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1          REM 704 FORTRAN II / DBC / 12 JAN 59.
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                                       THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=
                                       ** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION
                                       INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
                                       * IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF
                                       THIS LOGICAL BLOCK OR SUBROUTINE.
                                       C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
                                       P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                                       CONTROL CARD FOR DBC.                                        DBC/C01
                   00000           ORG 0                                                            DBC/C02
00000  0 00000 0 00723               PZE TAB+1                                                        DBC/C03
00001  0 00000 0 77731               PZE COMMON                                                       DBC/C04
00002  742422233460                  BCD 1(DBC)                                                       DBC/C05
00003  0 00000 0 00000               PZE (DBC)                                                        DBC/C06
                                        END OF DBC CONTROL CARD.                                      DBC/C07
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/C08
                                                                                                     DBC/C09
                                                                                                     DBC/001
                   00000           ORG 0                                                            DBC/002
                                       (DBC)/ CALLS=LINE,READ.  CALLER=MAIN PROGRAM.                 DBC/003
                                       (DBC) CONTROLS DECIMAL TO BINARY CONVERSION AND INPUT.        DBC/004
00000  0 02100 0 00001 (DBC)       TTR NEW                        INSTRUCTION EXECUTED IN LOCATION 1.DBC/005
                                       NEW = ENTRY POINT FROM MAIN PROGRAM (C(AC)= ADDRESS OF INPUT DBC/006
                                       ROUTINE TO HANDLE CURRENT  INPUT, AND C(0)= LOCATION OF THE   DBC/007
                                       CURRENT FORMAT STATEMENT).                                    DBC/008
00001 -0 76000 0 00007 NEW          LTM                        SET RBCD  TO CALL THE INDICATED       DBC/009
00002  0 62100 0 00304               STA TYPE                   TYPE OF  INPUT ROUTINE.               DBC/010
00003 -0 50000 0 00000               CAL 0                      SET  INPUT FORMAT STATEMENT           DBC/011
00004  0 62100 0 00007               STA CALL                   LOCATION.                             DBC/012
00005  0 40000 0 00626               ADD ONE                    SET EXIT                              DBC/013
00006  0 62100 0 00015               STA FX4                    TO MAIN PROGRAM.                      DBC/014
00007 -0 50000 0 00000 CALL          CAL **                     OBTAIN FORMAT STATEMENT               DBC/015
00010 -0 63400 4 00015               SXD FX4,4                  FOR SCAN.                             DBC/016
00011  0 07400 4 00036               TSX LINE,4                 * GO SCAN FORMAT.                     DBC/017
00012 -0 53400 4 00015               LXD FX4,4                  WHEN DONE, RESTORE C(XR4).            DBC/018
00013 -0 50000 0 00016               CAL TRAP                   SET LOCATION 1 FOR FUTURE             DBC/019
00014  0 60200 0 00001               SLW 1                      TRAP TRANSFER TO SEEK, AND            DBC/020
00015  1 00000 0 00000 FX4           TXI **,0,**                * TRANSFER CONTROL TO MAIN PROGRAM.   DBC/021
                                       THE MAIN PROGRAM CONTROLS ALL INDEXING OF THE LIST.           DBC/022
00016  0 02100 0 00017 TRAP          TTR SEEK                   INSTRUCTION EXECUTED IN LOCATION 1.DBC/023
                                       SEEK = REENTRY POINT FROM MAIN PROGRAM (C(0)= LOCATION OF     DBC/024
                                       THE ADDRESS OF THE NEXT  INPUT NUMBERS).                      DBC/025
00017 -0 76000 0 00007 SEEK          LTM                        PICKUP NTR INSTRUCTION, AND           DBC/026
00020 -0 50000 0 00000               CAL 0                      SET LOCATION                          DBC/027
00021  0 62100 0 00024               STA SETL                   OF  INPUT NUMBERS.                    DBC/028
00022  0 40000 0 00626               ADD ONE                    SET LOCATION FOR                      DBC/029
00023  0 62100 0 00035               STA OUT                    RETURN TO MAIN PROGRAM.               DBC/030
00024  0 50000 0 00000 SETL          CLA **                     PICKUP LOCATION OF  INPUT             DBC/031
00025  0 60100 0 00033 STO           STO PUT                    AND SET ADDRESS AND TAG OF PUT.       DBC/032
00026  0 56000 0 00025               LDQ STO                    SET PUT OP                            DBC/033
00027 -0 62000 0 00033               SLQ PUT                    TO STO.
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00030 -0 63400 4 00015          SXD FX4,4                    SAVE THE C(XR4), AND                    DBC/034
00031  0 07400 4 00316          TSX READ,4                 * GO READ AND CONVERT INPUT.              DBC/035
00032 -0 53400 4 00015          LXD FX4,4                    RESTORE THE C(XR4).                     DBC/036
00033  0 60100 0 00000 PUT      STO **,**                    STORE INPUT NUMBER.                     DBC/037
00034  0 76000 0 00007          ETM                          REPEAT UNTIL LIST IS EXHAUSTED,         DBC/038
00035  0 02100 0 00000 OUT      TTR **                     * UNDER CONTROL OF THE MAIN PROGRAM.      DBC/039
                                 END OF PROGRAM (DBC).                                               DBC/040
                               * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/041
                                                                                                   DBC/042
                               LINE,4/ CALLS=RBCD,FIELD. USES=READ. CALLER=(DBC).                  DBC/043
                               LINE SCANS THE FORMAT STATEMENT FOR EACH LINE OF INPUT.             DBC/044
00036 -0 63400 4 00116 LINE     SXD AX4,4                    SAVE THE C(XR4) FOR RETURN.             DBC/045
00037 -0 63400 1 00114          SXD AX1,1                    SAVE THE ORIGINAL C(XR1), AND           DBC/046
00040 -0 63400 2 00115          SXD AX2,2                    SAVE THE ORIGINAL C(XR2).               DBC/047
00041  0 76000 0 00006          COM                          COMPLEMENT THE C(AC), AND SET           DBC/048
00042  0 62200 0 00066          STD UNIT                     UNIT DECREMENT= -(CURRENT UNIT).        DBC/049
00043  0 60000 0 77737          STZ PEX                      SET PEX (SCALE FACTOR) = 0, AND         DBC/050
00044  0 60000 0 77731          STZ INT                      SET INT = 0.                            DBC/051
00045  0 62100 0 00102          STA SCAN5                    SAVE THE C(AC) ADDRESS, AND             DBC/052
00046  0 07400 2 00303          TSX RBCD,2                 * GO READ INPUT UNIT RECORD. THEN         DBC/053
00047  0 53400 2 00102          LXA SCAN5,2                  SET XR2= -(CURRENT FORMAT LOC.),ANDDBC/054
00050 -0 53400 1 00067          LXD SEVEN,1                  SET XR1 = 7, AND PICKUP THE             DBC/055
00051  0 56000 2 77777          LDQ -1,2                     1ST WORD OF CURRENT FORMAT.             DBC/056
                               CCLPAR = ENTRY POINT WHEN A LPAREN IS MET IN FORMAT SCAN.           DBC/057
00052 -0 63400 1 00120 CCLPAR   SXD BX1,1                    SAVE THE CURRENT CHARACTER COUNT,       DBC/058
00053 -0 63400 2 00121          SXD BX2,2                    SCAN POSITION, AND FORMAT WORD,         DBC/059
00054 -0 60000 0 77735          STQ MQR                      FOR POSSIBLE REPETITION OF GROUP.       DBC/060
00055  0 53400 4 77731          LXA INT,4                    SET GROUP CONTROL COUNT FOR THE         DBC/061
00056 -0 63400 4 00122          SXD BX4,4                    INDICATED NUMBER OF REPETITIONS,        DBC/062
00057 -0 63400 4 00265          SXD GROUPX,4                 AND SAVE FOR POSSIBLE RESCAN.           DBC/063
                               SCAN = ENTRY POINT FOR CCCMMA,CCSCFP,CCINPT,RESCAN.                 DBC/064
00060  0 60000 0 77731 SCAN     STZ INT                      CLEAR INT WORKING STORAGE, AND          DBC/065
00061  1 00006 0 00102 SIX      TXI SCAN5,0,6                GO RESUME SCAN.                         DBC/066
00062 -0 53400 1 00061 SCAN1    LXD SIX,1                    RESET FORMAT CHARACTER COUNT, AND       DBC/067
00063  0 56000 2 77777          LDQ -1,2                     PICKUP NEXT FORMAT WORD.                DBC/068
00064 -0 76300 0 00006 SCAN2    LGL 6                        EXAMINE NEXT CHARACTER,                 DBC/069
00065  0 34000 0 00631          CAS BLANK                    AND IF BLANK,                           DBC/070
00066  1 00000 0 00070 UNIT     TXI SCAN3,0,**               THEN                                    DBC/071
00067  1 00007 0 00102 SEVEN    TXI SCAN5,0,7                GO EXAMINE NEXT CHARACTER.              DBC/072
00070  0 34000 0 00630 SCAN3    CAS L(9)                     IF NOT BLANK, COMPARE WITH NINE,        DBC/073
D 00071  1 00000 0 00105        TXI SCAN6,0                  IF NON-NUMERIC, COMPARE CCTEST.         DBC/074
00072  0 76100 0 00000          NOP                          IF NUMERIC, THEN                        DBC/075
00073  0 60100 0 77732          STO DIG                      CONVERT                                 DBC/076
00074  0 50000 0 77731          CLA INT                      SUCCESSIVE                              DBC/077
00075  0 76700 0 00002          ALS 2                        BCD                                     DBC/078
00076  0 40000 0 77731          ADD INT                      DIGITS                                  DBC/079
00077  0 76700 0 00001          ALS 1                        TO BINARY,                              DBC/080
00100  0 36100 0 77732          ACL DIG                      TO SET INT= SCALE FACTOR,               DBC/081
                               SCAN4 = ENTRY POINT USED BY CCSCFM.                                 DBC/082
00101  0 60100 0 77731 SCAN4    STO INT                      CURRENT FIELD OR GROUP CONTROL.         DBC/083
                               SCAN5 = ENTRY POINT USED BY CCDCPT.                                 DBC/084
00102 -0 75400 0 00000 SCAN5    PXD **,0                     CLEAR THE AC, AND UPDATE COUNT.         DBC/085
00103  2 00001 1 00064          TIX SCAN2,1,1                WHEN NO CHARACTERS REMAIN,              DBC/086
00104  1 77777 2 00062          TXI SCAN1,2,-1               ADJUST SCAN POSITION, AND REPEAT.       DBC/087
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                                        SCAN6 = ENTRY POINT USED BY CCDCPT.                          DBC/088
00105 -0 53400 4 00107 SCAN6  LXD NCC,4                  WHEN A NON-NUMERIC IS MET,                  DBC/089
00106  0 34000 4 00626 SCAN7  CAS CCTEST,4               SCAN LIST OF CONTROL CHARACTERS,            DBC/090
00107  1 00014 0 00111 NCC    TXI SCAN8,0,12              AND IF EQUALITY IS FOUND,                   DBC/091
00110  0 02000 4 00127        TRA FRMTR,4               * TAKE THE INDICATED TRANSFER.               DBC/092
00111  2 00001 4 00106 SCAN8  TIX SCAN7,4,1               IF NOT FOUND IN CONTROL LIST, THEN          DBC/093
00112  0 42000 1 00005        HPR 5,1                     STOP. PRESS START TO CONTINUE.              DBC/0935
                                         END OF PROGRAM LINE.                                        DBC/097
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/098
                                                                                                     DBC/099
                                        FRMTR / CONTROL TRANSFERS FOR FORMAT SCAN =                  DBC/100
D     00113  1 00000 0 00127        TXI CCEDMK,0              END OF FORMAT STATEMENT.                DBC/1005
      00114  1 00000 0 00052 AX1    TXI CCLPAR,0,**           BEGIN FORMAT OR GROUP.                  DBC/101
      00115  1 00000 0 00132 AX2    TXI CCCMMA,0,**           END FIELD.                              DBC/102
      00116  1 00000 0 00137 AX4    TXI CCSLSH,0,**           END LINE OR RECORD.                     DBC/103
D     00117  1 00000 0 00142        TXI CCSCFP,0              SCALE FACTOR PLUS.                      DBC/104
      00120  1 00000 0 00145 BX1    TXI CCSCFM,0,**           SCALE FACTOR MINUS.                     DBC/105
      00121  1 00000 0 00147 BX2    TXI CCRPAR,0,**           END FORMAT OR GROUP.                    DBC/106
      00122  1 00000 0 00153 BX4    TXI CCDCPT,0,**           ROUNDING OF  INPUT NUMBER.              DBC/107
D     00123  1 00000 0 00172        TXI CCINPT,0              DECIMAL INPUT.                          DBC/108
      00124  1 00000 0 00177 CX1    TXI CCHNPT,0,**           HOLLERITH FIELD INPUT.                  DBC/109
      00125  1 00000 0 00250 CX2    TXI CCFNPT,0,**           FIXED POINT INPUT.                      DBC/110
      00126  1 00000 0 00254 CX4    TXI CCENPT,0,**           FLOATING POINT INPUT.                   DBC/111
                           00127 FRMTR  BSS 0                                                        DBC/112
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/113
                                                                                                     DBC/114
                                        CCEDMK/ CALLS=FIELD. USES=MAIN PROGRAM.                      DBC/1141
                                        CCEDMK = ENTRY POINT WHEN AN ENDMK IS MET IN FORMAT SCAN.    DBC/1142
00127  0 07400 4 00266 CCEDMK TSX FIELD,4                  * GO PROCESS UNDER FIELD CONTROL.           DBC/1143
00130 -0 50000 0 00273        CAL TXLOP                     THEN GO SET CNVSW TO RESCAN FORMAT          DBC/1144
D     00131  1 00000 0 00275        TXI SETSW,0               * IF LIST IS NOT EXHAUSTED.             DBC/1145
                                         END OF PROGRAM CCEDMK.                                      DBC/1146
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/1147
                                                                                                     DBC/1148
                                        CCCMMA/ CALLS=FIELD. USES=LINE(SCAN).                        DBC/115
                                        CCCMMA = ENTRY POINT WHEN A COMMA IS MET IN FORMAT SCAN.     DBC/116
00132  0 07400 4 00266 CCCMMA TSX FIELD,4                  * GO PROCESS UNDER FIELD CONTROL.           DBC/117
                                        RESUME = ENTRY POINT USED BY CCSLSH,CCRPAR,CCHNPT.           DBC/118
00133 -0 53400 1 00124 RESUME LXD CX1,1                     WHEN DONE, RESTORE CHARACTER COUNT,DBC/119
00134 -0 53400 2 00125        LXD CX2,2                     RESTORE SCAN POSITION, AND                  DBC/120
00135  0 56000 0 77734        LDQ MQ                        CURRENT FORMAT WORD. THEN                   DBC/121
D     00136  1 00000 0 00060        TXI SCAN,0                * GO RESUME SCAN.                         DBC/122
                                         END OF PROGRAM CCCMMA.                                      DBC/123
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/124
                                                                                                     DBC/125
                                        CCSLSH/ CALLS=FIELD,RBCD.  USES=CCCMMA.                      DBC/126
                                        CCSLSH = ENTRY POINT WHEN A SLASH IS MET IN FORMAT SCAN.     DBC/127
00137  0 07400 4 00266 CCSLSH TSX FIELD,4                  * GO PROCESS UNDER FIELD CONTROL.           DBC/128
00140  0 07400 2 00303        TSX RBCD,2                    * WHEN DONE, READ A RECORD, AND             DBC/129
D     00141  1 00000 0 00133        TXI RESUME,0              * GO RESUME SCAN.                         DBC/130
                                         END OF PROGRAM CCSLSH.                                      DBC/131
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/132
                                                                                                     DBC/133
                                        CCSCFP/ USES=LINE(SCAN).                                     DBC/134
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                                        CCSCFP = ENTRY POINT WHEN A P IS MET IN FORMAT SCAN.        DBC/135
     00142  0 50000 0 77731 CCSCFP CLA INT                        PICKUP AND                        DBC/136
     00143  0 60100 0 77737        STO PEX                        STORE SCALE FACTOR.               DBC/137
D    00144  1 00000 0 00060        TXI SCAN,0                   * GO RESUME SCAN.                   DBC/138
                                         END OF PROGRAM CCSCFP.                                    DBC/139
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/140
                                                                                                   DBC/141
                                        CCSCFM/ USES=LINE(SCAN).                                   DBC/142
                                        CCSCFM = ENTRY POINT WHEN A MINUS SIGN IS MET IN FORMAT SCAN.DBC/143
     00145  0 50200 0 77731 CCSCFM CLS INT                        SET INT MINUS, AND                DBC/144
D    00146  1 00000 0 00101        TXI SCAN4,0                  * GO GET SCALE FACTOR.              DBC/145
                                         END OF PROGRAM CCSCFM.                                    DBC/146
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/147
                                                                                                   DBC/148
                                        CCRPAR/ CALLS=FIELD. USES=CCCMMA,RESCAN(GROUP).            DBC/149
                                        CCRPAR = ENTRY POINT WHEN A RPAREN IS MET IN FORMAT SCAN.  DBC/150
     00147  0 07400 4 00266 CCRPAR TSX FIELD,4                  * GO PROCESS UNDER FIELD CONTROL.   DBC/151
     00150 -0 53400 4 00122        LXD BX4,4                      WHEN DONE, UPDATE GROUP COUNT, AND DBC/152
     00151 -2 00001 4 00133        TNX RESUME,4,1               * GO RESUME SCAN, UNLESS            DBC/153
D    00152  1 00000 0 00261        TXI GROUP,0                  * REPETITION OF GROUP IS INDICATED. DBC/154
                                         END OF PROGRAM CCRPAR.                                    DBC/155
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/156
                                                                                                   DBC/157
                                        CCDCPT/ USES=LINE(SCAN).                                   DBC/158
                                        CCDCPT = ENTRY POINT WHEN A POINT IS MET IN FORMAT SCAN.   DBC/159
     00153  0 50000 0 00171 CCDCPT CLA DTR                        MODIFY SCAN INSTRUCTION           DBC/160
     00154  0 60100 0 00070        STO SCAN3                      TO TRANSFER INTO DCPT1.           DBC/161
     00155  0 60000 0 77732        STZ DIG                        CLEAR DIG, AND                    DBC/1615
D    00156  1 00000 0 00102        TXI SCAN5,0                  * GO RESUME SCAN.                   DBC/162
                                        DCPT1 = REENTRY POINT FROM LINE(SCAN).                     DBC/163
     00157  0 34000 0 00630 DCPT1  CAS L(9)                       DETERMINE THE                     DBC/164
D    00160  1 00000 0 00164        TXI DCPT3,0                    NUMBER, MODULO TEN,               DBC/165
     00161  0 76100 0 00000        NOP                            OF DIGITS                         DBC/166
     00162  0 60100 0 77732        STO DIG                        IN FRACTION.                      DBC/167
D    00163  1 00000 0 00102        TXI SCAN5,0                  * WHEN A CONTROL CHARACTER IS MET,  DBC/168
     00164 -0 60000 0 77734 DCPT3  STQ MQ                         RESTORE THE                       DBC/169
     00165  0 56000 0 00157        LDQ DCPT1                      SCAN INSTRUCTION                  DBC/170
     00166 -0 60000 0 00070        STQ SCAN3                      TO ITS ORIGINAL FORM, AND         DBC/171
     00167  0 56000 0 77734        LDQ MQ                         GO COMPARE CHARACTER              DBC/172
D    00170  1 00000 0 00105        TXI SCAN6,0                  * WITH CCTEST LIST.                 DBC/173
                                         END OF PROGRAM CCDCPT.                                    DBC/174
D    00171  1 00000 0 00157 DTR    TXI DCPT1,0                  * INSTRUCTION CONSTANT.             DBC/175
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/176
                                                                                                   DBC/177
                                        CCINPT/ USES=LINE(SCAN).                                   DBC/178
                                        CCINPT = ENTRY POINT WHEN AN I IS MET IN FORMAT SCAN.      DBC/179
     00172 -0 50000 0 00273 CCINPT CAL TXLOP                      PICKUP TXLOP, AND                 DBC/180
                                        SETFX = ENTRY POINT USED BY CCFNPT.                        DBC/181
     00173  0 63000 0 00524 SETFX  STP FIXSW                      FIXED POINT SWITCH.               DBC/182
     00174  0 53400 4 77731        LXA INT,4                      SET COUNT FOR THE                 DBC/183
     00175 -0 63400 4 00604        SXD COUNT,4                    REPETITION OF THIS FIELD, AND     DBC/184
D    00176  1 00000 0 00060        TXI SCAN,0                   * GO RESUME SCAN.                   DBC/185
                                         END OF PROGRAM CCINPT.                                    DBC/186
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/187
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                                                                                                DBC/188
                                                                                                DBC/189
                                    CCHNPT/ USES=CCCMMA.                                        DBC/190
                                    CCHNPT = ENTRY POINT WHEN AN H IS MET IN FORMAT SCAN.       DBC/191
00177  0 53400 4 77731 CCHNPT LXA INT,4                  SET XR4 = HOLLERITH FIELD WIDTH.       DBC/192
00200  0 56000 0 77736         LDQ MQD                  PICKUP ANY REMAINING INPUT.            DBC/193
00201 -0 63400 2 00125         SXD CX2,2                SAVE FORMAT SCAN POSITION.             DBC/194
00202 -0 50000 2 77777         CAL -1,2                 PICKUP CURRENT FORMAT WORD.            DBC/195
00203 -0 53400 2 00347         LXD DX1,2                SET XR2 = INPUT CHARACTER COUNT.       DBC/196
00204 -2 00001 1 00222         TNX HNPT5,1,1            IF ANY CHARACTERS REMAIN IN CURRENTDBC/197
00205 -0 63400 1 00124         SXD CX1,1                FORMAT WORD, SAVE FOR-CHAR COUNT,      DBC/198
00206  0 77100 0 00006 HNPT1  ARS 6                    AND SHIFT REMAINDER INTO               DBC/199
00207  2 00001 1 00206         TIX HNPT1,1,1            THE MQ. WHEN DONE,                     DBC/200
00210 -0 53400 1 00124         LXD CX1,1                RESTORE FOR-CHAR COUNT, AND            DBC/201
00211  2 00001 2 00217 HNPT2  TIX HNPT4,2,1             IF INPUT-CHAR COUNT IS EXHAUSTED,      DBC/202
00212 -0 53400 2 00350         LXD DX2,2                SET XR2 = INPUT WORD COUNT,            DBC/203
00213  1 77777 2 00214         TXI HNPT3,2,-1           UPDATE IT, AND                         DBC/204
00214  0 56000 2 77751 HNPT3  LDQ BCD,2                 PICKUP NEXT INPUT WORD.                DBC/205
00215 -0 63400 2 00350         SXD DX2,2                THEN SAVE INPUT WORD COUNT,            DBC/206
00216 -0 53400 2 00061         LXD SIX,2                AND RESET INPUT-CHAR COUNT TO 6.       DBC/207
00217 -0 76300 0 00006 HNPT4  LGL 6                    FILL OUT THE PARTIAL WORD IN THE ACDBC/208
00220 -2 00001 4 00230         TNX HNPT7,4,1            WITH NEW INPUT, UPDATING FIELD         DBC/209
00221  2 00001 1 00211         TIX HNPT2,1,1            CONTROL, AND WHEN DONE,                DBC/210
00222 -0 53400 1 00125 HNPT5  LXD CX2,1                SET XR1 = CURRENT FOR-SCAN POSITIONDBC/211
00223  0 60200 1 77777         SLW -1,1                 AND STORE INPUT WORD IN FORMAT,        DBC/212
00224  1 77777 1 00225         TXI HNPT6,1,-1           THEN UPDATE FORMAT SCAN                DBC/213
00225 -0 63400 1 00125 HNPT6  SXD CX2,1                POSITION, AND SAVE IT.                 DBC/214
00226 -0 53400 1 00061         LXD SIX,1                RESET FORMAT CHARACTER COUNT TO 6,     DBC/215
D 00227  1 00000 0 00211       TXI HNPT2,0              AND REPEAT UNDER FIELD CONTROL.        DBC/216
00230 -0 63400 2 00347 HNPT7  SXD DX1,2                WHEN FIELD CONTROL IS EXHAUSTED,       DBC/217
00231 -0 53400 2 00125         LXD CX2,2                SAVE INPUT CHAR COUNT, AND SET XR2     DBC/218
00232 -0 60000 0 77736         STQ MQD                  TO SCAN POSITION. SAVE REMAINING       DBC/219
00233 -0 63400 1 00124         SXD CX1,1                INPUT, AND SAVE FOR-CHAR COUNT.        DBC/220
00234 -3 00001 1 00246         TXL HNPT11,1,1           IF ANY CHARACTERS REMAIN               DBC/221
00235  0 56000 2 77777         LDQ -1,2                 IN CURRENT FORMAT WORD,                DBC/222
00236 -0 77300 0 00006 HNPT8  RQL 6                    SHIFT THEM INTO POSITION,              DBC/223
00237  1 00001 1 00240         TXI HNPT9,1,1            LEFT-ADJUSTED                          DBC/224
00240 -3 00006 1 00236 HNPT9  TXL HNPT8,1,6            IN THE MQ,                             DBC/225
00241 -0 60000 0 77734         STQ MQ                   AND SAVE THE C(MQ).                    DBC/226
00242 -0 53400 1 00124         LXD CX1,1                RESTORE FORMAT CHARACTER COUNT.        DBC/227
00243 -2 00001 1 00246         TNX HNPT11,1,1           SHIFT REMAINDER INTO                   DBC/228
00244 -0 76300 0 00006 HNPT10 LGL 6                    THE AC,                                DBC/229
00245  2 00001 1 00244         TIX HNPT10,1,1           UPDATING CHARACTER COUNT. AND          DBC/230
00246  0 60200 2 77777 HNPT11 SLW -1,2                STORE LAST WORD OF FIELD. THEN         DBC/231
D 00247  1 00000 0 00133       TXI RESUME,0             * GO RESUME SCAN.                      DBC/232
                                    END OF PROGRAM CCHNPT.                                      DBC/233
                                    * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/234
                                                                                                DBC/235
                                    CCFNPT/ USES=CCINPT.                                        DBC/236
                                    CCFNPT = ENTRY POINT WHEN AN F IS MET IN FORMAT SCAN.       DBC/237
00250  0 50200 0 77737 CCFNPT CLS PEX                  PICKUP NEGATIVE OF SCALE FACTOR TO     DBC/238
                                    SETXP = ENTRY POINT USED BY CCENPT.                         DBC/239
00251  0 60100 0 77740 SETXP  STO EXP                  SET EXPONENT.                          DBC/240
00252  0 50000 0 00273         CLA TXLOP                PICKUP TXHOP AND                       DBC/241
D 00253  1 00000 0 00173       TXI SETFX,0              * GO SET FIXSW TO NOP.
