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

101               JOB   FORTRAN COMPILER -- LIST PHASE ONE -- PHASE 25
102               CTL   6611
103         *
104         * DUPLICATE LISTS ARE CHECKED AND ELIMINATED TO OPTIMIZE
105         * STORAGE AT OBJECT TIME.
106         *
107         * ON ENTRY, X1 IS THE TOP OF STATEMENTS IN LOW CORE, X3 IS
108         * ONE BELOW THE FORMAT STRINGS OR NUMBER TABLE, AND 81-83
109         * IS ONE BELOW THE FORMAT STRINGS OR NUMBER TABLE.
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         NXBTM  EQU   83                                                        0083
118         BOTFMT EQU   154  BOTTOM OF FORMAT STRINGS OR NUMBER TABLE - 1         0154
119         NEGARY EQU   163  16000 - ARYSIZ                                       0163
120         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR                  0184
121         FMTSW  EQU   696  X FOR NO FORMAT, L FOR LIMITED FORMAT                0696
122         *                 BLANK FOR ORDINARY, A FOR A CONVERSION
123         *
124                EXT00   SNAPSH, LOADNX, CDOVLY                                                MACRO
125         SNAPSH EQU   333                                                       0333            GEN
126         PHASLD EQU   381                                                       0381            GEN
127         SNAPEX EQU   564                                                       0564            GEN
128         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                           0700            GEN
129         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE           0700            GEN
130         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                            0704            GEN
131         TPERR  EQU   728                                                       0728            GEN
132         *
133                EXT03   START OF PHASE 3                                                       MACRO
134         BEGIN3 EQU   838                                                       0838            GEN
135         TOP3   EQU   2600                                                      2600            GEN
136         *
137         110    DCW   @LISTR ONE@                                         9  0110                      1
138         094    DCW   000                                                 3  0094                      2
139         096    DC    00                                                  2  0096                      2
140         099    DCW   000                                                 3  0099                      2
141         100    DC    0                                                   1  0100                      2
142         *
143         PHAS25 LDPH  LISTR ONE,LOADAD,BEGN25,,,25                                      MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]           GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                              GEN
            *                                                                          GEN
            * LOAD A BLOCK                                                            GEN
            *                                                                          GEN
144         )6J003 EQU   110  PHASE ID                                             0110            GEN
145         )6K003 EQU   700  LOAD NEXT PHASE                                      0700            GEN
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

146         )6L003  EQU   704  TAPE READ INSTRUCTION                             0704        GEN
147         )6M003  EQU   728  TAPE ERROR HANDLER                               0728        GEN
            *                                                                              GEN
148                 ORG   201                                                       0201
149         PHAS25  EQU   *&1                                                     0201        GEN
150                 LCA   )9J003,)6J003                                       7   0201  L 252 110   GEN      3   252     110
151                 BCE   )6K003,)6K003,1      Q: LOADING FROM CARDS?         8   0208  B 700 700 1 GEN      3   700     700
152                 BCE   )6K003,)6L003&4,0    Q: LOADING FROM AUTOCODER TAPE? 8   0216  B 700 708 0 GEN      3   700     708
153                 RTW   1,LOADAD             READ THE BLOCK                 8   0224  L %U1 838 R GEN      3   %U1     838
154                 BER   )6M003               Q: TAPE ERROR?                 5   0232  B 728 L     GEN      3   728
155                 CS    BEGN25,)9R003        ENTER THE BLOCK                7   0237  / 845 256   GEN      4   845     256
156         )9J003  DCW   @LISTR ONE@          PHASE ID                       9   0252              GEN      4
