDN | 0853: 0 | NOLABB | 1330: 0 | NOLABL | 1495: 0 | NOP | 1552: 0 | NXSTMT | 1168: 0 |
| PHAS30 | 0201: 0 | PHASLD | 0381: 0 | SAUCE | 3200: 0 | SAVBOT | 1065: 0 | SEQCOD | 1062: 0 | SEQTAB | 0148: 0 |
| SNAPEX | 0564: 0 | SNAPSH | 0333: 0 | SOUGHT | 1051: 0 | SVZONE | 1553: 0 | SWITCH | 1353: 0 | SX1 | 1113: 0 |
| SX1A | 1054: 0 | TOOBIG | 1066: 0 | TOP3 | 2600: 0 | TOPCD9 | 0840: 0 | TPERR | 0728: 0 | TPREAD | 0704: 0 |
| UNREF | 1375: 0 | UNREF2 | 1488: 0 | X1 | 0089: 0 | X2 | 0094: 0 | X3 | 0099: 0 | | |

UNREFERENCED SYMBOLS

BEGN28 BOTTAB CDOVLY DIFF16 MOVEDN PHASLD SAUCE  SNAPEX TOP3   TOPCD9 TPERR  TPREAD