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                                        END OF PROGRAM CCFNPT.                                  DBC/242
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/243
                                                                                                DBC/244
                                       CCENPT/ USES=CCFNPT.                                     DBC/245
                                       CCENPT = ENTRY POINT WHEN AN E IS MET IN FORMAT SCAN.    DBC/246
  00254 -0 75400 0 00000 CCENPT PXD ,0                      CLEAR THE AC, AND                   DBC/247
D 00255  1 00000 0 00251        TXI SETXP,0                * GO SET EXPONENT AND FIXSW.         DBC/248
                                        END OF PROGRAM CCENPT.                                  DBC/249
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/250
                                                                                                DBC/251
                                       RESCAN/ CALLS=RBCD.  USES=LINE(SCAN).                    DBC/252
                                       RESCAN = ENTRY POINT USED BY READ.                       DBC/253
  00256 -0 63400 4 00116 RESCAN SXD AX4,4                   FOR RETURN FROM FORMAT SCAN.        DBC/256
  00257  0 07400 2 00303        TSX RBCD,2                 * GO READ A RECORD.                  DBC/257
  00260 -0 53400 4 00265        LXD GROUPX,4                THEN PICKUP ORIGINAL GROUP COUNT TODBC/258
                                       GROUP = ENTRY POINT USED BY CCRPAR.                      DBC/259
  00261 -0 63400 4 00122 GROUP  SXD BX4,4                   UPDATE GROUP CONTROL.               DBC/260
  00262 -0 53400 1 00120        LXD BX1,1                   RESET CHARACTER COUNT,              DBC/261
  00263 -0 53400 2 00121        LXD BX2,2                   RESET SCAN POSITION, AND            DBC/262
  00264  0 56000 0 77735        LDQ MQR                     PICKUP 1ST FORMAT WORD OF GROUP.    DBC/263
  00265  1 00000 0 00060 GROUPX TXI SCAN,0,**              * GO RESCAN THIS GROUP.               DBC/264
                                        END OF PROGRAM RESCAN.                                  DBC/265
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/266
                                                                                                DBC/267
                                       FIELD,4/ USES READ.  CALLERS=LINE(SCAN),CCCMMA,CCSLSH,CCRPAR.DBC/268
                                       FIELD CONTROLS THE REPEATED  INPUT OF THE CURRENT FIELD. DBC/269
  00266 -0 63400 4 00126 FIELD  SXD CX4,4                   SAVE THE C(XR4) FOR RETURN.         DBC/270
  00267 -0 63400 1 00124        SXD CX1,1                   SAVE THE CHARACTER COUNT,           DBC/271
  00270 -0 63400 2 00125        SXD CX2,2                   THE SCAN POSITION, AND              DBC/272
  00271 -0 60000 0 77734        STQ MQ                      THE CURRENT FORMAT WORD.            DBC/273
  00272  0 53400 4 77731        LXA INT,4                   EXAMINE INT, AND                    DBC/274
  00273 -3 00000 4 00300 TXLOP  TXL DONE,4,0                IF NOT ZERO, THEN                   DBC/275
  00274  0 50000 0 00273        CLA TXLOP                   PICKUP TXHOP TO                     DBC/276
                                       SETSW = ENTRY POINT USED BY LINE(SCAN8).                 DBC/277
  00275  0 63000 0 00321 SETSW  STP CNVSW                   SET CONVERSION SWITCH.              DBC/278
  00276  0 50000 0 77733        CLA DATUM                   THEN PICKUP DATUM,                  DBC/279
D 00277  1 00000 0 00606        TXI LIST,0                 * GO STORE, AND EXAMINE LIST.         DBC/280
                                       DONE = ENTRY POINT USED BY READ.                         DBC/281
  00300 -0 53400 4 00126 DONE   LXD CX4,4                   WHEN DONE, RESTORE THE C(XR4), AND DBC/282
  00301  0 02000 4 00001        TRA 1,4                    * RETURN TO CALLER.                   DBC/283
                                        END OF PROGRAM FIELD.                                   DBC/284
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/285
                                                                                                DBC/286
                                       RBCD,2/ CALLS=(CSH),(TSH). CALLERS=LINE,CCSLSH,RESCAN.   DBC/287
                                       RBCD READS CURRENT INPUT RECORD INTO BCD BUFFER.         DBC/288
  00302  0 42000 1 00000 EOF    HPR 0,1                     EOF HALT / PRESS START TO REPEAT.   DBC/289
  00303 -0 53400 1 00066 RBCD   LXD UNIT,1                  SET XR1 FOR CURRENT UNIT, AND       DBC/290
  00304  0 07400 4 00000 TYPE   TSX **,4                   * GO TO INDICATED INPUT ROUTINE.      DBC/291
  00305  0 77777 0 77751        PZE BCD,,-1                 (INPUT BUFFER)                      DBC/292
                                       DCR1 = END-OF-FILE RETURN FROM INPUT ROUTINE.            DBC/293
  00306  1 00001 0 00302 DCR1   TXI EOF,0,1                 GO TO END-OF-FILE STOP.             DBC/294
                                       DCR1+1 = NORMAL RETURN FROM INPUT ROUTINE.               DBC/295
  00307 -0 50000 0 00306        CAL DCR1                    FOR CURRENT INPUT, RESET            DBC/296
  00310  0 62200 0 00347        STD DX1                     INPUT CHARACTER COUNT AND           DBC/297
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00311  0 62200 0 00350          STD DX2                          INPUT WORD COUNT TO ONE. THEN      DBC/298
00312  0 02000 2 00001          TRA 1,2                        * EXIT TO CALLER.                    DBC/299
                                    END OF PROGRAM RBCD.                                           DBC/300
                                  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/301
                                                                                                   DBC/302
                                  READ,4/  USES=FIELD,LINE. CALLERS=(DBC),LINE(RESCAN).            DBC/303
                                  READ  DOES INTEGER, FIXED, AND FLOATING POINT CONVERSION.        DBC/304
                                  XREAD = EXIT FROM READ WHEN FORMAT IS EXHAUSTED.                 DBC/305
                                                                                                   DBC/306
00313 -0 63400 4 00321 XREAD     SXD CNVSW,4                      SAVE THE C(XR4), AND
00314  0 07400 4 00256           TSX RESCAN,4                   * GO RESCAN FORMAT. THEN RETURN,   DBC/3061
00315 -0 53400 4 00321           LXD CNVSW,4                      AFTER GETTING FORMAT.             DBC/3062
                                  READ  = ENTRY POINT USED BY (DBC).                               DBC/307
00316 -0 63400 4 00116 READ      SXD AX4,4                        SAVE THE C(XR4) FOR RETURN TO LIST.DBC/308
00317 -0 63400 1 00114           SXD AX1,1                        SAVE THE ORIGINAL C(XR1),         DBC/309
00320 -0 63400 2 00115           SXD AX2,2                        SAVE THE ORIGINAL C(XR2), AND     DBC/310
00321 -3 00000 0 00313 CNVSW     TXL XREAD,0,**                   SWITCH (TXL=TRA, TXH=NOP).        DBC/311
                                                                                                   DBC/312
                                                                                                   DBC/313
00322  0 50000 0 00634           CLA MZE                                                           DBC/314
00323  0 60100 0 77743           STO N                                                             DBC/315
00324  0 60200 0 77747           SLW V                                                             DBC/316
00325  0 60200 0 77742           SLW DG                                                            DBC/317
00326  0 50200 0 77732           CLS DIG                                                           DBC/318
00327  0 60100 0 77750           STO D                                                             DBC/319
00330  0 50000 0 77740           CLA EXP                                                           DBC/320
00331  0 60100 0 77744           STO E                                                             DBC/321
00332  0 53400 4 77731           LXA INT,4                                                         DBC/322
00333  0 56000 0 77736           LDQ MQD                                                           DBC/323
00334 -0 53400 1 00347           LXD DX1,1                                                         DBC/324
00335 -0 53400 2 00350           LXD DX2,2                                                         DBC/325
00336 -0 14000 0 00337           TNO F6                                                            DBC/326
00337  2 00001 1 00343 F6        TIX F1,1,1                                                        DBC/327
00340  1 77777 2 00341           TXI F2,2,-1                                                       DBC/328
00341 -0 53400 1 00061 F2        LXD SIX,1                                                         DBC/329
00342  0 56000 2 77751           LDQ BCD,2                                                         DBC/330
00343 -0 75400 0 00000 F1        PXD ,0                                                            DBC/331
00344 -0 76300 0 00006           LGL 6                                                             DBC/332
00345 -3 00000 4 00520           TXL D6,4,0                                                        DBC/333
00346  0 34000 0 00631           CAS BLANK                                                         DBC/334
00347  1 00000 0 00363 DX1       TXI STOP1,0,**                                                    DBC/335
00350  1 00000 0 00367 DX2       TXI F3,0,**                                                       DBC/336
00351  0 34000 0 00617           CAS MINUS                                                         DBC/337
D      1 00000 0 00363           TXI STOP1,0                                                       DBC/338
D      1 00000 0 00361           TXI F4,0                                                          DBC/339
00354  0 34000 0 00632           CAS PLUS                                                          DBC/340
D      1 00000 0 00454           TXI C5L,0                                                         DBC/341
D      1 00000 0 00364           TXI F5,0                                                          DBC/342
00357  0 34000 0 00633           CAS NEGAT                                                         DBC/343
D      1 00000 0 00363           TXI STOP1,0                                                       DBC/344
00361  0 50000 0 00634 F4        CLA MZE                                                           DBC/345
00362  0 34000 0 00627           CAS TEN                                                           DBC/346
00363  0 42000 1 00001 STOP1     HPR 1,1                                                           DBC/347
00364 -0 75400 0 00000 F5        PXD ,0                                                            DBC/348
00365  0 60100 0 77742           STO DG                                                            DBC/349
D      1 00000 0 00516           TXI D9,0
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      00367  2 00001 4 00337 F3      TIX F6,4,1                    DBC/350
D     00370  1 00000 0 00520         TXI D6,0                      DBC/351
      00371 -2 00001 4 00417 E1      TNX E5,4,1                    DBC/352
      00372  2 00001 1 00376         TIX E2,1,1                    DBC/353
      00373  1 77777 2 00374         TXI E3,2,-1                   DBC/354
      00374 -0 53400 1 00061 E3      LXD SIX,1                     DBC/355
      00375  0 56000 2 77751         LDQ BCD,2                     DBC/356
      00376 -0 75400 0 00000 E2      PXD ,0                        DBC/357
      00377 -0 76300 0 00006         LGL 6                         DBC/358
      00400  0 34000 0 00631         CAS BLANK                     DBC/359
D     00401  1 00000 0 00416         TXI STOP2,0                   DBC/360
D     00402  1 00000 0 00371         TXI E1,0                      DBC/361
      00403 -0 63400 4 00424         SXD ER,4                      DBC/362
      00404  0 34000 0 00617 C2L     CAS MINUS                     DBC/363
D     00405  1 00000 0 00424         TXI ER,0                      DBC/364
D     00406  1 00000 0 00414         TXI E4,0                      DBC/365
      00407  0 34000 0 00632 C4L     CAS PLUS                      DBC/366
D     00410  1 00000 0 00424         TXI ER,0                      DBC/367
D     00411  1 00000 0 00417         TXI E5,0                      DBC/368
      00412  0 34000 0 00633         CAS NEGAT                     DBC/369
D     00413  1 00000 0 00424         TXI ER,0                      DBC/370
      00414  0 50000 0 00634 E4      CLA MZE                       DBC/371
      00415  0 34000 0 00627         CAS TEN                       DBC/372
      00416  0 42000 1 00002 STOP2   HPR 2,1                       DBC/373
      00417 -0 75400 0 00000 E5      PXD ,0                        DBC/374
      00420  0 60100 0 77744         STO E                         DBC/375
      00421 -2 00001 4 00520         TNX D6,4,1                    DBC/376
      00422  2 00001 1 00430 E9      TIX E6,1,1                    DBC/377
      00423  1 77777 2 00426         TXI E7,2,-1                   DBC/378
      00424  3 00000 4 00452 ER      TXH STOP4,4,**                DBC/379
D     00425  1 00000 0 00416         TXI STOP2,0                   DBC/380
      00426 -0 53400 1 00061 E7      LXD SIX,1                     DBC/381
      00427  0 56000 2 77751         LDQ BCD,2                     DBC/382
      00430 -0 75400 0 00000 E6      PXD ,0                        DBC/383
      00431 -0 76300 0 00006         LGL 6                         DBC/384
      00432  0 34000 0 00631         CAS BLANK                     DBC/385
D     00433  1 00000 0 00436         TXI STOP3,0                   DBC/386
D     00434  1 00000 0 00437         TXI E8,0                      DBC/387
      00435  0 34000 0 00627         CAS TEN                       DBC/388
      00436  0 42000 1 00003 STOP3   HPR 3,1                       DBC/389
      00437 -0 75400 0 00000 E8      PXD ,0                        DBC/390
      00440  0 60100 0 77742         STO DG                        DBC/391
      00441  0 50000 0 77744         CLA E                         DBC/392
      00442  0 76700 0 00002         ALS 2                         DBC/393
      00443  0 40000 0 77744         ADD E                         DBC/394
      00444  0 76700 0 00001         ALS 1                         DBC/395
      00445  0 36100 0 77742         ACL DG                        DBC/396
      00446  0 60100 0 77744         STO E                         DBC/397
      00447  2 00001 4 00422         TIX E9,4,1                    DBC/398
D     00450  1 00000 0 00520         TXI D6,0                      DBC/399
      00451  0 34000 0 00631 C1L     CAS BLANK                     DBC/400
      00452  0 42000 1 00004 STOP4   HPR 4,1                       DBC/401
D     00453  1 00000 0 00506         TXI D7,0                      DBC/402
      00454 -0 63400 4 77746 C5L     SXD U,4                       DBC/403
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        00455  0 62200 0 00424          STD ER                  DBC/404
        00456  0 34000 0 00621          CAS POINT               DBC/405
D       00457  1 00000 0 00404          TXI C2L,0               DBC/406
        00460  1 77777 4 00465          TXI C3L,4,-1            DBC/407
        00461  0 34000 0 00625          CAS EXPON               DBC/408
D       00462  1 00000 0 00452          TXI STOP4,0             DBC/409
D       00463  1 00000 0 00371          TXI E1,0                DBC/410
D       00464  1 00000 0 00407          TXI C4L,0               DBC/411
        00465 -0 75400 4 00000 C3L      PXD ,4                  DBC/412
        00466  0 77100 0 00022          ARS 18                  DBC/413
        00467  0 60100 0 77746          STO U                   DBC/414
        00470  0 60100 0 77750          STO D                   DBC/415
        00471  1 00001 4 00517          TXI D8,4,1              DBC/416
        00472  0 50000 0 77747 D4       CLA V                   DBC/417
        00473  0 40000 0 00626          ADD ONE                 DBC/418
        00474  0 60100 0 77747          STO V                   DBC/419
        00475 -2 00001 4 00520          TNX D6,4,1              DBC/420
        00476  2 00001 1 00502 D5       TIX D1,1,1              DBC/421
        00477  1 77777 2 00500          TXI D2,2,-1             DBC/422
        00500  0 53400 1 00503 D2       LXA D3,1                DBC/423
        00501  0 56000 2 77751          LDQ BCD,2               DBC/424
        00502 -0 75400 0 00000 D1       PXD ,0                  DBC/425
        00503 -0 76300 0 00006 D3       LGL 6                   DBC/426
        00504  0 34000 0 00627          CAS TEN                 DBC/427
D       00505  1 00000 0 00451          TXI C1L,0               DBC/428
        00506 -0 75400 0 00000 D7       PXD ,0                  DBC/429
        00507  0 62100 0 77742          STA DG                  DBC/430
        00510  0 50000 0 77743          CLA N                   DBC/431
        00511  0 76700 0 00002          ALS 2                   DBC/432
        00512  0 40000 0 77743          ADD N                   DBC/433
        00513  0 76700 0 00001          ALS 1                   DBC/434
        00514  0 40000 0 77742          ADD DG                  DBC/435
        00515  0 14000 0 00472          TOV D4                  DBC/436
        00516  0 60100 0 77743 D9       STO N                   DBC/437
        00517  2 00001 4 00476 D8       TIX D5,4,1              DBC/438
        00520  0 50000 0 77743 D6       CLA N                   DBC/439
        00521 -0 60000 0 77736          STQ MQD                 DBC/440
        00522 -0 63400 1 00347          SXD DX1,1               DBC/441
        00523 -0 63400 2 00350          SXD DX2,2               DBC/442
D       00524 -3 00000 0 00600 FIXSW    TXL T1,0                DBC/443
        00525  0 10000 0 00601          TZE T2                  DBC/444
        00526  0 50000 0 77750          CLA D                   DBC/445
        00527 -0 12000 0 00533          TMI ADE                 DBC/446
        00530  0 50000 0 77746          CLA U                   DBC/447
        00531  0 77100 0 00022          ARS 18                  DBC/448
        00532  0 40200 0 77750          SUB D                   DBC/449
        00533  0 40000 0 77744 ADE      ADD E                   DBC/450
        00534  0 40000 0 77747          ADD V                   DBC/451
        00535  0 60100 0 77750          STO D                   DBC/452
        00536  0 50000 0 77743          CLA N                   DBC/453
        00537  0 62100 0 00635          STA K1                  DBC/454
        00540  0 77100 0 00017          ARS 15                  DBC/455
        00541 -0 50100 0 00636          ORA K2                  DBC/456
        00542  0 30000 0 00636          FAD K2                  DBC/457
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                                                                                                DBC/458
00543  0 60100 0 77745          STO F                                                           DBC/459
00544  0 76000 0 00000          CLM                                                             DBC/460
00545 -0 50100 0 00635          ORA K1                                                          DBC/461
00546  0 30000 0 77745          FAD F                                                           DBC/462
00547 -0 77300 0 00010          RQL 8                                                           DBC/463
00550  0 76000 0 00010          RND                                                             DBC/464
00551 -0 50100 0 00637          ORA K3                                                          DBC/465
00552  0 53400 4 77750          LXA D,4                                                         DBC/466
00553 -3 00000 4 00601          TXL T2,4,0                                                      DBC/467
00554  0 56000 0 77750          LDQ D                                                           DBC/468
00555  0 16200 0 00566          TQP T4                                                          DBC/469
00556  3 00061 4 00564          TXH T5,4,49                                                     DBC/470
00557  0 24100 4 00722          FDP TAB,4                                                       DBC/471
00560 -0 60000 0 77745          STQ F                                                           DBC/472
00561  0 50000 0 77745          CLA F                                                           DBC/473
00562  0 36100 0 00640          ACL K4                                                          DBC/474
00563 -0 76000 0 00001          PBT                                                             DBC/475
00564  0 76000 0 00000 T5       CLM                                                             DBC/476
D      1 00000 0 00601          TXI T2,0                                                        DBC/477
00566  0 60100 0 77745 T4       STO F                                                           DBC/478
00567  3 00061 4 00575          TXH T3,4,49                                                     DBC/479
00570  0 56000 0 77745          LDQ F                                                           DBC/480
00571  0 26000 4 00722          FMP TAB,4                                                       DBC/481
00572  0 36100 0 00641          ACL K5                                                          DBC/482
00573 -0 76000 0 00001          PBT                                                             DBC/483
D      1 00000 0 00601          TXI T2,0                                                        DBC/484
00575  0 76000 0 00000 T3       CLM                                                             DBC/485
00576  0 76000 0 00006          COM                                                             DBC/486
D      1 00000 0 00601          TXI T2,0                                                        DBC/487
00600  0 76700 0 00022 T1       ALS 18                                                          DBC/488
00601 -0 53400 4 00604 T2       LXD COUNT,4                UPDATE FIELD COUNT, AND              DBC/489
00602  2 00001 4 00605          TIX MORE,4,1               IF EXHAUSTED, THEN                   DBC/490
00603  0 60100 0 77733          STO DATUM                  SAVE THE CONVERTED FIELD, AND        DBC/491
00604  1 00000 0 00300 COUNT    TXI DONE,0,**            * (FIELD REPEAT COUNT)EXAMINE FORMAT.  DBC/492
00605 -0 63400 4 00604 MORE     SXD COUNT,4                OTHERWISE, GO EXAMINE LIST.          DBC/493
                                    LIST = ENTRY POINT USED BY FIELD.                           DBC/494
00606 -0 53400 4 00116 LIST     LXD AX4,4                  SET XR4 FOR INDICATED RETURN,        DBC/495
00607 -0 53400 1 00114          LXD AX1,1                  RESTORE THE ORIGINAL C(XR1),         DBC/496
00610 -0 53400 2 00115          LXD AX2,2                  RESTORE THE ORIGINAL C(XR2), AND     DBC/497
00611  0 02000 4 00001          TRA 1,4                  * GO STORE (OR CONVERT) INPUT.         DBC/498
                                     END OF PROGRAM READ.                                       DBC/499
                                    * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * DBC/500
                                                                                                DBC/501
                                    CONSTANTS AND WORKING STORAGE USED BY DBC.                  DBC/5015
00612 +000000000077     ENDMK   OCT 77                     CCTEST-12.                           DBC/502
00613  000000000074      (      BCD 100000(                CCTEST-11.                           DBC/503
00614  000000000073      COMMA  BCD 100000,                CCTEST-10.                           DBC/504
00615  000000000061      SLASH  BCD 100000/                CCTEST-9.                            DBC/505
00616  000000000047      P      BCD 100000P                CCTEST-8.                            DBC/506
00617  000000000040      MINUS  BCD 100000-                CCTEST-7.                            DBC/507
00620  000000000034      )      BCD 100000)                CCTEST-6.                            DBC/508
00621  000000000033      POINT  BCD 100000.                CCTEST-5.                            DBC/509
00622  000000000031      I      BCD 100000I                CCTEST-4.                            DBC/510
00623  000000000030     H       BCD 100000H                CCTEST-3.