157                 DC    #1                                                  1   0253              GEN      4
158                 DC    @25@          PHASE NUMBER                          2   0255              GEN      4
159         )9R003  DCW   @}@                                                 1   0256              GEN      4
160                 XFR   PHAS25                                                   B 201             4   201
161         *
162                 ORG   BEGIN3                                                   0838
163         LOADAD  EQU   *&1          LOAD ADDRESS                             0838
164 *  841  SEQCOD  DCW   #4                                                  4   0841                        5
165 *  844  SX1     DCW   #3                                                  3   0844                        5
166 *  845  BEGN25  MCW   X1,SX1                                              7   0845  M 089 844             5   089     844
167    852          MCW   NXBTM,X2                                            7   0852  M 083 094             5   083     094
168    859          LCA   DOT,0&X2                                            7   0859  L /88 0!0             5  1188     000+2
169    866          CW    0&X2                                                4   0866  ) 0!0                 5   000+2
170    870          SBR   NXBTM                                               4   0870  H 083                 5   083
171    874          SBR   BOTFMT,0&X2                                        7   0874  H 154 0!0             6   154     000+2
172    881          MA    NEGARY,BOTFMT                                       7   0881  # 163 154             6   163     154
173    888  LOOP    BCE   DONE,0&X1,  BELOW BOTTOM STATEMENT                  8   0888  B /68 0|0             6  1168     000+1
174    896          MCW   0&X1,SEQCOD                                         7   0896  M 0|0 841             6   000+1   841
175    903          MCW   X1,SX1B&6                                          7   0903  M 089 /63             6   089    1163
176    910          MCW   SEQCOD-3,*&8                                       7   0910  M 838 924             7   838     924
177    917          BCE   IOSTMT,STMTS,0  I/O STATEMENT?                     8   0917  B 935 /95 0           7   935    1195
178    925          CHAIN 6                                                                 MACRO
179                 BCE                                                       1   0925  B           GEN     7
180                 BCE                                                       1   0926  B           GEN     7
181                 BCE                                                       1   0927  B           GEN     7
182                 BCE                                                       1   0928  B           GEN     7
183                 BCE                                                       1   0929  B           GEN     7
184                 BCE                                                       1   0930  B           GEN     8
185    931          B     DONE  I/O STATEMENTS ARE SORTED TOGETHER            4   0931  B /68               8  1168
186         *
187         * FOUND AN I/O STATEMENT
188         *
189    935  IOSTMT  C     0&X1  GET DOWN                                      4   0935  C 0|0               8   000+1
190    939          SAR   X1      TO BODY                                     4   0939  Q 089               8   089
191    943          B     GETCOM  GET X1 DOWN TO A COMMA                      4   0943  B |88               8  1088
192    947          CW    114                                                 4   0947  ) 114               8   114
193    951          BCE   *&5,FMTSW,L  LIMITED FORMAT ROUTINE?                8   0951  B 963 696 L         8   963     696
194    959          CW    115                                                 4   0959  ) 115               9   115
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195    963         SW    0&X1    UNDER THE COMMA                     4  0963  , 0|0               9   000+1
196    967         SAR   X1                                        4  0967  Q 089               9   089
197    971         MCW   SX1,X3  TOP OF STATEMENTS                  7  0971  M 844 099           9   844     099
198    978  TWOWM  C     0&X3  SKIP TWO                            4  0978  C 0?0               9   000+3
199    982         C            WORD MARKS                         1  0982  C                   9
200    983         SAR   X3                                        4  0983  Q 099               9   099
201    987         BCE   TWOWM,1&X3,}                             8  0987  B 978 0?1 } GMARK   10   978     001+3
202    995         C     X1,X3                                     7  0995  C 089 099           10   089     099
203  1 002         BU    CHKLST                                    5  1002  B |19 /             10  1019