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00624  000000000026     FCC     BCD 100000F
00625  000000000025     EXPON   BCD 100000E
                 00626 CCTEST   BSS 0
00626 +000000000001      ONE    DEC 1
00627 +000000000012      TEN    DEC 10
00630  0 00000 0 00011   L(9)   PZE 9
00631  000000000060      BLANK  BCD 100000
00632  000000000020     PLUS    BCD 100000+
00633  000000000014     NEGAT   BCD 100000-
00634 -0 00000 0 00000  MZE     MZE
00635 +233000000000     K1      DEC 155B8
00636 +252000000000     K2      DEC 170B8
00637 +000400000000     K3      DEC 1B9
00640 +335000000000     K4      DEC 221B8
00641 +043000000000     K5      DEC 35B8
00642 +375536246150             OCT 375536246150
00643 +372430204755             OCT 372430204755
00644 +366700324573             OCT 366700324573
00645 +363546566774             OCT 363546566774
00646 +360436770626             OCT 360436770626
00647 +354713132675             OCT 354713132675
00650 +351557257061             OCT 351557257061
00651 +346445677215             OCT 346445677215
00652 +342726145174             OCT 342726145174
00653 +337570120775             OCT 337570120775
00654 +334454732312             OCT 334454732312
00655 +330741367020             OCT 330741367020
00656 +325601137163             OCT 325601137163
00657 +322464114134             OCT 322464114134
00660 +316755023372             OCT 316755023372
00661 +313612334310             OCT 313612334310
00662 +310473426555             OCT 310473426555
00663 +304770675742             OCT 304770675742
00664 +301623713116             OCT 301623713116
00665 +276503074076             OCT 276503074076
00666 +273402374713             OCT 273402374713
00667 +267635456171             OCT 267635456171
00670 +264512676456             OCT 264512676456
00671 +261410545213             OCT 261410545213
00672 +255647410337             OCT 255647410337
00673 +252522640262             OCT 252522640262
00674 +247417031702             OCT 247417031702
00675 +243661534466             OCT 243661534466
00676 +240532743536             OCT 240532743536
00677 +235425434430             OCT 235425434430
00700 +231674055530             OCT 231674055530
00701 +226543212741             OCT 226543212741
00702 +223434157116             OCT 223434157116
00703 +217706576512             OCT 217706576512
00704 +214553630410             OCT 214553630410
00705 +211443023471             OCT 211443023471
00706 +205721522451             OCT 205721522451
00707 +202564416672             OCT 202564416672
00710 +177452013710             OCT 177452013710
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CCTEST-2.                                   DBC/511
CCTEST-1.                                   DBC/512
INDEXING ADDRESS FOR ABOVE LIST.            DBC/513
CONSTANT USED BY DBC.                       DBC/514
CONSTANT USED BY DBC.                       DBC/515
CONSTANT USED BY DBC.                       DBC/5155
CONSTANT USED BY DBC.                       DBC/516
CONSTANT USED BY DBC.                       DBC/517
CONSTANT USED BY DBC.                       DBC/518
CONSTANT USED BY DBC.                       DBC/519
CONSTANT USED BY DBC.                       DBC/520
CONSTANT USED BY DBC.                       DBC/521
CONSTANT USED BY DBC.                       DBC/522
CONSTANT USED BY DBC.                       DBC/523
CONSTANT USED BY DBC.                       DBC/524
48-TABLE USED BY DBC.                       DBC/525
47-TABLE USED BY DBC.                       DBC/526
46-TABLE USED BY DBC.                       DBC/527
45-TABLE USED BY DBC.                       DBC/528
44-TABLE USED BY DBC.                       DBC/529
43-TABLE USED BY DBC.                       DBC/530
42-TABLE USED BY DBC.                       DBC/531
41-TABLE USED BY DBC.                       DBC/532
40-TABLE USED BY DBC.                       DBC/533
39-TABLE USED BY DBC.                       DBC/534
38-TABLE USED BY DBC.                       DBC/535
37-TABLE USED BY DBC.                       DBC/536
36-TABLE USED BY DBC.                       DBC/537
35-TABLE USED BY DBC.                       DBC/538
34-TABLE USED BY DBC.                       DBC/539
33-TABLE USED BY DBC.                       DBC/540
32-TABLE USED BY DBC.                       DBC/541
31-TABLE USED BY DBC.                       DBC/542
30-TABLE USED BY DBC.                       DBC/543
29-TABLE USED BY DBC.                       DBC/544
28-TABLE USED BY DBC.                       DBC/545
27-TABLE USED BY DBC.                       DBC/546
26-TABLE USED BY DBC.                       DBC/547
25-TABLE USED BY DBC.                       DBC/548
24-TABLE USED BY DBC.                       DBC/549
23-TABLE USED BY DBC.                       DBC/550
22-TABLE USED BY DBC.                       DBC/551
21-TABLE USED BY DBC.                       DBC/552
20-TABLE USED BY DBC.                       DBC/553
19-TABLE USED BY DBC.                       DBC/554
18-TABLE USED BY DBC.                       DBC/555
17-TABLE USED BY DBC.                       DBC/556
16-TABLE USED BY DBC.                       DBC/557
15-TABLE USED BY DBC.                       DBC/558
14-TABLE USED BY DBC.                       DBC/559
13-TABLE USED BY DBC.                       DBC/560
12-TABLE USED BY DBC.                       DBC/561
11-TABLE USED BY DBC.                       DBC/562
10-TABLE USED BY DBC.                       DBC/563
```

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00711 +173734654500            OCT 173734654500          09-TABLE USED BY DBC.          DBC/564
00712 +170575360400            OCT 170575360400          08-TABLE USED BY DBC.          DBC/565
00713 +165461132000            OCT 165461132000          07-TABLE USED BY DBC.          DBC/566
00714 +161750220000            OCT 161750220000          06-TABLE USED BY DBC.          DBC/567
00715 +156606500000            OCT 156606500000          05-TABLE USED BY DBC.          DBC/568
00716 +153470400000            OCT 153470400000          04-TABLE USED BY DBC.          DBC/569
00717 +147764000000            OCT 147764000000          03-TABLE USED BY DBC.          DBC/570
00720 +144620000000            OCT 144620000000          02-TABLE USED BY DBC.          DBC/571
00721 +141500000000            OCT 141500000000          01-TABLE USED BY DBC.          DBC/572
00722 +136400000000     TAB    OCT 136400000000          00-TABLE USED BY DBC.          DBC/573
                 77731 COMMON ORG -39                                                   DBC/574
                 77731  INT   BSS 1                      VARIABLE USED BY DBC.          DBC/575
                 77732  DIG   BSS 1                      VARIABLE USED BY DBC.          DBC/576
                 77733  DATUM BSS 1                      VARIABLE USED BY DBC.          DBC/577
                 77734  MQ    BSS 1                      VARIABLE USED BY DBC.          DBC/578
                 77735  MQR   BSS 1                      VARIABLE USED BY DBC.          DBC/579
                 77736 MQD    BSS 1                      VARIABLE USED BY DBC.          DBC/580
                 77737  PEX   BSS 1                      VARIABLE USED BY DBC.          DBC/581
                 77740  EXP   BSS 1                      VARIABLE USED BY DBC.          DBC/582
                 77741  ND    BSS 1                      VARIABLE USED BY DBC.          DBC/583
                 77742 DG     BSS 1                      VARIABLE USED BY DBC.          DBC/584
                 77743 N      BSS 1                      VARIABLE USED BY DBC.          DBC/585
                 77744 E      BSS 1                      VARIABLE USED BY DBC.          DBC/586
                 77745 F      BSS 1                      VARIABLE USED BY DBC.          DBC/587
                 77746 U      BSS 1                      VARIABLE USED BY DBC.          DBC/588
                 77747 V      BSS 1                      VARIABLE USED BY DBC.          DBC/589
                 77750 D      BSS 1                      VARIABLE USED BY DBC.          DBC/590
                 77751 BCD    BSS 14                     VARIABLE USED BY DBC.          DBC/591
                                   END OF CONSTANTS AND WORKING STORAGE USED BY DBC.    DBC/592
                                  * * * * * * * * * * * * * * * * * * * * * * * * * * * *DBC/593
A                00000        END                                                       DBC/594
```

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```
1          ABS
1                                          CONTROL CARD FOR CSH.                                  CSH/C01
                          00000       ORG 0                                                         CSH/C02
00000   0 00000 0 00211          PZE C7+13                                                         CSH/C03
00001   0 00000 0 77767          PZE COMMON                                                        CSH/C04
00002   742362303460             BCD 1(CSH)                                                        CSH/C05
00003   0 00000 0 00003              3                                                             CSH/C07
                                     END OF CSH CONTROL CARD                                       CSH 0001
                                     CSH FOR FORTRAN II                                            CSH 0002
                          00000       ORG 0                                                         CSH 0003
                          77767 COMMON SYN -9                                                       CSH 0004
00000   0 42000 2 00000     B17 HPR 0,2          NON-HOLLERITH CHARACTER ON CARD                  CSH 0005
00001  -0 53400 1 00016         LXD B2,1         RESTART AFTER ERROR                              CSH 0006
00002  -0 53400 2 00020         LXD B3,2         X                                                CSH 0007
00003   0 76200 0 00321  RDBCD RCD                                                                CSH 0008
00004   0 70000 0 77776         CPY L                                                             CSH 0009
TD 00005  -3 00000 0 00007      TXL B1               X                                            CSH 0010
00006   0 02000 4 00002         TRA 2,4              END OF FILE EXIT                             CSH 0011
00007  -0 60000 0 77770  B1     STQ LS               SET LEFT SUM                                 CSH 0012
00010  -0 63400 1 00016         SXD B2,1             SAVE INDEX REGISTERS                         CSH 0013
00011  -0 63400 2 00020         SXD B3,2             X                                            CSH 0014
00012  -0 53400 1 00026         LXD B4,1             SET DIGIT ROW COUNT                          CSH 0015
00013   0 70000 0 77777         CPY R                COPY 9 RIGHT ROW AND                         CSH 0016
00014  -0 60000 0 77771         STQ RS               SET RIGHT SUM                                CSH 0017
00015   0 07400 2 00156         TSX C1,2             ENTER CONVERSION LOOP                        CSH 0018
TD 00016  -3 00000 0 00021  B2  TXL B5               LEAVE CONVERSION LOOP                        CSH 0019
00017   0 76700 0 00001         ALS 1                                                             CSH 0020
TD 00020  -3 00000 0 00064  B3  TXL C2               INITIALIZE BCD RECORD                        CSH 0021
00021   0 70000 0 77772  B5     CPY 8L               COPY 8 ROW AND                               CSH 0022
00022  -0 60000 0 77770         STQ LS               USE AS SUM                                   CSH 0023
00023   0 70000 0 77773         CPY 8R               X                                            CSH 0024
00024  -0 60000 0 77771         STQ RS               X                                            CSH 0025
00025   0 07400 2 00156         TSX C1,2             ENTER CONVERSION LOOP                        CSH 0026
00026  -3 00010 0 00031  B4     TXL B6,0,8           LEAVE CONVERSION LOOP                        CSH 0027
00027   0 76700 0 00003         ALS 3                ADD 8 TIMES 8 ROW                            CSH 0028
TD 00030  -3 00000 0 00063      TXL C3               X                                            CSH 0029
00031  -0 50000 0 77776  B6     CAL L                USE 9 ROW AS SUM                             CSH 0030
00032   0 60200 0 77770         SLW LS               X                                            CSH 0031
00033  -0 50000 0 77777         CAL R                X                                            CSH 0032
00034   0 60200 0 77771         SLW RS               X                                            CSH 0033
00035  -3 00001 1 00112  B13    TXL B7,1,1           TEST FOR ZERO ROW                            CSH 0034
00036   0 70000 0 77776  B14    CPY L                COPY LEFT ROW AND                            CSH 0035
TD 00037  -3 00000 0 00073      TXL B8               TEST FOR END OF RECORD                       CSH 0036
00040   0 02000 0 00000         TRA B17                                                           CSH 0037
00041  -0 50000 0 77770  B9     CAL LS               SAVE LEFT ZONE SUM                           CSH 0038
00042   0 60200 0 77776         SLW L                X                                            CSH 0039
00043  -0 50000 0 77772         CAL LDS              FORM INDICATOR FOR                           CSH 0040
00044   0 76000 0 00006         COM                  ZERO AND X AND / OR Y                        CSH 0041
00045  -0 32000 0 77774         ANA LZ               IN LEFT ROWS                                 CSH 0042
00046   0 32000 0 77770         ANS LS               X                                            CSH 0043
00047  -0 50000 0 77771         CAL RS               SAVE RIGHT ZONE SUM                          CSH 0044
00050   0 60200 0 77777         SLW R                X                                            CSH 0045
00051  -0 50000 0 77773         CAL RDS              FORM INDICATOR FOR                           CSH 0046
00052   0 76000 0 00006         COM                  ZERO AND X AND/OR Y
```

```
     00053 -0 32000 0 77775          ANA RZ        IN RIGHT ROWS                  CSH 0047
     00054  0 32000 0 77771          ANS RS        X                              CSH 0048
     00055  0 07400 2 00156          TSX C1,2      ENTER CONVERSION LOOP          CSH 0049
TD   00056 -3 00000 0 00132          TXL B15       LEAVE CONVERSION LOOP          CSH 0050
     00057  0 60200 0 77767          SLW TP        MULTIPLY INDICATOR             CSH 0051
     00060  0 76700 0 00002          ALS 2         BITS BY TEN                    CSH 0052
     00061  0 36100 0 77767          ACL TP        X                              CSH 0053
     00062  0 76700 0 00001          ALS 1         X                              CSH 0054
     00063  0 36100 1 00000  C3      ACL 0,1       ADD TO BCD RECORD              CSH 0055
     00064  0 60200 1 00000  C2      SLW 0,1       STORE IN BCD RECORD            CSH 0056
     00065  2 00001 1 00174          TIX C7,1,1    COUNT WORDS                    CSH 0057
     00066  0 50200 0 00162  C11     CLS C4        INVERT ROW SWITCH AND          CSH 0058
     00067  0 60100 0 00162          STO C4        TEST FOR RIGHT ROW DONE        CSH 0059
     00070 -0 73400 1 00003  (CSH)   PDX RDBCD,1   RESTORE ROW COUNT              CSH 0060
     00071 -0 12000 2 00001          TMI 1,2       TRANSFER IF RIGHT ROW DONE     CSH 0061
TD   00072  1 00000 0 00157  C10     TXI C9        GO CONVERT RIGHT ROW           CSH 0062
     00073 -0 50000 0 77776  B8      CAL L         TEST LEFT ROW FOR              CSH 0063
     00074 -0 32000 0 77770          ANA LS        ILLEGAL DOUBLE PUNCH           CSH 0064
     00075 -0 10000 0 00000          TNZ B17       X                              CSH 0065
     00076 -0 50000 0 77776  B10     CAL L         FORM LOGICAL SUM               CSH 0066
     00077 -0 60200 0 77770          ORS LS        OF LEFT ROWS                   CSH 0067
     00100  0 70000 0 77777          CPY R         COPY RIGHT ROW AND             CSH 0068
     00101 -0 50000 0 77777          CAL R         TEST FOR ILLEGAL               CSH 0069
     00102 -0 32000 0 77771          ANA RS        DOUBLE PUNCH                   CSH 0070
     00103 -0 10000 0 00000          TNZ B17       X                              CSH 0071
     00104 -0 50000 0 77777  B11     CAL R         FORM LOGICAL SUM OF            CSH 0072
     00105 -0 60200 0 77771          ORS RS        RIGHT ROWS                     CSH 0073
     00106 -2 00001 1 00126          TNX B12,1,1   TEST FOR ZONE ROWS             CSH 0074
     00107  0 07400 2 00156          TSX C1,2      ENTER CONVERSION LOOP          CSH 0075
TD   00110 -3 00000 0 00035          TXL B13       LEAVE CONVERSION LOOP          CSH 0076
TD   00111 -3 00000 0 00063          TXL C3        ADD TO BCD RECORD              CSH 0077
     00112 -0 50000 0 77772  B7      CAL 8L        ADD 8 LEFT ROW TO              CSH 0078
     00113 -0 50100 0 77770          ORA LS        LEFT LOGICAL SUM               CSH 0079
     00114  0 60200 0 77772          SLW LDS       X                              CSH 0080
     00115  0 70000 0 77774          CPY LZ        COPY ZERO LEFT AND             CSH 0081
     00116 -0 32000 0 77774          ANA LZ        FORM INDICATOR FOR             CSH 0082
     00117  0 60200 0 77770          SLW LS        BOTH DIGIT AND ZERO            CSH 0083
     00120 -0 50000 0 77773          CAL 8R        ADD 8 RIGHT ROW TO             CSH 0084
     00121 -0 50100 0 77771          ORA RS        RIGHT LOGICAL SUM              CSH 0085
     00122  0 60200 0 77773          SLW RDS       X                              CSH 0086
     00123  0 70000 0 77775          CPY RZ        COPY ZERO RIGHT AND            CSH 0087
     00124 -0 32000 0 77775          ANA RZ        FORM INDICATOR FOR             CSH 0088
     00125  0 60200 0 77771          SLW RS        BOTH DIGIT AND ZERO            CSH 0089
     00126  0 07400 2 00156  B12     TSX C1,2      ENTER CONVERSION LOOP          CSH 0090
TD   00127 -3 00000 0 00036          TXL B14       LEAVE CONVERSION LOOP          CSH 0091
     00130  0 76700 0 00004          ALS 4         SHIFT TO ZONE POSITION         CSH 0092
TD   00131 -3 00000 0 00063          TXL C3        X                              CSH 0093
     00132 -0 50000 0 77772  B15     CAL LDS       FORM INDICATOR FOR             CSH 0094
     00133 -0 50100 0 77774          ORA LZ        BLANK COLUMNS IN               CSH 0095
     00134 -0 50100 0 77776          ORA L         LEFT HALF OF CARD              CSH 0096
     00135  0 76000 0 00006          COM           X                              CSH 0097
     00136  0 60200 0 77770          SLW LS        X                              CSH 0098
     00137 -0 50000 0 77773          CAL RDS       FORM INDICATOR FOR             CSH 0099
     00140 -0 50100 0 77775          ORA RZ        BLANK COLUMNS IN               CSH 0100
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     00141 -0 50100 0 77777        ORA R          RIGHT HALF OF CARD          CSH 0101
     00142  0 76000 0 00006        COM            X                           CSH 0102
     00143  0 60200 0 77771        SLW RS         X                           CSH 0103
     00144  0 07400 2 00156        TSX C1,2       ENTER CONVERSION LOOP       CSH 0104
TD   00145 -3 00000 0 00153        TXL B16        LEAVE CONVERSION LOOP       CSH 0105
     00146  0 60200 0 77767        SLW TP         MULTIPLY INDICATOR          CSH 0106
     00147  0 76700 0 00001        ALS 1          BITS BY 3 AND               CSH 0107
     00150  0 36100 0 77767        ACL TP         SHIFT TO ZONE POSITION      CSH 0108
     00151  0 76700 0 00004        ALS 4          X                           CSH 0109
TD   00152 -3 00000 0 00063        TXL C3         X                           CSH 0110
     00153 -0 53400 1 00016  B16   LXD B2,1       RESTORE INDEX REGISTERS     CSH 0111
     00154 -0 53400 2 00020        LXD B3,2       AND RETURN TO MAIN          CSH 0112
     00155  0 02000 4 00003        TRA 3,4        PROGRAM                     CSH 0113
     00156 -0 63400 1 00162  C1    SXD C4,1       SAVE ROW COUNT              CSH 0114
     00157 -0 50000 4 00001  C9    CAL 1,4        INITIALIZE ADDRESSES        CSH 0115
     00160  0 40100 0 00174        ADM C7         X ADD 6                     CSH 0116
     00161  0 56000 0 77770  C6    LDQ LS         OBTAIN LEFT SUM             CSH 0117
     00162 -3 00000 0 00165  C4    TXL C8,,**     TRANSFER IF LEFT ROW        CSH 0118
     00163  0 40100 0 00174        ADM C7         RIGHT ROW, ADD 6 MORE       CSH 0119
     00164  0 56000 0 77771        LDQ RS         OBTAIN RIGHT SUM AND        CSH 0120
     00165  0 62100 0 00064  C8    STA C2         SET BCD RECORD ADDRESS      CSH 0121
     00166  0 62100 0 00063        STA C3         X                           CSH 0122
     00167  3 00001 1 00173        TXH C5,1,1     SKIP TEST IF DIGIT ROW      CSH 0123
     00170 -0 60000 0 77767        STQ TP         TEST FOR NO SUM             CSH 0124
     00171 -0 50000 0 77767        CAL TP         X                           CSH 0125
     00172  0 10000 0 00066        TZE C11        X                           CSH 0126
     00173  0 53400 1 00174  C5    LXA C7,1       SET WORD COUNT              CSH 0127
T    00174 -0 75400 0 00006  C7    PXD 6          CONVERT ROW                 CSH 0128
     00175 -0 76300 0 00001        LGL 1          X                           CSH 0129
     00176  0 76700 0 00005        ALS 5          X                           CSH 0130
     00177 -0 76300 0 00001        LGL 1          X                           CSH 0131
     00200  0 76700 0 00005        ALS 5          X                           CSH 0132
     00201 -0 76300 0 00001        LGL 1          X                           CSH 0133
     00202  0 76700 0 00005        ALS 5          X                           CSH 0134
     00203 -0 76300 0 00001        LGL 1          X                           CSH 0135
     00204  0 76700 0 00005        ALS 5          X                           CSH 0136
     00205 -0 76300 0 00001        LGL 1          X                           CSH 0137
     00206  0 76700 0 00005        ALS 5          X                           CSH 0138
     00207 -0 76300 0 00001        LGL 1          X                           CSH 0139
     00210  0 02000 2 00002        TRA 2,2        EXIT FOR ROW PROCEDURE      CSH 0140
                      77767        ORG COMMON                                 CSH 0141
                      77767  TP    BSS 1          TEMPORARY                   CSH 0142
                      77770  LS    BSS 1          LEFT SUM                    CSH 0143
                      77771  RS    BSS 1          RIGHT SUM                   CSH 0144
                      77772  LDS   BSS 1          LEFT DIGIT SUM              CSH 0145
                      77773  RDS   BSS 1          RIGHT DIGIT SUM             CSH 0146
                      77774  LZ    BSS 1          LEFT ZERO ROW               CSH 0147
                      77775  RZ    BSS 1          RIGHT ZERO ROW              CSH 0148
                      77776  L     BSS 1          LEFT ROW                    CSH 0149
                      77777  R     BSS 1          RIGHT ROW                   CSH 0150
                      77772  8L    SYN LDS        8 LEFT ROW                  CSH 0151
                      77773  8R    SYN RDS        8 RIGHT ROW                 CSH 0152
A                     00000        END                                        CSH 0153
```

```
1          ABS
1                                        CONTROL CARD FOR TSH.                                  TSH/C01
                          00000      ORG 0                                                       TSH/C02
00000   0 00000 0 00025          PZE BAD+1                                                      TSH/C03
00001   0 00000 0 00000          PZE                                                            TSH/C04
00002   746362303460             BCD 1(TSH)                                                     TSH/C05
00003   0 00000 0 00000          PZE                                                            TSH/C06
                                         END OF TSH CONTROL CARD.                               TSH/C07
                          00000      ORG 0                                                       TSH000
00000  -0 63400 2 00022    RTD SXD X2,2              SAVE INDEX REGISTER                        TSH001
00001  -0 76000 0 00012        RTT                   CLEAR RTT INDICATOR                        TSH002
00002   0 76100 0 00000  (TSH) NOP RTD               X                                          TSH003
00003   0 50000 4 00001        CLA 1,4               OBTAIN ADDRESS OF 1ST                      TSH004
00004   0 62100 0 00011        STA CPY               LOCATION FOR COPY                          TSH005
00005   0 50000 0 00023        CLA BAC               INITIALIZE TAPE CHECK TEST                 TSH006
00006   0 60100 0 00015    REP STO ERR               TO REREAD AFTER 1ST ERROR.                 TSH007
00007   0 76200 1 00177        RDS 127,1             SELECT TAPE                                TSH008
00010  -0 53400 2 00023        LXD BAC,2             SET IR2 TO ZERO                            TSH009
00011   0 70000 2 00011    CPY CPY *,2               READ TAPE RECORD OF                        TSH010
00012   1 77777 2 00011        TXI CPY,2,-1          N WORDS                                    TSH011
00013   1 00001 4 00016        TXI RES,4,1           EOF (END OF LIST)                          TSH012
00014  -0 76000 0 00012        RTT                   EOR REDUNDANCY TEST                        TSH013
U       00015     00000 0 00000    ERR ***           IF ERROR, REREAD                           TSH014
00016  -0 53400 2 00022    RES LXD X2,2              RETURN TO MAIN                             TSH015
00017   0 02000 4 00003        TRA 3,4               PROGRAM FOR EOF                            TSH016
00020   0 76400 1 00377    TRY BST 127,1             PREPARE TO REREAD BAD                      TSH017
00021   0 50000 0 00024        CLA BAD               RECORD                                     TSH018
TD      00022   1 00000 0 00006     X2 TXI REP       X                                          TSH019
TD      00023   1 00000 0 00020    BAC TXI TRY                                                  TSH020
00024   0 42000 3 00000    BAD HPR 0,3               2ND ERROR HALT                             TSH021
A                         00000      END                                                         TSH022
```

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```
1          REM 704 FORTRAN II / DBC / 12 JAN 59.
1          REM 704 FORTRAN II / BDC / 12 JAN 59.
1                                     704 FORTRAN II / BDC / 12 JAN 59.

                                      THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=
                                      ** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION
                                      INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
                                      * IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF
                                      THIS LOGICAL BLOCK OR SUBROUTINE.
                                      C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
                                      P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).
                                      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                                      CONTROL CARD FOR BDC.                                        BDC/C01
A                   00000         ORG                                                            BDC/C02
00000  0 00001 0 00673            PZE TAB+1,,1                                                   BDC/C03
00001  0 00000 0 77552            PZE COMMON                                                     BDC/C04
00002  742224233460               BCD 1(BDC)                                                     BDC/C05
00003  0 00000 0 00001            PZE (BDC)                                                      BDC/C06
00004  742631433460               BCD 1(FIL)                                                     BDC/C07
00005 -0 00000 0 00037            MZE (FIL)                                                      BDC/C08
                                      END OF BDC CONTROL CARD.                                   BDC/C13
                                      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    00000         ORG 0                                                          BDC/001
                                      (BDC)/ CALLS=LINE,PRINT. CALLER=MAIN PROGRAM.              BDC/002
                                      (BDC) CONTROLS BINARY TO DECIMAL CONVERSION AND OUTPUT.    BDC/003
00000  745163453460      (RTN) BCD 1(RTN)                                                        BDC/0035
00001  0 02100 0 00002 (BDC)  TTR NEW                        INSTRUCTION EXECUTED IN LOCATION 1.BDC/004
                                      NEW = ENTRY POINT FROM MAIN PROGRAM (C(AC)= ADDRESS OF OUTPUTBDC/005
                                      ROUTINE TO HANDLE CURRENT OUTPUT, AND C(0)= LOCATION OF THE BDC/006
                                      CURRENT FORMAT STATEMENT).                                 BDC/007
00002 -0 76000 0 00007 NEW     LTM                          SET FILLW TO CALL THE INDICATED    BDC/008
00003  0 62100 0 00541          STA TYPE                     TYPE OF OUTPUT ROUTINE.            BDC/009
00004 -0 50000 0 00000          CAL 0                        SET OUTPUT FORMAT STATEMENT        BDC/010
00005  0 62100 0 00010          STA CALL                     LOCATION.                          BDC/011
00006  0 40000 0 00577          ADD ONE                      SET EXIT                           BDC/012
00007  0 62100 0 00016          STA FX4                      TO MAIN PROGRAM.                   BDC/013
00010 -0 50000 0 00000 CALL     CAL **                       OBTAIN FORMAT STATEMENT            BDC/014
00011 -0 63400 4 00016          SXD FX4,4                    FOR SCAN.                          BDC/015
00012  0 07400 4 00056          TSX LINE,4                 * GO SCAN FORMAT.                    BDC/016
00013 -0 53400 4 00016          LXD FX4,4                    WHEN DONE, RESTORE C(XR4).         BDC/017
00014 -0 50000 0 00017          CAL TRAP                     SET LOCATION 1 FOR FUTURE          BDC/018
00015  0 60200 0 00001          SLW 1                        TRAP TRANSFER TO SEEK, AND         BDC/019
00016  1 00000 0 00000 FX4      TXI **,0,**                * TRANSFER CONTROL TO MAIN PROGRAM.  BDC/020
                                      THE MAIN PROGRAM CONTROLS ALL INDEXING OF THE LIST.        BDC/021
00017  0 02100 0 00020 TRAP     TTR SEEK                     INSTRUCTION EXECUTED IN LOCATION 1.BDC/022
                                      SEEK = REENTRY POINT FROM MAIN PROGRAM (C(0)= LOCATION OF  BDC/023
                                      THE ADDRESS OF THE NEXT OUTPUT NUMBERS).                   BDC/024
00020 -0 76000 0 00007 SEEK     LTM                          PICKUP NTR INSTRUCTION, AND        BDC/025
00021 -0 50000 0 00000          CAL 0                        SET LOCATION                       BDC/026
00022  0 62100 0 00025          STA SETL                     OF OUTPUT NUMBERS.                 BDC/027
00023  0 40000 0 00577          ADD ONE                      SET LOCATION FOR                   BDC/028
00024  0 62100 0 00036          STA OUT                      RETURN TO MAIN PROGRAM.            BDC/029
```

```
00025 -0 50000 0 00000 SETL    CAL **                          PICKUP LOCATION OF OUTPUT          BDC/030
00026  0 60200 0 00031         SLW GET                         AND SET ADDRESS AND TAG OF GET.    BDC/031
00027  0 56000 0 00042         LDQ CLA                         SET GET OP                         BDC/032
00030 -0 62000 0 00031         SLQ GET                         TO CLA.                            BDC/033
00031  0 50000 0 00000 GET     CLA **,**                       GET OUTPUT NUMBER.                 BDC/034
00032 -0 63400 4 00016         SXD FX4,4                       SAVE THE C(XR4), AND               BDC/035
00033  0 07400 4 00315         TSX PRINT,4                   * GO CONVERT AND PRINT OUTPUT.       BDC/036
00034 -0 53400 4 00016         LXD FX4,4                       RESTORE THE C(XR4).                BDC/037
00035  0 76000 0 00007         ETM                             REPEAT UNTIL LIST IS EXHAUSTED,    BDC/038
00036  0 02100 0 00000 OUT     TTR **                        * UNDER CONTROL OF THE MAIN PROGRAM. BDC/039
                                 END OF PROGRAM (BDC).                                            BDC/040
                               * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/041
                                                                                                  BDC/042
                               (FIL)/ CALLS=FILLW. USES=(RTN). CALLER=MAIN PROGRAM.             BDC/043
                               (FIL) CONTROLS TRANSMISSION OF ANY REMAINING OUTPUT FROM REC.BDC/044
00037  0 40000 0 00600  (FIL) ADD TWO                         SET ADDRESS FOR                    BDC/045
00040  0 62100 0 00055         STA RET                         RETURN TO MAIN PROGRAM.            BDC/046
00041 -0 76000 0 00007         LTM                             IF NO                              BDC/047
00042  0 50000 0 00476 CLA     CLA PACK                        OUTPUT REMAINS                     BDC/048
00043  0 40200 0 00545         SUB FILT                        IN REC BUFFER,                     BDC/049
00044 -0 10000 0 00050         TNZ LAST                        OR IN.                             BDC/050
00045  0 50000 0 77777         CLA WORD                        WORD INDICATOR,                    BDC/051
00046  0 40200 0 00577         SUB ONE                         THEN                               BDC/052
00047  0 10000 0 00053         TZE EXIT                      * EXIT TO RESTORE ALL INDICATORS.    BDC/053
00050 -0 63400 4 00016 LAST    SXD FX4,4                       OTHERWISE, SAVE THE C(XR4), AND    BDC/054
00051  0 07400 4 00515         TSX FILLW,4                   * GO TRANSMIT REMAINING OUTPUT.      BDC/055
00052 -0 53400 4 00016         LXD FX4,4                       RESTORE THE C(XR4), AND            BDC/056
00053 -0 50000 0 00053  EXIT   CAL EXIT                        PICKUP EXIT ADDRESS, AND           BDC/057
00054  1 00000 0 00000  FILLX  TXI (RTN),0,**                 * EXIT TO RESTORE ALL INDICATORS.    BDC/0575
00055  0 02100 0 00000  RET    TTR **                          THEN RETURN TO MAIN PROGRAM        BDC/0576
                                 END OF PROGRAM (FIL).                                            BDC/058
                               * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/059
                                                                                                  BDC/060
                               LINE,4/ CALLS=RESET,FIELD,FILLW.  USES=PRINT. CALLER=(BDC).      BDC/156
                               LINE SCANS THE FORMAT STATEMENT FOR EACH LINE OF OUTPUT.         BDC/157
00056 -0 63400 4 00135 LINE    SXD AX4,4                       SAVE THE C(XR4) FOR RETURN.        BDC/158
00057 -0 63400 1 00133         SXD AX1,1                       SAVE THE ORIGINAL C(XR1), AND      BDC/159
00060 -0 63400 2 00134         SXD AX2,2                       SAVE THE ORIGINAL C(XR2).          BDC/160
00061  0 76000 0 00006         COM                             COMPLEMENT THE C(AC), AND          BDC/161
00062  0 73400 2 00007 SEVEN   PAX 7,2                         SET XR2= -(CURRENT FORMAT LOC.),ANDBDC/162
00063  0 62200 0 00105         STD UNIT                        UNIT DECREMENT= -(CURRENT UNIT).   BDC/163
00064  0 60000 0 77750         STZ PEX                         SET PEX (SCALE FACTOR) = 0, AND    BDC/164
00065  0 07400 4 00544         TSX RESET,4                   * SET REC=BLANKS, PACK=REC, WORD=1.  BDC/165
00066  0 60100 0 77745         STO INT                         SET INT = 1.                       BDC/166
00067  0 53400 1 00062         LXA SEVEN,1                     SET XR1 = 7, AND PICKUP THE        BDC/167
00070  0 56000 2 77777         LDQ -1,2                        1ST WORD OF CURRENT FORMAT.        BDC/168
                               CCLPAR = ENTRY POINT WHEN A LPAREN IS MET IN FORMAT SCAN.        BDC/169
00071 -0 63400 1 00137 CCLPAR  SXD BX1,1                       SAVE THE CURRENT CHARACTER COUNT,  BDC/170
00072 -0 63400 2 00140         SXD BX2,2                       SCAN POSITION, AND FORMAT WORD,    BDC/171
00073 -0 60000 0 77752         STQ MQR                         FOR POSSIBLE REPETITION OF GROUP.  BDC/172
00074  0 53400 4 77745         LXA INT,4                       SET GROUP CONTROL COUNT FOR THE    BDC/173
00075 -0 63400 4 00141         SXD BX4,4                       INDICATED NUMBER OF REPETITIONS,   BDC/174
00076 -0 63400 4 00274         SXD GROUPX,4                    AND SAVE FOR POSSIBLE RESCAN.      BDC/175
                               SCAN = ENTRY POINT FOR CCCMMA,CCSCFP,CCIOUT,CCHOUT,RESCAN.       BDC/176
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     00077  0 60000 0 77745 SCAN   STZ INT                          CLEAR INT WORKING STORAGE, AND      BDC/177
     00100  1 00006 0 00121 SIX    TXI SCAN5,0,6                    GO RESUME SCAN.                     BDC/178
     00101 -0 53400 1 00100 SCAN1  LXD SIX,1                        RESET FORMAT CHARACTER COUNT, AND   BDC/179
     00102  0 56000 2 77777        LDQ -1,2                         PICKUP NEXT FORMAT WORD.            BDC/180
     00103 -0 76300 0 00006 SCAN2  LGL 6                            EXAMINE NEXT CHARACTER,             BDC/181
     00104  0 34000 0 00570        CAS BLANK                        AND IF BLANK,                       BDC/182
     00105  1 00000 0 00107 UNIT   TXI SCAN3,0,**                   THEN                                BDC/183
D    00106  1 00000 0 00121        TXI SCAN5,0                      GO EXAMINE NEXT CHARACTER.          BDC/184
     00107  0 34000 0 00601 SCAN3  CAS L(9)                         IF NOT BLANK, COMPARE WITH NINE,    BDC/185
D    00110  1 00000 0 00124        TXI SCAN6,0                      IF NON-NUMERIC, COMPARE CCTEST.     BDC/186
     00111  0 76100 0 00000        NOP                              IF NUMERIC, THEN                    BDC/187
     00112  0 60100 0 77746        STO DIG                          CONVERT                             BDC/188
     00113  0 50000 0 77745        CLA INT                          SUCCESSIVE                          BDC/189
     00114  0 76700 0 00002        ALS 2                            BCD                                 BDC/190
     00115  0 40000 0 77745        ADD INT                          DIGITS                              BDC/191
     00116  0 76700 0 00001        ALS 1                            TO BINARY,                          BDC/192
     00117  0 36100 0 77746        ACL DIG                          TO SET INT= SCALE FACTOR,           BDC/193
                                       SCAN4 = ENTRY POINT USED BY CCSCFM.                             BDC/194
     00120  0 60100 0 77745 SCAN4  STO INT                          CURRENT FIELD OR GROUP CONTROL.     BDC/195
                                       SCAN5 = ENTRY POINT USED BY CCDCPT.                             BDC/196
     00121 -0 75400 0 00311 SCAN5  PXD XPRINT,0                     CLEAR THE AC, AND UPDATE COUNT.     BDC/197
     00122  2 00001 1 00103        TIX SCAN2,1,1                    WHEN NO CHARACTERS REMAIN,          BDC/198
     00123  1 77777 2 00101        TXI SCAN1,2,-1                   ADJUST SCAN POSITION, AND REPEAT.   BDC/199
                                       SCAN6 = ENTRY POINT USED BY CCDCPT.                             BDC/200
     00124 -0 53400 4 00126 SCAN6  LXD NCC,4                        WHEN A NON-NUMERIC IS MET,          BDC/201
     00125  0 34000 4 00567 SCAN7  CAS CCTEST,4                     SCAN LIST OF CONTROL CHARACTERS,    BDC/202
     00126  1 00014 0 00130 NCC    TXI SCAN8,0,12                   AND IF EQUALITY IS FOUND,           BDC/203
     00127  0 02000 4 00146        TRA FRMTR,4                    * TAKE THE INDICATED TRANSFER.        BDC/204
     00130  2 00001 4 00125 SCAN8  TIX SCAN7,4,1                    IF NOT FOUND IN CONTROL LIST, THEN  BDC/205
     00131  0 42000 1 00005        HPR 5,1                          STOP. PRESS START TO CONTINUE.      BDC/2055
                                        END OF PROGRAM LINE.                                           BDC/210
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/211
                                                                                                       BDC/212
                                       FRMTR / CONTROL TRANSFERS FOR FORMAT SCAN =                     BDC/213
D    00132  1 00000 0 00146        TXI CCEDMK,0                     END OF FORMAT STATEMENT.            BDC/2135
     00133  1 00000 0 00071 AX1    TXI CCLPAR,0,**                  BEGIN FORMAT OR GROUP.              BDC/214
     00134  1 00000 0 00152 AX2    TXI CCCMMA,0,**                  END FIELD.                          BDC/215
     00135  1 00000 0 00157 AX4    TXI CCSLSH,0,**                  END LINE OR RECORD.                 BDC/216
D    00136  1 00000 0 00162        TXI CCSCFP,0                     SCALE FACTOR PLUS.                  BDC/217
     00137  1 00000 0 00165 BX1    TXI CCSCFM,0,**                  SCALE FACTOR MINUS.                 BDC/218
     00140  1 00000 0 00167 BX2    TXI CCRPAR,0,**                  END FORMAT OR GROUP.                BDC/219
     00141  1 00000 0 00173 BX4    TXI CCDCPT,0,**                  ROUNDING OF OUTPUT NUMBER.          BDC/220
D    00142  1 00000 0 00212        TXI CCIOUT,0                     DECIMAL OUTPUT.                     BDC/221
     00143  1 00000 0 00217 CX1    TXI CCHOUT,0,**                  HOLLERITH FIELD OUTPUT.             BDC/222
     00144  1 00000 0 00243 CX2    TXI CCFOUT,0,**                  FIXED POINT OUTPUT.                 BDC/223
     00145  1 00000 0 00254 CX4    TXI CCEOUT,0,**                  FLOATING POINT OUTPUT.              BDC/224
                           00146 FRMTR BSS 0                                                           BDC/225
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/226
                                                                                                       BDC/227
                                       CCEDMK/ CALLS=FIELD,MAIN PROGRAM.                               BDC/2271
                                       CCEDMK = ENTRY POINT WHEN AN ENDMARK IS MET IN FORMAT SCAN.     BDC/2272
     00146  0 07400 4 00275 CCEDMK TSX FIELD,4                    * GO PROCESS UNDER FIELD CONTROL.     BDC/2273
     00147  0 50000 0 00121        CLA SCAN5                        WHEN DONE, SET                      BDC/2274
     00150  0 62100 0 00317        STA CNVSW                        CONVERSION SWITCH TO RESCAN, AND    BDC/2275
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D     00151  1 00000 0 00513        TXI LIST,0                    * GO SEE IF LIST IS EXHAUSTED.       BDC/2276
                                         END OF PROGRAM CCEDMK.