204  1 007  STMBOT C     0&X1                                      4  1007  C 0|0               10   000+1
205  1 011         SAR   X1                                        4  1011  Q 089               10   089
206  1 015         B     LOOP                                      4  1015  B 888               10   888
207  1 019  CHKLST C     0&X1,0&X3                                 7  1019  C 0|0 0?0           10   000+1   000+3
208  1 026         BU    GETGM  LISTS ARE DIFFERENT                5  1026  B |68 /             11  1068
209  1 031         C     0&X3,0&X1                                 7  1031  C 0?0 0|0           11   000+3   000+1
210  1 038         BU    GETGM  LISTS ARE DIFFERENT                5  1038  B |68 /             11  1068
211  1 043         BW    SYNTAX,0&X1                               8  1043  V /16 0|0 1         11  1116     000+1
212  1 051         BWZ                                             1  1051  V                   11
213  1 052         BWZ                                             1  1052  V                   11
214  1 053         LCA   X3,0&X1  LINK IDENTICAL LISTS TOGETHER    7  1053  L 099 0|0           11   099     000+1
215  1 060         SBR   X1                                        4  1060  H 089               12   089
216  1 064         B     STMBOT                                    4  1064  B |07               12  1007
217          *
218          * LISTS ARE UNEQUAL.  GET X3 DOWN TO A GMWM
219          *
220  1 068  GETGM  C     0&X3  SKIP ONE                            4  1068  C 0?0               12   000+3
221  1 072         SAR   X3      WORD MARK                         4  1072  Q 099               12   099
222  1 076         BCE   TWOWM,1&X3,}                             8  1076  B 978 0?1 } GMARK   12   978     001+3
223  1 084         B     GETGM                                     4  1084  B |68               12  1068
224          *
225          * GET COMMA
226          *
227  1 088  GETCOM SBR   GETCMX&3                                  4  1088  H /03               12  1103
228  1 092  SCHCOM BW    STMBOT,0&X1                               8  1092  V |07 0|0 1         13  1007     000+1
229  1 100  GETCMX BCE   0-0,0&X1,,                               8  1100  B 000 0|0 ,         13   000     000+1
230  1 108         SBR   X1                                        4  1108  H 089               13   089
231  1 112         B     SCHCOM                                    4  1112  B |92               13  1092
232          *
233          * LIST SYNTAX ERROR
234          *
235  1 116  SYNTAX CS    332                                       4  1116  / 332               13   332
236  1 120         CS                                              1  1120  /                   13
237  1 121         SW    GLOBER                                    4  1121  , 184               13   184
238  1 125         MN    SEQCOD,237                                7  1125  D 841 237           14   841     237
239  1 132         MN                                              1  1132  D                   14
240  1 133         MN                                              1  1133  D                   14
241  1 134         MCW   ERR18                                     4  1134  M S29               14  1229
242  1 138         W                                               1  1138  2                   14
243  1 139         BCV   *&5                                       5  1139  B /48 @             14  1148
244  1 144         B     *&3                                       4  1144  B /50               14  1150
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SEQ PG LIN  LABEL  OP    OPERANDS                                              SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 148         CC    1                                                       2  1148  F 1               15
246  1 150         MCW   SLASH,SEQCOD-3                                         7  1150  M S30 838         15  1230     838
247  1 157  SX1B   MCW   SEQCOD,0                                               7  1157  M 841 000         15   841     000
248  1 164         B     STMBOT                                                  4  1164  B |07             15  1007
249         *
250  1 168  DONE   SW    0&X1                                                    4  1168  , 0|0             15   000+1
251  1 172         MCW   SX1,X1                                                  7  1172  M 844 089         15   844     089
252  1 179         BSS   SNAPSH,C                                               5  1179  B 333 C           15   333
253  1 209         B     LOADNX                                                  4  1184  B 700             16   700
254         *
255         * DATA
256         *
257  1 213  DOT    DCW   @.@                                                     1  1188                    16