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/2277
                                                                                                      BDC/2278
                                        CCCMMA/ CALLS=FIELD. USES=LINE(SCAN).                         BDC/228
                                        CCCMMA = ENTRY POINT WHEN A COMMA IS MET IN FORMAT SCAN.      BDC/229
      00152  0 07400 4 00275 CCCMMA TSX FIELD,4                   * GO PROCESS UNDER FIELD CONTROL.     BDC/230
                                        RESUME = ENTRY POINT USED BY CCSLSH,CCRPAR.                   BDC/231
      00153 -0 53400 1 00143 RESUME LXD CX1,1                       WHEN DONE, RESTORE CHARACTER COUNT,BDC/232
      00154 -0 53400 2 00144        LXD CX2,2                       RESTORE SCAN POSITION, AND          BDC/233
      00155  0 56000 0 77751        LDQ MQ                          CURRENT FORMAT WORD. THEN           BDC/234
D     00156  1 00000 0 00077        TXI SCAN,0                    * GO RESUME SCAN.                     BDC/235
                                         END OF PROGRAM CCCMMA.                                       BDC/236
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/237
                                                                                                      BDC/238
                                        CCSLSH/ CALLS=FIELD,FILLW. USES=CCCMMA.                       BDC/239
                                        CCSLSH = ENTRY POINT WHEN A SLASH IS MET IN FORMAT SCAN.      BDC/240
      00157  0 07400 4 00275 CCSLSH TSX FIELD,4                   * GO PROCESS UNDER FIELD CONTROL.     BDC/241
      00160  0 07400 4 00515        TSX FILLW,4                   * WHEN DONE, OUTPUT RECORD, AND       BDC/242
D     00161  1 00000 0 00153        TXI RESUME,0                  * GO RESUME SCAN.                     BDC/243
                                         END OF PROGRAM CCSLSH.                                       BDC/244
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/245
                                                                                                      BDC/246
                                        CCSCFP/ USES=LINE(SCAN).                                      BDC/247
                                        CCSCFP = ENTRY POINT WHEN A P IS MET IN FORMAT SCAN.          BDC/248
      00162  0 50000 0 77745 CCSCFP CLA INT                         PICKUP AND                          BDC/249
      00163  0 60100 0 77750        STO PEX                         STORE SCALE FACTOR.                 BDC/250
D     00164  1 00000 0 00077        TXI SCAN,0                    * GO RESUME SCAN.                     BDC/251
                                         END OF PROGRAM CCSCFP.                                       BDC/252
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/253
                                                                                                      BDC/254
                                        CCSCFM/ USES=LINE(SCAN).                                      BDC/255
                                        CCSCFM = ENTRY POINT WHEN A MINUS SIGN IS MET IN FORMAT SCAN.BDC/256
      00165  0 50200 0 77745 CCSCFM CLS INT                         SET INT MINUS, AND                  BDC/257
D     00166  1 00000 0 00120        TXI SCAN4,0                   * GO GET SCALE FACTOR.                BDC/258
                                         END OF PROGRAM CCSCFM.                                       BDC/259
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/260
                                                                                                      BDC/261
                                        CCRPAR/ CALLS=FIELD. USES=CCCMMA,RESCAN(GROUP).               BDC/262
                                        CCRPAR = ENTRY POINT WHEN A RPAREN IS MET IN FORMAT SCAN.     BDC/263
      00167  0 07400 4 00275 CCRPAR TSX FIELD,4                   * GO PROCESS UNDER FIELD CONTROL.     BDC/264
      00170 -0 53400 4 00141        LXD BX4,4                       WHEN DONE, UPDATE GROUP COUNT, AND BDC/265
      00171 -2 00001 4 00153        TNX RESUME,4,1                * GO RESUME SCAN, UNLESS              BDC/266
D     00172  1 00000 0 00270        TXI GROUP,0                   * REPETITION OF GROUP IS INDICATED.   BDC/267
                                         END OF PROGRAM CCRPAR.                                       BDC/268
                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/269
                                                                                                      BDC/270
                                        CCDCPT/ USES=LINE(SCAN).                                      BDC/271
                                        CCDCPT = ENTRY POINT WHEN A POINT IS MET IN FORMAT SCAN.      BDC/272
      00173  0 50000 0 00211 CCDCPT CLA DTR                         MODIFY SCAN INSTRUCTION             BDC/273
      00174  0 60100 0 00107        STO SCAN3                       TO TRANSFER INTO DCPT1.             BDC/274
      00175  0 60000 0 77746        STZ DIG                         CLEAR DIG, AND                      BDC/2745
D     00176  1 00000 0 00121        TXI SCAN5,0                   * GO RESUME SCAN.                     BDC/275
                                        DCPT1 = REENTRY POINT FROM LINE(SCAN).                        BDC/276
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      00177  0 34000 0 00601 DCPT1  CAS L(9)                      DETERMINE THE                      BDC/277
D     00200  1 00000 0 00204        TXI DCPT3,0                   NUMBER, MODULO TEN,                BDC/278
      00201  0 76100 0 00000        NOP                           OF DIGITS                          BDC/279
      00202  0 60100 0 77746        STO DIG                       IN FRACTION.                       BDC/280
D     00203  1 00000 0 00121        TXI SCAN5,0                 * WHEN A CONTROL CHARACTER IS MET,   BDC/281
      00204 -0 60000 0 77751 DCPT3  STQ MQ                        RESTORE THE                        BDC/282
      00205  0 56000 0 00177        LDQ DCPT1                     SCAN INSTRUCTION                   BDC/283
      00206 -0 60000 0 00107        STQ SCAN3                     TO ITS ORIGINAL FORM, AND          BDC/284
      00207  0 56000 0 77751        LDQ MQ                        GO COMPARE CHARACTER               BDC/285
D     00210  1 00000 0 00124        TXI SCAN6,0                 * WITH CCTEST LIST.                  BDC/286
                                     END OF PROGRAM CCDCPT.                                         BDC/287
D     00211  1 00000 0 00177 DTR    TXI DCPT1,0                 * INSTRUCTION CONSTANT.              BDC/288
                                     * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/289
                                                                                                    BDC/290
                                     CCIOUT/ USES=LINE(SCAN).                                       BDC/291
                                     CCIOUT = ENTRY POINT WHEN AN I IS MET IN FORMAT SCAN.          BDC/292
      00212  0 50000 0 00362 CCIOUT CLA IAD                       PICKUP INTG, AND                   BDC/293
                                     SETAD = ENTRY POINT USED BY CCFOUT,CCEOUT.                     BDC/294
      00213  0 62100 0 00317 SETAD  STA CNVSW                     SET CONVERSION SWITCH.             BDC/295
      00214  0 53400 4 77745        LXA INT,4                     SET COUNT FOR THE                  BDC/296
      00215 -0 63400 4 00511        SXD COUNT,4                   REPETITION OF THIS FIELD, AND      BDC/297
D     00216  1 00000 0 00077        TXI SCAN,0                  * GO RESUME SCAN.                    BDC/298
                                     END OF PROGRAM CCIOUT.                                         BDC/299
                                     * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/300
                                                                                                    BDC/301
                                     CCHOUT/ USES=LINE(SCAN).                                       BDC/302
                                     CCHOUT = ENTRY POINT WHEN AN H IS MET IN FORMAT SCAN.          BDC/303
      00217  0 50000 0 00476 CCHOUT CLA PACK                      SET STORING ADDRESS                BDC/304
      00220  0 62100 0 00232        STA HOUT4                     TO CURRENT LOCATION IN REC BUFFER. BDC/305
      00221 -0 50000 0 77777        CAL WORD                      PICKUP WORD INDICATOR.             BDC/306
      00222  0 53400 4 77745        LXA INT,4                     SET XR4 = FIELD WIDTH.             BDC/307
      00223 -0 14000 0 00224        TNO HOUT1                     TURN OFF OVERFLOW INDICATOR.       BDC/308
      00224  2 00001 1 00230 HOUT1  TIX HOUT3,1,1                 UPDATE COUNT, AND IF NO CHARACTERS BDC/309
      00225 -0 53400 1 00100        LXD SIX,1                     REMAIN, RESET CHARACTER COUNT,     BDC/310
      00226  1 77777 2 00227        TXI HOUT2,2,-1                RESET CURRENT FORMAT SCAN POSITION,BDC/311
      00227  0 56000 2 77777 HOUT2  LDQ -1,2                      AND PICKUP NEXT FORMAT WORD.       BDC/312
      00230 -0 76300 0 00006 HOUT3  LGL 6                         SHIFT SIX CHARACTERS               BDC/313
      00231 -0 14000 0 00240        TNO HOUT5                     INTO THE AC.                       BDC/314
      00232  0 60200 0 00000 HOUT4  SLW **                        STORE BCD WORD IN REC BUFFER, AND  BDC/315
      00233 -0 50000 0 00232        CAL HOUT4                     UPDATE                             BDC/316
      00234  0 40000 0 00577        ADD ONE                       STORING                            BDC/317
      00235  0 62100 0 00232        STA HOUT4                     ADDRESS                            BDC/318
      00236  0 62100 0 00476        STA PACK                      AND PACK ADDRESS.                  BDC/319
      00237 -0 50000 0 00577        CAL ONE                       RESET WORD INDICATOR.              BDC/320
      00240  2 00001 4 00224 HOUT5  TIX HOUT1,4,1                 REPEAT UNTIL WHOLE GROUP IS MOVED. BDC/321
      00241  0 60100 0 77777        STO WORD                      SAVE INCOMPLETE WORD. AND          BDC/322
D     00242  1 00000 0 00077        TXI SCAN,0                  * GO RESUME SCAN.                    BDC/323
                                     END OF PROGRAM CCHOUT.                                         BDC/324
                                     * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/325
                                                                                                    BDC/326
                                     CCFOUT/ USES=CCIOUT.                                           BDC/327
                                     CCFOUT = ENTRY POINT WHEN AN F IS MET IN FORMAT SCAN.          BDC/328
      00243  0 50000 0 00253 CCFOUT CLA FXDW                      SET CONVERSION ROUTINE             BDC/329
      00244  0 62100 0 00427        STA CNV5                      FOR FIXED POINT                    BDC/330
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     00245  0 62200 0 00441          STD CNV6                        OUTPUT                                  BDC/331
     00246  0 62200 0 00435          STD CLR                         (WITHOUT EXPONENT).                     BDC/332
     00247  0 50200 0 77750          CLS PEX                         SET EXP TO THE                          BDC/333
     00250  0 60100 0 77742          STO EXP                         NEGATIVE OF SCALE FACTOR.               BDC/334
     00251  0 50000 0 00331          CLA FAD                         PICKUP FXD, AND                         BDC/335
D    00252  1 00000 0 00213          TXI SETAD,0                   * GO SET CONVERSION SWITCH.               BDC/336
                                         END OF PROGRAM CCFOUT.                                             BDC/337
     00253  0 00001 0 77742 FXDW     PZE CHAR,0,1                    CONSTANT USED BY CCFOUT.                BDC/338
                                         * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/339
                                                                                                            BDC/340
                                         CCEOUT/ USES=CCIOUT.                                               BDC/341
                                         CCEOUT = ENTRY POINT WHEN AN E IS MET IN FORMAT SCAN.              BDC/342
     00254  0 50000 0 00262 CCEOUT    CLA FLTW                        SET CONVERSION ROUTINE                  BDC/343
     00255  0 62100 0 00427          STA CNV5                        FOR FLOATING POINT                      BDC/344
     00256  0 62200 0 00441          STD CNV6                        OUTPUT                                  BDC/345
     00257  0 62200 0 00435          STD CLR                         (WITH EXPONENT).                        BDC/346
     00260  0 50000 0 00340          CLA FLT1                        PICKUP FLT, AND                         BDC/347
D    00261  1 00000 0 00213          TXI SETAD,0                   * GO SET CONVERSION SWITCH.               BDC/348
                                         END OF PROGRAM CCEOUT.                                             BDC/349
     00262  0 00005 0 77736 FLTW     PZE CHAR-4,0,5                  CONSTANT USED BY CCEOUT.                BDC/350
                                         * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/351
                                                                                                            BDC/352
                                         RESCAN/ CALLS=FILLW. USES=LINE(SCAN).                              BDC/353
                                         RESCAN = ENTRY POINT USED BY PRINT.                                BDC/354
     00263 -0 63400 4 00135 RESCAN   SXD AX4,4                       FOR RETURN FROM FORMAT SCAN.            BDC/357
     00264 -0 63400 1 00133          SXD AX1,1                       SAVE THE ORIGINAL C(XR1),               BDC/358
     00265 -0 63400 2 00134          SXD AX2,2                       SAVE THE ORIGINAL C(XR2), AND           BDC/359
     00266  0 07400 4 00515          TSX FILLW,4                   * GO OUTPUT RECORD.                       BDC/360
     00267 -0 53400 4 00274          LXD GROUPX,4                    THEN PICKUP ORIGINAL GROUP COUNT TOBDC/361
                                         GROUP = ENTRY POINT USED BY CCRPAR.                                BDC/362
     00270 -0 63400 4 00141 GROUP    SXD BX4,4                       UPDATE GROUP CONTROL.                   BDC/363
     00271 -0 53400 1 00137          LXD BX1,1                       RESET CHARACTER COUNT,                  BDC/364
     00272 -0 53400 2 00140          LXD BX2,2                       RESET SCAN POSITION, AND                BDC/365
     00273  0 56000 0 77752          LDQ MQR                         PICKUP 1ST FORMAT WORD OF GROUP.        BDC/366
     00274  1 00000 0 00077 GROUPX   TXI SCAN,0,**                 * GO RESCAN THIS GROUP.                   BDC/367
                                         END OF PROGRAM RESCAN.                                             BDC/368
                                         * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/369
                                                                                                            BDC/370
                                         FIELD,4/ USES PRINT. CALLERS=LINE(SCAN),CCCMMA,CCSLSH,CCRPAR.BDC/371
                                         FIELD CONTROLS THE REPEATED OUTPUT OF THE CURRENT FIELD.           BDC/372
     00275 -0 63400 4 00145 FIELD    SXD CX4,4                       SAVE THE C(XR4) FOR RETURN.             BDC/373
     00276 -0 63400 1 00143          SXD CX1,1                       SAVE THE CHARACTER COUNT,               BDC/374
     00277 -0 63400 2 00144          SXD CX2,2                       THE SCAN POSITION, AND                  BDC/375
     00300 -0 60000 0 77751          STQ MQ                          THE CURRENT FORMAT WORD.                BDC/376
     00301 -0 53400 1 00133          LXD AX1,1                       RESTORE THE ORIGINAL C(XR1),            BDC/377
     00302 -0 53400 2 00134          LXD AX2,2                       RESTORE THE ORIGINAL C(XR2), AND        BDC/378
     00303  0 53400 4 77745          LXA INT,4                       EXAMINE INT, AND                        BDC/379
     00304 -3 00000 4 00307          TXL DONE,4,0                    IF NOT ZERO, THEN                       BDC/380
     00305 -0 63400 4 00467          SXD CLR2,4                      SET COLUMN WIDTH OF EACH FIELD.         BDC/381
D    00306  1 00000 0 00513          TXI LIST,0                    * AND GO PROCESS FIELD.                   BDC/382
                                         DONE = ENTRY POINT USED BY PRINT.                                  BDC/383
     00307 -0 53400 4 00145 DONE     LXD CX4,4                       WHEN DONE, RESTORE THE C(XR4), AND BDC/384
     00310  0 02000 4 00001          TRA 1,4                       * RETURN TO CALLER.                       BDC/385
                                         END OF PROGRAM FIELD.                                              BDC/386
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                                        * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/387
                                                                                                  BDC/388
                                        PRINT,4/ USES=FIELD,LINE. CALLERS=(BDC),LINE(RESCAN).     BDC/389
                                        PRINT DOES INTEGER, FIXED, AND FLOATING POINT CONVERSION. BDC/390
                                        XPRINT = EXIT FROM PRINT WHEN FORMAT IS EXHAUSTED.        BDC/391
00311 -0 63400 4 00317 XPRINT SXD CNVSW,4                SAVE THE C(XR4), AND                     BDC/392
00312  0 07400 4 00263       TSX RESCAN,4             * GO RESCAN FORMAT. THEN RETURN,            BDC/3921
00313 -0 53400 4 00317       LXD CNVSW,4              AFTER GETTING FORMAT.                       BDC/3922
00314  0 50000 0 77747       CLA DATUM                THEN  PROCEED TO CONVERSION.                BDC/393
                                        PRINT = ENTRY POINT USED BY (BDC).                        BDC/394
00315 -0 63400 4 00135 PRINT SXD AX4,4                SAVE THE C(XR4) FOR RETURN TO LIST.         BDC/395
00316  0 60100 0 77747       STO DATUM                STORE CURRENT FIELD FOR CONVERSION.         BDC/396
00317  1 00000 0 00000 CNVSW TXI **,0,**             * SWITCH TO FLT, FXD, INTG,OR RESCAN.         BDC/397
                                        FLT = ENTRY POINT FOR FLOATING POINT CONVERSION.          BDC/398
00320  0 10000 0 00433 FLT   TZE CNVN                 IF NON-ZERO, BEGIN E, F CONVERSION.         BDC/399
00321  0 76500 0 00033       LRS 27                   PLACE CHARACTERISTIC IN THE AC,             BDC/400
00322  0 76000 0 00003       SSP                      FRACTION IN THE MQ.                         BDC/401
00323  0 40200 0 00575       SUB BASE                                                             BDC/402
00324  0 76500 0 00043       LRS 35                   OBTAIN REQUIRED BASE IN THE MQ.             BDC/403
00325  0 20000 0 00576       MPY LOG2                                                             BDC/404
00326  0 60100 0 77742       STO EXP                                                              BDC/405
00327  0 12000 0 00340       TPL FLT1                                                             BDC/406
00330  0 40200 0 77750       SUB PEX                                                              BDC/407
00331  0 73400 4 00370 FAD   PAX FXD,4                                                            BDC/408
00332  0 56000 0 77747       LDQ DATUM                                                            BDC/409
00333  0 26000 4 00671       FMP TAB-1,4                                                          BDC/410
00334  0 76000 0 00003       SSP                      TEST PROBABLE                               BDC/411
00335  0 53400 4 77750       LXA PEX,4                EXPONENT.                                   BDC/412
00336  0 40200 4 00672       SUB TAB,4                                                            BDC/413
D 00337  1 00000 0 00344      TXI FLT4,0                                                           BDC/414
00340  0 73400 4 00320 FLT1  PAX FLT,4                                                            BDC/415
00341  0 50000 4 00672       CLA TAB,4                                                            BDC/416
00342 -0 40000 0 77747       SBM DATUM                                                            BDC/417
00343  0 40000 0 00574       ADD BIAS                                                             BDC/418
00344  0 12000 0 00350 FLT4  TPL FLT2                                                             BDC/419
00345 -0 50000 0 77742       CAL EXP                  ADJUST EXPONENT.                            BDC/420
00346  0 40000 0 00577       ADD ONE                                                              BDC/421
00347  0 60200 0 77742       SLW EXP                                                              BDC/422
00350 -0 50000 0 00566 FLT2  CAL E                    OBTAIN E FOR                                BDC/423
00351  0 60200 0 77736       SLW CHAR-4               EXPONENT.                                   BDC/424
00352  0 50000 0 77742       CLA EXP                                                              BDC/425
00353  0 40200 0 77750       SUB PEX                                                              BDC/426
00354  0 60100 0 77742       STO EXP                                                              BDC/427
00355 -0 50000 0 00570       CAL BLANK                                                            BDC/428
00356  0 56000 0 77742       LDQ EXP                  OBTAIN SIGN.                                BDC/429
00357  0 16200 0 00361       TQP FLT3                                                             BDC/430
00360 -0 50000 0 00560       CAL MINUS                                                            BDC/431
00361  0 60200 0 77737 FLT3  SLW CHAR-3                                                            BDC/432
00362 -0 75400 0 00445 IAD   PXD INTG,0                                                           BDC/433
00363  0 22100 0 00571       DVP TEN                  OBTAIN DIGITS                               BDC/434
00364 -0 60000 0 77740       STQ CHAR-2               OF EXPONENT.                                BDC/435
00365  0 60200 0 77741       SLW CHAR-1                                                           BDC/436
00366  0 50000 0 77747       CLA DATUM                                                            BDC/437
D 00367  1 00000 0 00371      TXI CNV,0                                                            BDC/438
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                                        FXD = ENTRY POINT FOR FIXED POINT CONVERSION.                  BDC/439
00370  0 10000 0 00433 FXD     TZE CNVN                      TEST OUTPUT NUMBER FOR ZERO.              BDC/440
00371  0 53400 4 77742 CNV     LXA EXP,4                     TEST FOR SCALING.                         BDC/441
00372 -3 00000 4 00400         TXL CNV1,4,0                                                            BDC/442
00373  0 56000 0 77742         LDQ EXP                                                                 BDC/443
00374  0 16200 0 00402         TQP CNV2                                                                BDC/444
00375  0 56000 0 77747         LDQ DATUM                                                               BDC/445
00376  0 26000 4 00672         FMP TAB,4                                                               BDC/446
00377  0 36100 0 00574         ACL BIAS                                                                BDC/447
00400 -0 30000 0 00572 CNV1    UFA FIXN                      FIX INTERNAL FLOATING BINARY NO.          BDC/448
D 00401  1 00000 0 00406       TXI CNVN1,0                                                             BDC/449
00402  0 24100 4 00672 CNV2    FDP TAB,4                                                               BDC/450
00403 -0 60000 0 77744         STQ FD                                                                  BDC/451
00404  0 50000 0 77744         CLA FD                                                                  BDC/452
00405 -0 30000 0 00573         UFA FIXQ                                                                BDC/453
00406  0 76300 0 00010 CNVN1   LLS 8                                                                   BDC/454
00407  0 76700 0 00002         ALS 2                                                                   BDC/455