258  1 220  STMTS  DCW   @5613LUP@  READ/WRITE (INPUT) (TAPE), PRINT, PUNCH     7  1195                    16
259  1 254  ERR18  DCW   @ERROR 18 - LIST SYNTAX, STATEMENT @                   34  1229                    17
260  1 255  SLASH  DCW   @/@                                                     1  1230                    17
261  1 265  GMWM   DCW   @}@                                                     1  1231          GMARK     17
262                XFR   BEGN25                                                        B 845               17   845
263         CLRME  CLRA  BEGN25,GMWM                                                           MACRO
            *      CLRA  CLRBOT,CLRTOP[,ORG,GMWMAD]                                            GEN
            *                                                                                 GEN
            * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                               GEN
            *                                                                                 GEN
264                ORG   201                                                          0201
            *                                                                               GEN
            * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                       GEN
            *                                                                               GEN
265         CLRME  EQU   *&1                                                          0201  GEN
266         )0J004 CS    GMWM         CLEAR FROM CLRTOP                             4  0201  / S31       GEN     18  1231
267                SBR   )0J004&3                                                     4  0205  H 204       GEN     18   204
268                SBR   )0L004&6                                                     4  0209  H 250       GEN     18   250
269                C     )0J004&3,)0M004   DOWN TO CLRBOT & X00?                    7  0213  C 204 261   GEN     18   204     261
270                BU    )0J004                                                     5  0220  B 201 /     GEN     18   201
            *                                                                               GEN
            * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                         GEN
            *                                                                               GEN
271         )0K004 C     )0L004&6,)0N004                                           7  0225  C 250 264   GEN     18   250     264
272                BU    )0L004                                                     5  0232  B 244 /     GEN     18   244
273                CS    LOADNX,)0Q004  LOAD THE NEXT BLOCK AT 1                    7  0237  / 700 271   GEN     19   700     271
274         )0L004 LCA   )0P004,0-0     CLEAR WITH BLANK AND WORD MARK             7  0244  L 265 000   GEN     19   265     000
275                SBR   )0L004&6                                                     4  0251  H 250       GEN     19   250
276                B     )0K004                                                     4  0255  B 225       GEN     19   225
277         )0M004 DSA   )0R004         CLRBOT & X00 - 1                          3  0261  899         GEN     19   899
278         )0N004 DSA   BEGN25         CLRBOT                                    3  0264  845         GEN     19   845
279         )0P004 DCW   #1                                                        1  0265              GEN     19
280                DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP            5  0270              GEN     19
281         )0Q004 DCW   @}@                                                       1  0271              GEN     20
282                ORG   BEGN25&X00                                                    0900
283         )0R004 EQU   *           CLRBOT & X00 - 1                                0899              GEN
284                XFR   CLRME                                                               B 201               20   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J004	0201: 0	)0K004	0225: 0	)0L004	0244: 0	)0M004	0261: 0	)0N004	0264: 0	)0P004	0265: 0
)0Q004	0271: 0	)0R004	0899: 0	)6J003	0110: 0	)6K003	0700: 0	)6L003	0704: 0	)6M003	0728: 0
)9J003	0252: 0	)9R003	0256: 0	BEGIN3	0838: 0	BEGN25	0845: 0	BOTFMT	0154: 0	CDOVLY	0700: 0
CHKLST	1019: 0	CLRME	0201: 0	DONE	1168: 0	DOT	1188: 0	ERR18	1229: 0	FMTSW	0696: 0
GETCMX	1100: 0	GETCOM	1088: 0	GETGM	1068: 0	GLOBER	0184: 0	GMWM	1231: 0	IOSTMT	0935: 0
LOADAD	0838: 0	LOADNX	0700: 0	LOOP	0888: 0	NEGARY	0163: 0	NXBTM	0083: 0	PHAS25	0201: 0
PHASLD	0381: 0	SCHCOM	1092: 0	SEQCOD	0841: 0	SLASH	1230: 0	SNAPEX	0564: 0	SNAPSH	0333: 0
STMBOT	1007: 0	STMTS	1195: 0	SX1	0844: 0	SX1B	1157: 0	SYNTAX	1116: 0	TOP3	2600: 0
TPERR	0728: 0	TPREAD	0704: 0	TWOWM	0978: 0	X1	0089: 0	X2	0094: 0	X3	0099: 0

UNREFERENCED SYMBOLS

CDOVLY PHASLD SNAPEX TOP3 TPERR TPREAD