00410  0 77100 0 00012         ARS 10                                                                  BDC/456
00411  0 60100 0 77743         STO ND                        STORE INTEGRAL PART.                      BDC/457
00412 -0 60000 0 77744         STQ FD                        STORE FRACTIONAL PART.                    BDC/458
00413  0 53400 4 77746         LXA DIG,4                                                               BDC/459
00414  0 50000 0 77744         CLA FD                        SKIP FRACTIONAL.                          BDC/460
00415  0 36100 4 00613         ACL RND,4                                                               BDC/461
00416  0 76500 0 00043         LRS 35                        ROUND NUMBER.                             BDC/462
00417  0 40000 0 77743         ADD ND                                                                  BDC/463
00420  0 60100 0 77743         STO ND                                                                  BDC/464
00421 -3 00000 4 00440         TXL CNV3,4,0                  TEST FOR FRACTION WANTED.                 BDC/465
00422 -0 60000 0 77744 CNV4    STQ FD                                                                  BDC/466
00423  0 76700 0 00004         ALS 4                         CONVERT FRACTIONAL PART.                  BDC/467
00424  0 76300 0 00041         LLS 33                                                                  BDC/468
00425  0 40000 0 77744         ADD FD                                                                  BDC/469
00426  0 76500 0 00040         LRS 32                                                                  BDC/470
00427  0 60200 4 00000 CNV5    SLW **,4                      (FXD=CHAR, FLT=CHAR-4)                    BDC/471
00430  2 00001 4 00422         TIX CNV4,4,1                                                            BDC/472
00431  0 50000 0 77743         CLA ND                        OBTAIN INTEGRAL PART.                     BDC/473
D 00432  1 00000 0 00440       TXI CNV3,0                                                              BDC/474
00433  0 53400 4 77746 CNVN    LXA DIG,4                                                               BDC/475
00434  0 56000 0 00570         LDQ BLANK                                                               BDC/476
00435  1 00000 4 00436 CLR     TXI CLR1,4,**                 (FXD=1, FLT=5)                            BDC/477
00436 -0 60000 4 77742 CLR1    STQ CHAR,4                                                              BDC/478
00437  2 00001 4 00436         TIX CLR1,4,1                                                            BDC/479
00440  0 53400 4 77746 CNV3    LXA DIG,4                                                               BDC/480
00441  1 00000 4 00442 CNV6    TXI CNV7,4,**                 (FXD=1, FLT=5)                            BDC/481
00442  0 56000 0 00562 CNV7    LDQ POINT                     ESTABLISH POINT.                          BDC/482
00443 -0 60000 4 77742         STQ CHAR,4                                                              BDC/483
D 00444  1 00000 0 00447       TXI CNV11,0                                                             BDC/484
                                        INTG = ENTRY POINT FOR INTEGER CONVERSION.                     BDC/485
00445 -0 53400 4 00577 INTG    LXD ONE,4                                                               BDC/486
00446  0 77100 0 00022         ARS 18                                                                  BDC/487
00447  0 76500 0 00043 CNV11   LRS 35                                                                  BDC/488
00450  0 22100 0 00571 CNV9    DVP TEN                       CONVERT INTEGRAL PART.                    BDC/489
00451  0 60200 4 77741         SLW CHAR-1,4                                                            BDC/490
00452 -0 60000 0 77743         STQ ND                                                                  BDC/491
00453  0 50000 0 77743         CLA ND                                                                  BDC/492
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00454  0 10000 0 00457          TZE CNV8                                                  BDC/493
00455  0 76000 0 00000          CLM                                                       BDC/494
00456  1 00001 4 00450          TXI CNV9,4,1                                              BDC/495
00457 -0 50000 0 00570 CNV8     CAL BLANK                   PUT SIGN IN SPREAD BCD.       BDC/496
00460  0 16200 0 00462          TQP CNV12                                                 BDC/497
00461 -0 50000 0 00560          CAL MINUS                                                 BDC/498
00462  0 60200 4 77740 CNV12    SLW CHAR-2,4                                              BDC/499
00463 -0 50000 0 00570          CAL BLANK                                                 BDC/500
00464  1 00003 4 00467          TXI CLR2,4,3                                              BDC/501
00465  0 60200 4 77742 CLR3     SLW CHAR,4                                                BDC/502
00466  1 00001 4 00467          TXI CLR2,4,1                                              BDC/503
00467 -3 00000 4 00465 CLR2     TXL CLR3,4,**               (COLUMN WIDTH OF THIS FIELD)  BDC/504
00470 -0 53400 4 00467          LXD CLR2,4                                                BDC/505
00471 -0 50000 0 77777          CAL WORD                    PACK RECORD INTO              BDC/506
00472  0 14000 0 00473          TOV PACK2                   FULL WORDS.                   BDC/507
00473  0 76700 0 00006 PACK2    ALS 6                                                     BDC/508
00474  0 40000 4 77742          ADD CHAR,4                                                BDC/509
00475 -0 14000 0 00503          TNO PACK3                                                 BDC/510
00476  0 60200 0 00000 PACK     SLW **                      (CURRENT ADDRESS IN REC BUFFER) BDC/511
00477 -0 50000 0 00476          CAL PACK                                                  BDC/512
00500  0 40000 0 00577          ADD ONE                                                   BDC/513
00501  0 62100 0 00476          STA PACK                                                  BDC/514
00502 -0 50000 0 00577          CAL ONE                                                   BDC/515
00503  2 00001 4 00473 PACK3    TIX PACK2,4,1               WHEN THIS FIELD HAS BEEN PROCESSED,BDC/516
00504  0 60200 0 77777          SLW WORD                    SAVE ANY REMAINDER, AND       BDC/517
00505 -0 53400 4 00511          LXD COUNT,4                 COUNT NUMBER OF               BDC/518
00506  2 00001 4 00512          TIX MORE,4,1                WORDS CONVERTED.              BDC/519
00507 -0 63400 1 00133          SXD AX1,1                   IF FIELD COUNT HAS BEEN EXHAUSTED, BDC/520
00510 -0 63400 2 00134          SXD AX2,2                   RESTORE THE C(XR1),C(XR2), AND BDC/521
00511  1 00000 0 00307 COUNT    TXI DONE,0,**              * (FIELD REPEAT COUNT) EXIT TO FIELD.BDC/522
00512 -0 63400 4 00511 MORE     SXD COUNT,4                 OTHERWISE, GO GET MORE LIST.  BDC/523
                                LIST = ENTRY POINT USED BY LINE(SCAN),FIELD.              BDC/524
                                                            RESTORE THE C(XR4), AND       BDC/525
00513 -0 53400 4 00135 LIST     LXD AX4,4                  * GO GET NEXT OUTPUT NUMBER.   BDC/526
00514  0 02000 4 00001          TRA 1,4                                                   BDC/527
                                 END OF PROGRAM PRINT.                                    BDC/528
                                * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/529
                                                                                          BDC/530
                                FILLW(RESET),4/ CALLERS=(FIL),LINE,CCSLSH,RESCAN.         BDC/531
                                FILLW FILLS OUT LAST WORD,CONTROLS OUTPUT, AND RESETS.    BDC/532
00515 -0 63400 4 00054 FILLW    SXD FILLX,4                 SAVE THE C(XR4) FOR RETURN.   BDC/533
00516  0 53400 4 00476          LXA PACK,4                  SET XR4 = REC + NO. WORDS ENTERED. BDC/534
00517 -0 50000 0 77777          CAL WORD                    EXAMINE                       BDC/535
00520  0 40200 0 00577          SUB ONE                     WORD INDICATOR, AND           BDC/536
00521  0 10000 0 00533          TZE FILL1                   IF NOT ZERO, THEN             BDC/537
00522 -0 50000 0 00476          CAL PACK                    SET ADDRESS                   BDC/538
00523  0 62100 0 00531          STA FILL3                   FOR LAST WORD.                BDC/539
00524 -0 50000 0 77777          CAL WORD                    PICKUP WORD,                  BDC/540
00525  0 14000 0 00526          TOV FILL4                   AND                           BDC/541
00526  0 76700 0 00006 FILL4    ALS 6                       FILL OUT                      BDC/542
00527  0 40000 0 00570          ADD BLANK                   WITH BLANKS.                  BDC/543
00530 -0 14000 0 00526          TNO FILL4                   WHEN DONE,                    BDC/544
00531  0 60200 0 00000 FILL3    SLW **                      STORE LAST WORD.              BDC/545
00532  1 00001 4 00533          TXI FILL1,4,1               UPDATE, AND SET               BDC/546
00533  2 77753 4 00535 FILL1    TIX FILL2,4,REC             XR4 AND THE DECREMENT OF FILL
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00534  0 53400 4 00577          LXA ONE,4                    TO THE NUMBER OF WORDS ENTERED     BDC/547
00535 -0 63400 4 00542 FILL2    SXD FILL,4                   IN REC BUFFER. THEN                BDC/548
00536 -0 53400 4 00105          LXD UNIT,4                   SELECT CURRENT OUTPUT UNIT.        BDC/549
00537  3 77776 4 00541          TXH TYPE,4,-2                PUNCH OR PRINT OUTPUT.             BDC/550
00540  0 76600 4 00177          WRS 127,4                    BCD TAPE OUTPUT.                   BDC/551
00541  0 07400 4 00000 TYPE     TSX **,4                   * GO TO INDICATED OUTPUT ROUTINE.    BDC/552
00542  0 00000 0 77753 FILL     PZE REC,,**                  (DECREMENT = NO. WORDS ENTERED)    BDC/553
00543 -0 53400 4 00054          LXD FILLX,4                  REENTRY FROM OUTPUT ROUTINE.       BDC/554
                                RESET = ENTRY POINT USED BY LINE.                               BDC/555
00544 -0 50000 0 00567 RESET    CAL BLANKS                   RESET REC                          BDC/556
00545  0 60200 0 77753 FILT     SLW REC                      TO BLANKS,                         BDC/557
00546 -0 50000 0 00542          CAL FILL                     PACK ADDRESS                       BDC/558
00547  0 62100 0 00476          STA PACK                     TO REC, AND                        BDC/559
00550 -0 50000 0 00577          CAL ONE                      PICKUP 1 TO                        BDC/560
00551  0 60200 0 77777          SLW WORD                     SET WORD INDICATOR.                BDC/561
00552  0 02000 4 00001          TRA 1,4                    * EXIT TO CALLER.                    BDC/562
                                 END OF PROGRAM FILLW(RESET).                                   BDC/563
                                * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/564
                                                                                                BDC/565
                                CONSTANTS AND WORKING STORAGE USED BY FIL/BDC.                  BDC/566
00553 +000000000077     ENDMK   OCT 77                       CCTEST-12.                         BDC/5665
00554  000000000074      (      BCD 100000(                  CCTEST-11.                         BDC/567
00555  000000000073     COMMA   BCD 100000,                  CCTEST-10.                         BDC/568
00556  000000000061     SLASH   BCD 100000/                  CCTEST-9.                          BDC/569
00557  000000000047      P      BCD 100000P                  CCTEST-8.                          BDC/570
00560  000000000040     MINUS   BCD 100000-                  CCTEST-7.                          BDC/571
00561  000000000034      )      BCD 100000)                  CCTEST-6.                          BDC/572
00562  000000000033     POINT   BCD 100000.                  CCTEST-5.                          BDC/573
00563  000000000031      I      BCD 100000I                  CCTEST-4.                          BDC/574
00564  000000000030     H       BCD 100000H                  CCTEST-3.                          BDC/575
00565  000000000026      F      BCD 100000F                  CCTEST-2.                          BDC/576
00566  000000000025      E      BCD 100000E                  CCTEST-1.                          BDC/577
                  00567 CCTEST  BSS 0                        INDEXING ADDRESS FOR ABOVE LIST.   BDC/578
00567  606060606060     BLANKS  BCD 1                        CONSTANT USED BY FIL/BDC.          BDC/579
00570  000000000060      BLANK  BCD 100000                   CONSTANT USED BY FIL/BDC.          BDC/580
00571 +000000000012      TEN    DEC 10                       CONSTANT USED BY FIL/BDC.          BDC/581
00572 +233000000000      FIXN   DEC 155B8                    CONSTANT USED BY FIL/BDC.          BDC/582
00573 +266000000000      FIXQ   DEC 182B8                    CONSTANT USED BY FIL/BDC.          BDC/583
00574 +033000000000      BIAS   DEC 27B8                     CONSTANT USED BY FIL/BDC.          BDC/584
00575 +000000000200      BASE   DEC 128                      CONSTANT USED BY FIL/BDC.          BDC/585
00576 +115040462343      LOG2   DEC .301029957B              CONSTANT USED BY FIL/BDC.          BDC/586
00577 +000000000001      ONE    DEC 1                        CONSTANT USED BY FIL/BDC.          BDC/587
00600  0 00000 0 00002   TWO    PZE 2                        CONSTANT USED BY FIL/BDC.          BDC/5875
00601  0 00000 0 00011 L(9)     PZE 9                        CONSTANT USED BY FIL/BDC.          BDC/5876
00602 +000000000021             DEC .5BE-9                   09-TABLE USED BY FIL/BDC.          BDC/588
00603 +000000000253             DEC .5BE-8                   08-TABLE USED BY FIL/BDC.          BDC/589
00604 +000000003265             DEC .5BE-7                   07-TABLE USED BY FIL/BDC.          BDC/590
00605 +000000041433             DEC .5BE-6                   06-TABLE USED BY FIL/BDC.          BDC/591
00606 +000000517426             DEC .5BE-5                   05-TABLE USED BY FIL/BDC.          BDC/592
00607 +000006433342             DEC .5BE-4                   04-TABLE USED BY FIL/BDC.          BDC/593
00610 +000101422335             DEC .5BE-3                   03-TABLE USED BY FIL/BDC.          BDC/594
00611 +001217270243             DEC .5BE-2                   02-TABLE USED BY FIL/BDC.          BDC/595
00612 +014631463146             DEC .5BE-1                   01-TABLE USED BY FIL/BDC.          BDC/596
00613 +200000000000     RND     DEC .5B                      00-TABLE USED BY FIL/BDC.          BDC/597
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00614 +376700324573          OCT 376700324573     46-TABLE USED BY FIL/BDC.     BDC/598
00615 +373546566774          OCT 373546566774     45-TABLE USED BY FIL/BDC.     BDC/599
00616 +370436770626          OCT 370436770626     44-TABLE USED BY FIL/BDC.     BDC/600
00617 +364713132675          OCT 364713132675     43-TABLE USED BY FIL/BDC.     BDC/601
00620 +361557257061          OCT 361557257061     42-TABLE USED BY FIL/BDC.     BDC/602
00621 +356445677215          OCT 356445677215     41-TABLE USED BY FIL/BDC.     BDC/603
00622 +352726145174          OCT 352726145174     40-TABLE USED BY FIL/BDC.     BDC/604
00623 +347570120775          OCT 347570120775     39-TABLE USED BY FIL/BDC.     BDC/605
00624 +344454732312          OCT 344454732312     38-TABLE USED BY FIL/BDC.     BDC/606
00625 +340741367020          OCT 340741367020     37-TABLE USED BY FIL/BDC.     BDC/607
00626 +335601137163          OCT 335601137163     36-TABLE USED BY FIL/BDC.     BDC/608
00627 +332464114134          OCT 332464114134     35-TABLE USED BY FIL/BDC.     BDC/609
00630 +326755023372          OCT 326755023372     34-TABLE USED BY FIL/BDC.     BDC/610
00631 +323612334310          OCT 323612334310     33-TABLE USED BY FIL/BDC.     BDC/611
00632 +320473426555          OCT 320473426555     32-TABLE USED BY FIL/BDC.     BDC/612
00633 +314770675742          OCT 314770675742     31-TABLE USED BY FIL/BDC.     BDC/613
00634 +311623713116          OCT 311623713116     30-TABLE USED BY FIL/BDC.     BDC/614
00635 +306503074076          OCT 306503074076     29-TABLE USED BY FIL/BDC.     BDC/615
00636 +303402374713          OCT 303402374713     28-TABLE USED BY FIL/BDC.     BDC/616
00637 +277635456171          OCT 277635456171     27-TABLE USED BY FIL/BDC.     BDC/617
00640 +274512676456          OCT 274512676456     26-TABLE USED BY FIL/BDC.     BDC/618
00641 +271410545213          OCT 271410545213     25-TABLE USED BY FIL/BDC.     BDC/619
00642 +265647410337          OCT 265647410337     24-TABLE USED BY FIL/BDC.     BDC/620
00643 +262522640262          OCT 262522640262     23-TABLE USED BY FIL/BDC.     BDC/621
00644 +257417031702          OCT 257417031702     22-TABLE USED BY FIL/BDC.     BDC/622
00645 +253661534466          OCT 253661534466     21-TABLE USED BY FIL/BDC.     BDC/623
00646 +250532743536          OCT 250532743536     20-TABLE USED BY FIL/BDC.     BDC/624
00647 +245425434430          OCT 245425434430     19-TABLE USED BY FIL/BDC.     BDC/625
00650 +241674055530          OCT 241674055530     18-TABLE USED BY FIL/BDC.     BDC/626
00651 +236543212741          OCT 236543212741     17-TABLE USED BY FIL/BDC.     BDC/627
00652 +233434157116          OCT 233434157116     16-TABLE USED BY FIL/BDC.     BDC/628
00653 +227706576512          OCT 227706576512     15-TABLE USED BY FIL/BDC.     BDC/629
00654 +224553630410          OCT 224553630410     14-TABLE USED BY FIL/BDC.     BDC/630
00655 +221443023471          OCT 221443023471     13-TABLE USED BY FIL/BDC.     BDC/631
00656 +215721522451          OCT 215721522451     12-TABLE USED BY FIL/BDC.     BDC/632
00657 +212564416672          OCT 212564416672     11-TABLE USED BY FIL/BDC.     BDC/633
00660 +207452013710          OCT 207452013710     10-TABLE USED BY FIL/BDC.     BDC/634
00661 +203734654500          OCT 203734654500     09-TABLE USED BY FIL/BDC.     BDC/635
00662 +200575360400          OCT 200575360400     08-TABLE USED BY FIL/BDC.     BDC/636
00663 +175461132000          OCT 175461132000     07-TABLE USED BY FIL/BDC.     BDC/637
00664 +171750220000          OCT 171750220000     06-TABLE USED BY FIL/BDC.     BDC/638
00665 +166606500000          OCT 166606500000     05-TABLE USED BY FIL/BDC.     BDC/639
00666 +163470400000          OCT 163470400000     04-TABLE USED BY FIL/BDC.     BDC/640
00667 +157764000000          OCT 157764000000     03-TABLE USED BY FIL/BDC.     BDC/641
00670 +154620000000          OCT 154620000000     02-TABLE USED BY FIL/BDC.     BDC/642
00671 +151500000000          OCT 151500000000     01-TABLE USED BY FIL/BDC.     BDC/643
00672 +146400000000     TAB  OCT 146400000000     00-TABLE USED BY FIL/BDC.     BDC/644
                 77552 COMMON ORG -150            COMMON WORKING STORAGE=       BDC/645
                 77742  CHAR  BES 120             VARIABLE USED BY FIL/BDC.     BDC/646
                 77742  EXP   BSS 1               VARIABLE USED BY FIL/BDC.     BDC/647
                 77743  ND    BSS 1               VARIABLE USED BY FIL/BDC.     BDC/648
                 77744  FD    BSS 1               VARIABLE USED BY FIL/BDC.     BDC/649
                 77745  INT   BSS 1               VARIABLE USED BY FIL/BDC.     BDC/650
                 77746  DIG   BSS 1               VARIABLE USED BY FIL/BDC.     BDC/651
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77747  DATUM BSS 1                          VARIABLE USED BY FIL/BDC.          BDC/652
77750  PEX   BSS 1                          VARIABLE USED BY FIL/BDC.          BDC/653
77751  MQ    BSS 1                          VARIABLE USED BY FIL/BDC.          BDC/654
77752  MQR   BSS 1                          VARIABLE USED BY FIL/BDC.          BDC/655
77753  REC   BSS 20                         VARIABLE USED BY FIL/BDC.          BDC/656
77777  WORD  BSS 1                          VARIABLE USED BY FIL/BDC.          BDC/657
                    END OF CONSTANTS AND WORKING STORAGE USED BY FIL/BDC.      BDC/658
                   * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *BDC/659
A      00000        END                                                         BDC/660
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412

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1          ABS
1                                          CONTROL CARD FOR SCH.                                  SCH/C01
                          00000        ORG 0                                                       SCH/C02
00000  0 00000 0 00132          PZE COL1+1                                                        SCH/C03
00001  0 00000 0 77701          PZE COMMON                                                        SCH/C04
00002  746223303460             BCD 1(SCH)                                                        SCH/C05
00003  0 00000 0 00000          PZE                                                               SCH/C06
                                           END OF SCH CONTROL CARD.                               SCH/C07
                          00000        ORG 0                                                       SCH 0001
                          77701 COMMON SYN -63                                                     SCH2P11
00000 -0 63400 1 00104  FIRST SXD X1,1                                                             SCH 0002
00001 -0 63400 2 00112        SXD X2,2                                                             SCH 0003
00002 -0 63400 4 00130        SXD X4,4                                                             SCH 0004
00003 -0 50000 0 00005        CAL PR6                                                              SCH 0005
00004  0 60200 0 00000        SLW 0                                                                SCH 0006
TD 00005 -3 00000 0 00006   PR6 TXL START                                                          SCH 0007
00006 -0 53400 4 00130  START LXD X4,4                                                             SCH 0008
00007  0 50000 4 00001        CLA 1,4                 OBTAIN STARTING LOCATION OF                  SCH 0009
00010  0 77100 0 00022        ARS 18                  BUFFER AREA FOR LINE IMAGE                   SCH 0010
00011  0 40000 4 00001        ADD 1,4                 IN BCD                                       SCH 0011
00012 -0 73400 4 00000  (SCH) PDX FIRST,4             SAVE LOCATION                                SCH 0012
00013 -0 63400 4 00005        SXD PR6,4               X                                            SCH 0013
00014  0 62100 0 00021        STA PR2                 SUPPLY ADDRESS                               SCH 0014
00015  0 62100 0 00043        STA CI9                 X                                            SCH 0015
00016  0 76600 0 00341        WPU                                                                  SCH 0016
00017  0 50000 0 00127        CLA BLNKS                    FIND LAST NON-BLANK                     SCH 0017
00020 -0 53400 4 00056        LXD CI4,4                    GROUP                                   SCH 0018
00021  0 34000 4 00000  PR2   CAS 0,4                      X                                       SCH 0019
00022  1 77777 4 00025        TXI PR1,4,-1                                                         SCH 0020
00023  1 00001 4 00021        TXI PR2,4,1                  X                                       SCH 0021
00024  1 77777 4 00025        TXI PR1,4,-1                                                         SCH 0022
00025 -0 63400 4 00062  PR1   SXD CI6,4                    STORE END TEST                          SCH 0023
00026 -0 63400 4 00074        SXD CI8,4                    X                                       SCH 0024
00027 -0 63400 4 00031        SXD PR8,4                                                            SCH 0025
00030 -0 53400 4 00005        LXD PR6,4                                                            SCH 0026
D 00031 -2 00000 4 00033  PR8 TNX PR5,4                                                            SCH 0027
00032 -0 53400 4 00005  PR3   LXD PR6,4                    INITIALIZE GROUP COUNT                  SCH 0028
00033  0 53400 2 00035  PR5   LXA PR7,2                    INITIALIZE LEFT SETUP                   SCH 0029
00034 -0 53400 1 00077        LXD YZ1,1                    CLEAR CARD IMAGE                        SCH 0030
T 00035 -0 75400 0 00000  PR7 PXD                                                                  SCH 0031
00036  0 60200 1 77742  PR4   SLW LT,1                                                             SCH 0032
00037  0 60200 1 77722        SLW RT,1                                                             SCH 0033
00040  2 00001 1 00036        TIX PR4,1,1                  X                                       SCH 0034
00041 -0 50000 0 00131  CIR   CAL COL1                     INITIALIZE COLUMN INDICATOR             SCH 0035
00042  0 60200 0 77701  CI2   SLW COL                      X                                       SCH 0036
00043  0 56000 4 00000  CI9   LDQ 0,4                      OBTAIN GROUP                            SCH 0037
00044 -0 63400 4 00116        SXD OZ2,4                    STORE GROUP COUNT                       SCH 0038
00045  0 53400 4 00047        LXA Q6,4                     SET CHARACTER COUNT                     SCH 0039
T 00046 -0 75400 0 00014  CI1 PXD 12                                                               SCH 0040
00047 -0 76300 0 00006  Q6    LGL 6                                                                SCH 0041
00050  0 73400 1 00000        PAX 0,1                      X                                       SCH 0042
00051 -0 50000 0 77701        CAL COL                      POSITION COLUMN INDICATOR               SCH 0043
00052  0 77100 4 00006        ARS 6,4                      X                                       SCH 0044
00053  2 00020 1 00077        TIX YZ1,1,16                 TEST FOR DIGIT                          SCH 0045
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        00054  3 00017 1 00102          TXH YZ2,1,15        TEST FOR Y-ZONE                SCH 0046
        00055 -0 60200 3 77737  CI5     ORS D,3             STORE DIGIT                    SCH 0047
        00056  2 00001 4 00046  CI4     TIX CI1,4,1         COUNT CHARACTERS               SCH 0048
        00057  0 77100 0 00001  CI3     ARS 1               SHIFT AND TEST COLUMN          SCH 0049
        00060 -0 53400 4 00116          LXD OZ2,4           RESTORE GROUP COUNT            SCH 0050
        00061  1 77777 4 00062          TXI CI6,4,-1        COUNT GROUPS                   SCH 0051
D       00062 -3 00000 4 00064  CI6     TXL CI7,4           TEST FOR LAST NON-BLANK GR.    SCH 0052
        00063 -0 10000 0 00042          TNZ CI2             TEST FOR END OF ROW            SCH 0053
        00064 -0 50000 2 77724  CI7     CAL 8.3,2           FORM TRUE 8,4                  SCH 0054
        00065 -0 60200 2 77727          ORS D-8,2           AND 3 ROWS AND                 SCH 0055
        00066 -0 60200 2 77734          ORS D-3,2           MOVE8.4 AND 8.3                SCH 0056
        00067  0 60200 2 77725          SLW 8.2,2           ROWS                           SCH 0057
        00070 -0 50000 2 77723          CAL 8.4,2           FORM TRUE8.4                   SCH 0058
        00071 -0 60200 2 77727          ORS D-8,2                                          SCH 0059
        00072 -0 60200 2 77733          ORS D-4,2                                          SCH 0060
        00073  0 60200 2 77724          SLW 8.3,2           X                              SCH 0061
D       00074 -3 00000 4 00117  CI8     TXL WP,4            TEST FOR END                   SCH 0062
        00075  3 00017 2 00117          TXH WP,2,15         TEST FOR RIGHT HALF            SCH 0063
        00076  1 00020 2 00041          TXI CIR,2,16        INITIALIZE RIGHT HALF          SCH 0064
        00077  2 00020 1 00105  YZ1     TIX XZ1,1,16        TEST FOR 16/CH/32              SCH 0065
        00100  3 00017 1 00110          TXH XZ2,1,15        TEST FOR X-ZONE                SCH 0066
        00101 -0 60200 3 77737          ORS D,3             STORE DIGIT                    SCH 0067
        00102 -0 60200 2 77741  YZ2     ORS Y,2             STORE Y-ZONE                   SCH 0068
        00103  2 00001 4 00046          TIX CI1,4,1         COUNT CHARACTERS               SCH 0069
TD      00104 -3 00000 0 00057  X1      TXL CI3             OBTAIN NEXT GROUP              SCH 0070
        00105  2 00020 1 00113  XZ1     TIX OZ1,1,16        TEST FOR 32/CH/48              SCH 0071
        00106  3 00017 1 00056          TXH CI4,1,15        TEST FOR BLANK                 SCH 0072
        00107 -0 60200 3 77737          ORS D,3             STORE DIGIT                    SCH 0073
        00110 -0 60200 2 77740  XZ2     ORS X,2             STORE X-ZONE                   SCH 0074
        00111  2 00001 4 00046          TIX CI1,4,1         COUNT CHARACTERS               SCH 0075
TD      00112 -3 00000 0 00057  X2      TXL CI3             OBTAIN NEXT GROUP              SCH 0076
        00113 -0 60200 2 77737  OZ1     ORS Z,2             STORE O-ZONE                   SCH 0077
        00114 -0 60200 3 77737          ORS D,3                                            SCH 0078
        00115  2 00001 4 00046          TIX CI1,4,1         COUNT CHARACTERS               SCH 0079
TD      00116 -3 00000 0 00057  OZ2     TXL CI3                                            SCH 0080
        00117  0 53400 1 00046  WP      LXA CI1,1                                          SCH 0081
        00120  0 70000 1 77742  WP3     CPY LT,1            COPY CARD IMAGE                SCH 0082
        00121  0 70000 1 77722          CPY RT,1                                           SCH 0083
        00122  2 00001 1 00120          TIX WP3,1,1                                        SCH 0084
        00123 -0 53400 1 00104          LXD X1,1                                           SCH 0085
        00124 -0 53400 2 00112          LXD X2,2                                           SCH 0086
        00125 -0 53400 4 00130  WT2     LXD X4,4                                           SCH 0087
        00126  0 02000 4 00002          TRA 2,4                                            SCH 0088
        00127  606060606060     BLNKS   BCD 1                                              SCH 0089
        00130  0 00000 0 00001  X4      HTR 1                                              SCH 0090
        00131 -0 00000 0 00000  COL1    MZE                                                SCH 0091
                               77701            ORG -63                                    SCH 0092
                               77701    COL     BSS 1                                      SCH 0093
                               77722    RT      BES 16                                     SCH 0094
                               77722    8.5     BSS 1                                      SCH 0095
                               77723    8.4     BSS 1                                      SCH 0096
                               77724    8.3     BSS 1                                      SCH 0097
                               77725    8.2     BSS 1                                      SCH 0098
                               77737    D       BES 9                                      SCH 0099
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77737  Z     BSS 1          SCH 0100
77740  X     BSS 1          SCH 0101
77741  Y     BSS 1          SCH 0102
77742  LT    SYN Y+1        SCH 0103
00000        END            SCH 0104
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A

915

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1          ABS
1                                          CONTROL CARD FOR SPH.                                    SPH/C01
                          00000        ORG 0                                                         SPH/C02
00000  0 00000 0 00236    PZE COL1+1                                                                SPH/C03
00001  0 00000 0 77653    PZE COMMON                                                                SPH/C04
00002  746247303460       BCD 1(SPH)                                                                SPH/C05
00003  0 00000 0 00003       3                                                                      SPH/C06
                           END OF SPH CONTROL CARD.                                                 SPH/C07
                           SPH FOR FORTRAN II                                                       SPH 0001
                          00000        ORG 0                                                         SPH 0002
                          77653 COMMON SYN -85                                                       SPH 0003
00000 -0 53400 1 00140    RPT LXD X1,1          PREPARE TO CAUSE LINE                              SPH 0004
00001 -0 53400 2 00146        LXD X2,2          TO BE PRINTED AGAIN AND THE                        SPH 0005
00002 -0 53400 4 00031        LXD X4,4          PROGRAM TO CONTINUE                                SPH 0006
00003  0 50000 4 00001    LMT CLA 1,4           OBTAIN STARTING LOCATION OF BUFFER AREA *          SPH 0007
00004  0 62100 0 00021        STA T5            SUPPLY ADDRESS                                     SPH 0008
00005  0 77100 0 00022        ARS 18            * FOR LINE IMAGE IN BCD                            SPH 0009
00006  0 40000 4 00001        ADD 1,4           X                                                  SPH 0010
00007 -0 63400 1 00140        SXD X1,1                                                             SPH 0011
00010 -0 63400 2 00146        SXD X2,2                                                             SPH 0012
00011 -0 63400 4 00031        SXD X4,4                                                             SPH 0013
00012 -0 73400 4 00013    L11 PDX 11,4          SAVE LOCATION                                      SPH 0014
00013  0 62100 0 00052        STA PR2                                                              SPH 0015
00014  0 62100 0 00077        STA CI9                                                              SPH 0016
00015 -0 63400 4 00026        SXD PR6,4         SAVE LOCATION                                      SPH 0017
00016 -0 50000 0 00222        CAL DEL                                                              SPH 0018
00017  0 60200 0 00104        SLW 1ST                                                              SPH 0019
00020  0 76200 0 00361  T4    RPR                   SELECT PRINTER                                 SPH 0020
00021 -0 50000 0 00021  T5    CAL *                 OBTAINFIRST CHARACTER                          SPH 0021
00022  0 77100 0 00036        ARS 30                X                                              SPH 0022
00023  0 10000 0 00220        TZE SP4               DOUBLE SPACE IF ZERO                           SPH 0023
00024  0 34000 0 00233        CAS YZONE             TEST FOR SPACE SUPPRESS                        SPH 0024
TD 00025 -3 00000 0 00027  Z2 TXL BK                NO                                             SPH 0025
TD 00026 -3 00000 0 00047  PR6 TXL RPR+1            SUPPRESS SPACE                                 SPH 0026
00027  0 34000 0 00234  BK    CAS BNK               TEST FOR BLANK                                 SPH 0027
TD 00030 -3 00000 0 00032  OZ2 TXL DIGF             NO                                             SPH 0028
TD 00031 -3 00000 0 00050  X4  TXL RPR+2                                                           SPH 0029
00032  0 76000 0 00372  DIGF  SPR 10                SET CHANNEL SKIP                               SPH 0030
00033 -0 32000 0 00034        ANA MK                MASK OUT ZONE                                  SPH 0031
00034  0 73400 1 00017  MK    PAX 15,1              OBTAIN SPR COMBINATION                         SPH 0032
00035  1 00001 1 00036        TXI N2,1,1            X                                              SPH 0033
00036 -2 00010 1 00040  N2    TNX N3,1,8            X                                              SPH 0034
00037  0 76000 0 00370        SPR 8                 X                                              SPH 0035
00040 -2 00004 1 00042  N3    TNX N4,1,4            X                                              SPH 0036
00041  0 76000 0 00364        SPR 4                 X                                              SPH 0037
00042 -2 00002 1 00044  N4    TNX N5,1,2            X                                              SPH 0038
00043  0 76000 0 00362        SPR 2                 X                                              SPH 0039
00044 -2 00001 1 00046  N5    TNX RPR,1,1           X                                              SPH 0040
00045  0 76000 0 00361        SPR 1                 X                                              SPH 0041
00046  0 76200 0 00361  RPR   RPR                   SELECT PRINTER AGAIN                           SPH 0042
00047  0 76000 0 00365        SPR 5                 SUPPRESS SPACE                                 SPH 0043
00050  0 50000 0 00232        CLA BLNKS             FIND LAST NON-BLANK GROUP                      SPH 0044
00051 -0 53400 4 00112        LXD CI4,4             X                                              SPH 0045
00052  0 34000 4 00000  PR2   CAS 0,4                X                                              SPH 0046
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        00053  1 77777 4 00056          TXI PR1,4,-1        X                                  SPH 0047
        00054  1 00001 4 00052          TXI PR2,4,1         X                                  SPH 0048
        00055  1 77777 4 00056          TXI PR1,4,-1        X                                  SPH 0049
        00056 -0 63400 4 00116  PR1     SXD CI6,4           STORE END TEST                     SPH 0050
        00057 -0 63400 4 00130          SXD CI8,4           X                                  SPH 0051
        00060 -0 63400 4 00063          SXD PR8,4           X                                  SPH 0052
        00061 -0 63400 4 00213          SXD WP4,4           X                                  SPH 0053
        00062 -0 53400 4 00026          LXD PR6,4           X                                  SPH 0054
D       00063 -2 00000 4 00067  PR8     TNX PR5,4                                              SPH 0055
        00064 -3 00014 4 00066          TXL PR3,4,12                                           SPH 0056
        00065  0 76000 0 00370          SPR 8               FIRST CYCLE                        SPH 0057
        00066 -0 53400 4 00026  PR3     LXD PR6,4           INITIALIZE GROUP COUNT             SPH 0058
        00067  0 53400 2 00071  PR5     LXA PR7,2           INITIALIZE LEFT SETUP              SPH 0059
        00070 -0 53400 1 00133          LXD YZ1,1           CLEAR CARD IMAGE                   SPH 0060
T       00071 -0 75400 0 00000  PR7     PXD                 X                                  SPH 0061
        00072  0 60200 1 77714  PR4     SLW LT,1            X                                  SPH 0062
        00073  0 60200 1 77674          SLW RT,1            X                                  SPH 0063
        00074  2 00001 1 00072          TIX PR4,1,1         X                                  SPH 0064
        00075 -0 50000 0 00235  CIR     CAL COL1            INITIALIZE COLUMN INDICATOR        SPH 0065
        00076  0 60200 0 77653  CI2     SLW COL             X                                  SPH 0066
        00077  0 56000 4 00000  CI9     LDQ 0,4             OBTAIN GROUP                       SPH 0067
        00100 -0 63400 4 00030          SXD OZ2,4           STORE GROUP COUNT                  SPH 0068
        00101  0 53400 4 00103          LXA Q6,4            SET CHARACTER COUNT                SPH 0069
T       00102 -0 75400 0 00003  CI1     PXD LMT                                                SPH 0070
        00103 -0 76300 0 00006  Q6      LGL 6                                                  SPH 0071
        00104  0 73400 1 00000  1ST     PAX 0,1                                                SPH 0072
        00105 -0 50000 0 77653          CAL COL             POSITION COLUMN INDICATOR          SPH 0073
        00106  0 77100 4 00006          ARS 6,4             X                                  SPH 0074
        00107  2 00020 1 00133          TIX YZ1,1,16        TEST FOR DIGIT                     SPH 0075
        00110  3 00017 1 00136          TXH YZ2,1,15        TEST FOR Y-ZONE                    SPH 0076
        00111 -0 60200 3 77711  CI5     ORS D,3             STORE DIGIT                        SPH 0077
        00112  2 00001 4 00102  CI4     TIX CI1,4,1         COUNT  CHARACTERS                  SPH 0078
        00113  0 77100 0 00001  CI3     ARS 1               SHIFT AND TEST COLUMN              SPH 0079
        00114 -0 53400 4 00030          LXD OZ2,4           RESTORE GROUP COUNT                SPH 0080
        00115  1 77777 4 00116          TXI CI6,4,-1        COUNT GROUPS                       SPH 0081
D       00116 -3 00000 4 00120  CI6     TXL CI7,4           TEST FOR LAST NON-BLANK GROUP      SPH 0082
        00117 -0 10000 0 00076          TNZ CI2             TEST FOR END OF ROW                SPH 0083
        00120 -0 50000 2 77676  CI7     CAL 8.3,2           FORM TRUE 8,4                      SPH 0084
        00121 -0 60200 2 77701          ORS D-8,2           AND 3 ROWS AND                     SPH 0085
        00122 -0 60200 2 77706          ORS D-3,2           MOVE 8.4 AND 8.3                   SPH 0086
        00123  0 60200 2 77677          SLW 8.2,2           ROWS                               SPH 0087
        00124 -0 50000 2 77675          CAL 8.4,2           FORM TRUE 8.4                      SPH 0088
        00125 -0 60200 2 77701          ORS D-8,2           X                                  SPH 0089
        00126 -0 60200 2 77705          ORS D-4,2           X                                  SPH 0090
        00127  0 60200 2 77676          SLW 8.3,2           X                                  SPH 0091
D       00130 -3 00000 4 00153  CI8     TXL WP,4            TEST FOR END                       SPH 0092
        00131  3 00017 2 00153          TXH WP,2,15         TEST FOR RIGHT HALF                SPH 0093
        00132  1 00020 2 00075          TXI CIR,2,16        INITIALIZE RIGHT HALF              SPH 0094
        00133  2 00020 1 00141  YZ1     TIX XZ1,1,16        TEST FOR 16/CH/32                  SPH 0095
        00134  3 00017 1 00144          TXH XZ2,1,15        TEST FOR X-ZONE                    SPH 0096
        00135 -0 60200 3 77711          ORS D,3             STORE DIGIT                        SPH 0097
        00136 -0 60200 2 77713  YZ2     ORS Y,2             STORE Y-ZONE                       SPH 0098
        00137  2 00001 4 00102          TIX CI1,4,1         COUNT CHARACTERS                   SPH 0099
TD      00140 -3 00000 0 00113  X1      TXL CI3             OBTAIN NEXT GROUP                  SPH 0100
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     00141  2 00020 1 00147  XZ1    TIX OZ1,1,16          TEST FOR 32/CH/48                          SPH 0101
     00142  3 00017 1 00112         TXH CI4,1,15          TEST FOR BLANK                             SPH 0102
     00143 -0 60200 3 77711         ORS D,3               STORE DIGIT                                SPH 0103
     00144 -0 60200 2 77712  XZ2    ORS X,2               STORE X-ZONE                               SPH 0104
     00145  2 00001 4 00102         TIX CI1,4,1           COUNT CHARACTERS                           SPH 0105
TD   00146 -3 00000 0 00113  X2     TXL CI3               OBTAIN NEXT GROUP                          SPH 0106
     00147 -0 60200 2 77711  OZ1    ORS Z,2               STORE O-ZONE                               SPH 0107
     00150 -0 60200 3 77711         ORS D,3               STORE DIGIT                                SPH 0108
     00151  2 00001 4 00102         TIX CI1,4,1           COUNT CHARACTERS                           SPH 0109
TD   00152 -3 00000 0 00113         TXL CI3                                                          SPH 0110
     00153 -0 53400 1 00025  WP     LXD Z2,1              COPY LOOP                                  SPH 0111
     00154  0 70000 1 77700  C      CPY LT-12,1           CARD IMAGE COPIES                          SPH 0112
     00155  0 70000 1 77660         CPY RT-12,1           X                                          SPH 0113
     00156  1 77777 1 00157         TXI T2,1,-1                                                      SPH 0114
     00157  3 77767 1 00154  T2     TXH C,1,-9            TEST FOR ECHO                              SPH 0115
     00160  0 70000 1 77703         CPY LECHO-9,1         ECHO COPIES                                SPH 0116
     00161  0 70000 1 77716         CPY RECHO-9,1         X                                          SPH 0117
     00162  3 77764 1 00154         TXH C,1,-12           TEST FOR END OF CARD IMAGE                 SPH 0118
     00163  3 77755 1 00156         TXH T2-1,1,-19        TEST FOR END OF ECHOS                      SPH 0119
     00164  0 53400 1 00217         LXA L2,1                                                         SPH 0120
     00165 -0 50000 1 77716  CL     CAL LECHO+2,1         8.3 AND 8.4 ECHOS INTO                     SPH 0121
     00166 -0 60200 0 77717         ORS LECHO+3           8 AND 3 AND 4 ECHO ROWS                    SPH 0122
     00167 -0 60200 1 77725         ORS LECHO+9,1         X                                          SPH 0123
     00170 -0 50000 1 77731         CAL RECHO+2,1         X                                          SPH 0124
     00171 -0 60200 0 77732         ORS RECHO+3           X                                          SPH 0125
     00172 -0 60200 1 77740         ORS RECHO+9,1         X                                          SPH 0126
     00173  2 00001 1 00165         TIX CL,1,1            X                                          SPH 0127
     00174  0 53400 1 00012         LXA L11,1                                                        SPH 0128
     00175 -0 50000 1 77711      T9 CAL 8.4L+11,1      LEFT ECHO CHECK                              SPH 0129
     00176  0 76000 0 00006         COM                   X                                          SPH 0130
     00177  0 36100 1 77727         ACL LECHO+11,1        X                                          SPH 0131
     00200  0 76000 0 00006         COM                   X                                          SPH 0132
     00201 -0 10000 0 00207         TNZ ERRL              LEFT ECHO CHECK ERROR                      SPH 0133
     00202 -0 50000 1 77671       R CAL 8.4R+11,1         RIGHT ECHO CHECK                           SPH 0134
     00203  0 76000 0 00006         COM                   X                                          SPH 0135
     00204  0 36100 1 77742         ACL RECHO+11,1        X                                          SPH 0136
     00205  0 76000 0 00006         COM                   X                                          SPH 0137
     00206  0 10000 0 00212         TZE ERR+1             RIGHT ECHO CHECK ERROR                     SPH 0138
     00207  0 56000 0 00226    ERRL LDQ RES               SET UP FOR SECOND ATTEMPT TO PRINT LINE    SPH 0139
     00210 -0 60000 0 00000         STQ 0                 X                                          SPH 0140
     00211  0 42000 4 00000     ERR HPR 0,4               ECHO CHECK ERROR. RESTART OR CONTINUE      SPH 0141
     00212  2 00001 1 00175         TIX T9,1,1            CONTINUE                                   SPH 0142
D    00213  3 00000 4 00227  WP4    TXH WP5,4             TEST FOR SECOND CYCLE                      SPH 0143
     00214 -0 53400 1 00140         LXD X1,1              NO, RELOAD INDEX REGISTERS AND RETURN      SPH 0144
     00215 -0 53400 2 00146         LXD X2,2              X                                          SPH 0145
     00216 -0 53400 4 00031  WT2    LXD X4,4              X                                          SPH 0146
     00217  0 02000 4 00002  L2     TRA 2,4               X                                          SPH 0147
     00220  0 76000 0 00364  SP4    SPR 4                 DOUBLE SPACE                               SPH 0148
TD   00221 -3 00000 0 00050         TXL RPR+2                                                        SPH 0149
TD   00222 -3 00000 0 00223  DEL    TXL FIX                                                          SPH 0150
     00223 -0 50000 0 00034  FIX    CAL MK                                                           SPH 0151
     00224  0 60200 0 00104         SLW 1ST                                                          SPH 0152
     00225  2 00001 4 00102         TIX CI1,4,1                                                      SPH 0153
     00226  0 02000 0 00000  RES    TRA RPT                                                          SPH 0154
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00227  0 76200 0 00361  WP5    RPR                      SELECT PRINTER AGAIN        SPH 0155
00230  0 76000 0 00371          SPR 9                   SECOND CYCLE                SPH 0156
00231 -3 00014 0 00067  WP2    TXL PR5,0,12             CONVERT REST OF LINE        SPH 0157
00232  606060606060      BLNKS BCD 1                                               SPH 0158
00233 +000000000020      YZONE OCT 20                                              SPH 0159
00234 +000000000060      BNK   OCT 60                                              SPH 0160
00235 -0 00000 0 00000   COL1   MZE                                                SPH 0161
                         77653         ORG COMMON                                  SPH 0162
                         77653  COL    BSS 1                                       SPH 0163
                         77674  RT     BES 16                                      SPH 0164
                         77674  8.5    BSS 1                                       SPH 0165
                         77675  8.4    BSS 1                                       SPH 0166
                         77676  8.3    BSS 1                                       SPH 0167
                         77677  8.2    BSS 1                                       SPH 0168
                         77711  D      BES 9                                       SPH 0169
                         77711  Z      BSS 1                                       SPH 0170
                         77712  X      BSS 1                                       SPH 0171
                         77713  Y      BSS 1                                       SPH 0172
                         77714  LT     SYN Y+1                                     SPH 0173
                         77676  8.4L   SYN LT-14                                   SPH 0174
                         77656  8.4R   SYN RT-14                                   SPH 0175
                         77714  LECHO  BSS 11                                      SPH 0176
                         77727  RECHO  BSS 11                                      SPH 0177
                         00102  (SPH)  SYN CI1                                     SPH 0178
                         00000         END                                         SPH 0179
```

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1          ABS
1                                   CONTROL CARD FOR STH.                                  STH/C01
                        00000   ORG 0                                                      STH/C02
00000  0 00000 0 00014           PZE X4+1                                                   STH/C03
00001  0 00000 0 00000           PZE                                                        STH/C04
00002  746263303460              BCD 1(STH)                                                 STH/C05
00003  0 00000 0 00000           PZE                                                        STH/C06
                                    END OF STH CONTROL CARD.                                STH/C07
                        00000   ORG 0                                                      STHF2001
00000  0 50000 4 00001     WOT  CLA 1,4              CALCULATE ADDRESS                      STHF2002
00001  0 77100 0 00022          ARS 18               FOR COPY INSTRUCTION                   STHF2003
00002  0 40000 4 00001          ADD 1,4              X                                      STHF2004
00003 -0 63400 4 00013          SXD X4,4             SAVE INDEX REGISTER                    STHF2005
00004 -0 73400 4 00000   (STH)  PDX WOT,4            COUNT OF WORDS PER RECORD TO IR4       STHF2006
00005  0 62100 0 00006          STA WT1              SUPPLY ADDRESS TO CPY INSTRUCTION      STHF2007
00006  0 70000 4 00000     WT1  CPY 0,4              COPY RECORD TO OUTPUT TAPE             STHF2008
00007  2 00001 4 00006          TIX WT1,4,1          X                                      STHF2009
00010  0 76600 0 00333          IOD                  INPUT OUTPUT DELAY                     STHF2010
00011 -0 53400 4 00013          LXD X4,4             RESTORE IR4, RETURN TO                 STHF2011
00012  0 02000 4 00002          TRA 2,4              MAIN PROGRAM                           STHF2012
00013  0 00000 0 00001      X4  HTR 1                STORAGE FOR INDEX REGISTER 4           STHF2013
A                       00000   END                                                        STHF2014
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1          ABS                                                                    LRT/C00
1                                                CONTROL CARD FOR LRT.                                          LRT/C01
 A                      00000          ORG                                                                        LRT/C02
     00000  0 00000 0 00120            PZE BT+1                                                                   LRT/C03
     00001  0 00000 0 00000            PZE                                                                        LRT/C04
     00002  744325653460               BCD 1(LEV)                                                                 LRT/C05
     00003  0 00000 0 00000            PZE (LEV)                                                                  LRT/C06
     00004  745163453460               BCD 1(RTN)                                                                 LRT/C07
     00005  0 00000 0 00041            PZE (RTN)                                                                  LRT/C08
                                        END OF LRT CONTROL CARD.                                                  LRT/C09
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

 A                      00000          ORG                                                                        LRT/C
                                       (LEV)/ CALLER=MAIN PROGRAM.                                                LRT/001
                                       (LEV) SAVES ALL INDICATORS BEFORE I/O TRANSMISSION.                        LRT/002
     00000  0 40000 0 00114 (LEV)      ADD L(2)                        SET UP FOR RETURN                          LRT/003
     00001  0 62100 0 00040            STA BAK                         TO CONTROL LOOP.                           LRT/004
     00002 -0 76000 0 00012            RTT                             MAKE CERTAIN REDUNDANCY                    LRT/005
     00003  0 76100 0 00000            NOP                             INDICATOR IS TURNED OFF.                   LRT/006
     00004  0 62100 0 00075            STA RT                          SAVE FOR 2ND TRY, IF NECESSARY=            LRT/007
     00005 -0 63400 1 00017            SXD ERX1,1                      STARTING LOCATION, AND THE                 LRT/008
     00006 -0 63400 2 00046            SXD ERX2,2                      CONTENTS OF XR1, XR2,                      LRT/009
     00007 -0 63400 4 00111            SXD ERX4,4                      AND XR4.                                   LRT/010
     00010 -0 50000 0 00000            CAL 0                           ALSO SAVE THE                              LRT/011
     00011  0 60200 0 00112            SLW C(0)                        CONTENTS OF LOCATION 0,                    LRT/012
     00012 -0 50000 0 00001            CAL 1                           AND THE                                    LRT/013
     00013  0 60200 0 00113            SLW C(1)                        CONTENTS OF LOCATION 1.                    LRT/014
     00014 -0 50000 0 00020            CAL TON                         SET UP FOR                                 LRT/015
     00015  0 60200 0 00001            SLW 1                           PREVIOUS TRAP                              LRT/016
     00016  0 50000 0 00023            CLA LTM                         MODE CONDITION.                            LRT/017
     00017  1 00000 0 00022 ERX1       TXI SET,0,**                    IF IN TRAPPING MODE, THEN                  LRT/018
     00020  0 02100 0 00021 TON        TTR CHS                         INSTRUCTION EXECUTED IN LOCATION 1.LRT/019
     00021  0 76000 0 00002 CHS        CHS                             CHANGE LTM TO ETM, AND                     LRT/020
     00022  0 60100 0 00065 SET        STO RTM                         SET RTM TO RESTORE TRAPPING COND.          LRT/021
     00023 -0 76000 0 00007 LTM        LTM                             LEAVE TRAPPING MODE, AND                   LRT/022
     00024  0 50000 0 00064            CLA NOP                         THEN                                       LRT/023
     00025  0 14000 0 00027 TOV        TOV SETAC                       RETAIN PREVIOUS                            LRT/024
     00026  0 50000 0 00025            CLA TOV                         AC OVERFLOW CONDITION                      LRT/025
     00027  0 62200 0 00060 SETAC      STD AVR                         IN AVR.                                    LRT/026
     00030  0 50000 0 00064            CLA NOP                         THEN                                       LRT/027
     00031  0 16100 0 00033 TQO        TQO SETMQ                       RETAIN PREVIOUS                            LRT/028
     00032  0 50000 0 00031            CLA TQO                         MQ OVERFLOW CONDITION                      LRT/029
     00033  0 62200 0 00061 SETMQ      STD QVR                         IN QVR.                                    LRT/030
     00034  0 50000 0 00035            CLA DCT                         THEN                                       LRT/031
     00035  0 76000 0 00012 DCT        DCT                             RETAIN PREVIOUS                            LRT/032
     00036  0 50000 0 00064            CLA NOP                         DIVIDE CHECK CONDITION                     LRT/033
     00037  0 60100 0 00063            STO DCR                         IN DCR.                                    LRT/034
     00040  0 02100 0 00000 BAK        TTR **                        * EXIT TO MAIN PROGRAM.                      LRT/035
                                        END OF PROGRAM (LEV).                                                     LRT/036
                                       * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *LRT/037
                                                                                                                  LRT/038
                                       (RTN)/ CALLERS=MAIN PROGRAM,(FIL).                                         LRT/039
                                       (RTN) RESTORES ALL INDICATORS AFTER I/O TRANSMISSION.                      LRT/040
     00041 -0 76000 0 00007 (RTN)      LTM                             LEAVE TRAPPING MODE, AND                   LRT/041
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00042  0 40000 0 00114        ADD L(2)                    SET UP FOR RETURN                    LRT/042
00043  0 62100 0 00066        STA RET                     TO CONTROL LOOP.                     LRT/043
00044  0 76600 0 00333        IOD                         INPUT-OUTPUT DELAY.                  LRT/044
00045 -0 76000 0 00012        RTT                         IF BINARY TAPE READING WAS NOT       LRT/045
00046  1 00000 0 00067 ERX2   TXI TRY,0,**                 CORRECT, THEN TRY AGAIN.             LRT/046
00047 -0 50000 0 00071 GOOD   CAL TXLOP                   OTHERWISE, CONTINUE.                 LRT/047
00050  0 63000 0 00067        STP TRY                     SET TRY TO TRANSFER CASE.            LRT/048
                                  RES = ENTRY POINT USED BY (FIL).                             LRT/049
00051 -0 50000 0 00112 RES    CAL C(0)                    RESTORE                              LRT/050
00052  0 60200 0 00000        SLW 0                       THE C(0).                            LRT/051
00053 -0 50000 0 00113        CAL C(1)                    RESTORE                              LRT/052
00054  0 60200 0 00001        SLW 1                       THE C(1).                            LRT/053
00055  0 76600 0 00333        IOD                         INPUT-OUTPUT DELAY.                  LRT/054
00056  0 56000 0 00115        LDQ MAX                     FORCE ALL TEST                       LRT/055
00057  0 26000 0 00115        FMP MAX                     CONDITIONS ON, AND THEN              LRT/056
00060  0 00000 0 00061 AVR    PZE QVR,,**                 RESTORE ORIGINAL AC OV CONDITION.    LRT/057
00061  0 00000 0 00062 QVR    PZE NXT,,**                 RESTORE ORIGINAL MQ OV CONDITION.    LRT/058
00062  0 22100 0 00116 NXT    DVP ZER                     AND THEN                             LRT/059
00063  0 00000 0 00000 DCR    PZE **                      RESTORE ORIGINAL DIVIDE CHECK COND.LRT/060
00064  0 76100 0 00000 NOP    NOP                         AND THEN                             LRT/061
00065  0 00000 0 00000 RTM    PZE **                      RESTORE ORIGINAL TRAP MODE COND.     LRT/062
00066  0 02100 0 00000 RET    TTR **                    * EXIT TO MAIN PROGRAM.                LRT/063
D      00067 -3 00000 0 00072 TRY    TXL TRY1,0          OPSWITCH (TXL=TRA, TXH=NOP).         LRT/064
00070  0 42000 7 00007        HPR 7,7                     HALT AFTER 2ND FAILURE.              LRT/065
D      00071 -3 00000 0 00047 TXLOP  TXL GOOD,0          PRESS START TO ACCEPT RECORD.        LRT/066
00072  0 50000 0 00071 TRY1   CLA TXLOP                   SET TRY TO NO TRANSFER CASE          LRT/067
00073  0 63000 0 00067        STP TRY                     FOR 2ND ATTEMPT AT READING RECORD.   LRT/068
00074  0 53400 1 00116        LXA ZER,1                   SET XR1 = 0, AND                     LRT/069
00075  0 56000 1 00000 RT     LDQ **,1                    OBTAIN RTB LOCATION.                 LRT/070
00076 -0 75400 0 00000        PXD ,0                      OBTAIN OPERATION                     LRT/071
00077 -0 76300 0 00014        LGL 12                      BITS, AND TEST                       LRT/072
00100  0 40200 0 00117        SUB BT                      FOR LOCATION RTB.                    LRT/073
00101  0 10000 0 00103        TZE CONT                    IF NOT, THEN ADJUST THE              LRT/074
00102  1 77777 1 00075        TXI RT,1,-1                 C(XR1), AND CONTINUE SEARCH.         LRT/075
00103 -0 76300 0 00030 CONT   LGL 24                      WHEN FOUND, SET                      LRT/076
00104  0 62100 0 00105        STA BST                     CURRENT TAPE ADDRESS.                LRT/077
00105  0 76400 0 00200 BST    BST **                      BACKSPACE CURRENT TAPE.              LRT/078
00106 -0 53400 1 00017        LXD ERX1,1                  RESTORE THE                          LRT/079
00107 -0 53400 2 00046        LXD ERX2,2                  ORIGINAL CONTENTS OF                 LRT/080
00110 -0 53400 4 00111        LXD ERX4,4                  XR1,XR2, AND XR4.                    LRT/081
00111  1 00000 0 00040 ERX4   TXI BAK,0,**              * EXIT TO MAIN PROGRAM FOR 2ND TRY.    LRT/082
                                   END OF PROGRAM (RTN).                                       LRT/083
                                  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *LRT/084
                                                                                               LRT/085
                                  CONSTANTS AND WORKING STORAGE USED BY LEV/RTN/FIL/BDC.       LRT/086
00112  0 00000 0 00000 C(0)   PZE **                      VARIABLE USED BY LEV/RTN/FIL/BDC.    LRT/087
00113  0 00000 0 00000 C(1)   PZE **                      VARIABLE USED BY LEV/RTN/FIL/BDC.    LRT/088
00114  0 00000 0 00002 L(2)   PZE 2                       CONSTANT USED BY LEV/RTN/FIL/BDC.    LRT/089
00115 +377777777777    MAX    OCT 377777777777           CONSTANT USED BY LEV/RTN/FIL/BDC.    LRT/090
00116  0 00000 0 00000 ZER    PZE 0                      CONSTANT USED BY LEV/RTN/FIL/BDC.    LRT/091
00117 +000000000762    BT     OCT 000000000762           CONSTANT USED BY LEV/RTN/FIL/BDC.    LRT/092
                                   END OF CONSTANTS AND WORKING STORAGE USED BY LEV/RTN.       LRT/093
                                  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *LRT/094
                                                                                               LRT/095
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A                    00000        END                                                    LRT/096
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1          ABS
1                                        CONTROL CARD FOR EXP(1                                  XP1/C01
                         00000       ORG 0                                                        XP1/C02
00000   0 00000 0 00042              PZE EXP+1                                                    XP1/C03
00001   0 00000 0 77776              PZE FACTOR                                                   XP1/C04
00002   256747740160                 BCD 1EXP(1                                                   XP1/C05
00003   0 00000 0 00000              PZE                                                          XP1/C06
                                         END OF EXP(1 CONTROL CARD.                               XP1/C07
                         00000       ORG 0                                                        EXP10001
                                         EXPONENTIATION SUBROUTINE                                EXP10002
                                         FIXED POINT BASE, FIXED POINT EXPONENT                   EXP10003
00000   0 10000 4 00001  EXP(1 TZE 1,4                       EXIT FOR ZERO BASE                   EXP10004
00001   0 77100 0 00022        ARS 18                                                             EXP10005
00002   0 60100 0 77777        STO POWER                     SAVE BASE                            EXP10006
00003   0 76300 0 00021        LLS 17                                                             EXP10007
00004   0 62100 0 00041        STA EXP                                                            EXP10008
00005   0 50000 0 00041        CLA EXP                                                            EXP10009
00006  -0 10000 0 00011        TNZ ENZ                                                            EXP10010
00007   0 56000 0 00040        LDQ FIXONE                                                         EXP10011
00010   0 02000 0 00036        TRA EXIT                                                           EXP10012
00011   0 50000 0 00040  ENZ   CLA FIXONE                                                         EXP10013
00012  -0 40000 0 77777        SBM POWER                                                          EXP10014
00013   0 10000 0 00016        TZE N                                                              EXP10015
00014   0 16200 0 00016        TQP N                                                              EXP10016
00015   0 02000 0 00036        TRA EXIT                                                           EXP10017
00016   0 50000 0 00040  N     CLA FIXONE                                                         EXP10018
00017   0 60100 0 77776        STO FACTOR                    X                                    EXP10019
00020   0 50000 0 00041  CLA1  CLA EXP                       IS POWER                             EXP10020
00021   0 76000 0 00001        LBT                           A FACTOR                             EXP10021
00022   0 02000 0 00026        TRA CLA2                      NO                                   EXP10022
00023   0 56000 0 77777        LDQ POWER                     YES                                  EXP10023
00024   0 20000 0 77776        MPY FACTOR                                                         EXP10024
00025  -0 60000 0 77776        STQ FACTOR                                                         EXP10025
00026   0 50000 0 00041  CLA2  CLA EXP                                                            EXP10026
00027   0 77100 0 00001        ARS 1                                                              EXP10027
00030   0 60100 0 00041        STO EXP                                                            EXP10028
00031   0 10000 0 00036        TZE EXIT                                                           EXP10029
00032   0 56000 0 77777        LDQ POWER                     COMPUTE                              EXP10030
00033   0 20000 0 77777        MPY POWER                     NEXT                                 EXP10031
00034  -0 60000 0 77777        STQ POWER                     POWER                                EXP10032
00035   0 02000 0 00020        TRA CLA1                                                           EXP10033
00036   0 76300 0 00065  EXIT  LLS 53                                                             EXP10034
00037   0 02000 4 00001        TRA 1,4                                                            EXP10035
                                     WORKING STORAGE                                              EXP10036
00040  +000000000001     FIXONE DEC 1                                                            EXP10037
00041   0 00000 0 00000   EXP                                                                    EXP10038
                         77777  POWER SYN -1                                                      EXP10039
                         77776 FACTOR SYN -2                                                      EXP10040
A                        00000       END                                                          EXP10041
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1          ABS
1                                        CONTROL CARD FOR EXP(2                                          XP2/C01
                          00000      ORG 0                                                                XP2/C02
00000  0 00000 0 00050          PZE EXP+1                                                                XP2/C03
00001  0 00000 0 77776          PZE FACTOR                                                               XP2/C04
00002  256747740260             BCD 1EXP(2                                                               XP2/C05
00003  0 00000 0 00000          PZE                                                                      XP2/C06
                                     END OF EXP(2 CONTROL CARD.                                          XP2/C07
                          00000      ORG 0                                                                EXP20001
                                     EXPONENTIATION SUBROUTINE                                           EXP20002
                                     FLOATING POINT BASE, FIXED POINT EXPONENT                           EXP20003
00000  0 10000 4 00001  EXP(2 TZE 1,4                          EXIT FOR ZERO BASE                        EXP20004
00001 -0 63400 2 00022          SXD SAVEX,2                                                              EXP20005
00002  0 16200 0 00005          TQP MQPOS                                                                EXP20006
00003 -0 53400 2 00004          LXD NEGONE,2                    SET NEGATIVE MQ INDICATOR                EXP20007
00004 -3 77777 0 00006 NEGONE   TXL MQPOS+1,0,-1                                                         EXP20008
00005 -0 53400 2 00037  MQPOS   LXD TXL,2                       SET POSITIVE MQ INDICATOR                EXP20009
00006  0 60100 0 77777          STO POWER                       INITIALIZATION                           EXP20010
T 00007 -0 75400 0 00000        PXD                                                                      EXP20011
00010  0 76300 0 00021          LLS 17                          X                                        EXP20012
00011  0 62100 0 00047          STA EXP                         X                                        EXP20013
00012  0 50000 0 00047          CLA EXP                                                                  EXP20014
00013 -0 10000 0 00016          TNZ N                                                                    EXP20015
00014  0 50000 0 00046          CLA FLOONE                                                               EXP20016
00015  0 02000 0 00044          TRA EXIT                                                                 EXP20017
00016  0 50000 0 00046  N       CLA FLOONE                      X                                        EXP20018
00017  0 60100 0 77776          STO FACTOR                      X                                        EXP20019
00020  0 50000 0 00047  CLA1    CLA EXP                         IS POWER                                 EXP20020
00021  0 76000 0 00001          LBT                             A FACTOR                                 EXP20021
TD 00022 -3 00000 0 00026  SAVEX TXL CLA2                       NO                                       EXP20022
00023  0 56000 0 77777          LDQ POWER                       YES                                      EXP20023
00024  0 26000 0 77776          FMP FACTOR                                                               EXP20024
00025  0 60100 0 77776          STO FACTOR                                                               EXP20025
00026  0 50000 0 00047  CLA2    CLA EXP                                                                  EXP20026
00027  0 77100 0 00001          ARS 1                                                                    EXP20027
00030  0 60100 0 00047          STO EXP                                                                  EXP20028
00031  0 10000 0 00036          TZE TXL-1                                                                EXP20029
00032  0 56000 0 77777          LDQ POWER                                                                EXP20030
00033  0 26000 0 77777          FMP POWER                                                                EXP20031
00034  0 60100 0 77777          STO POWER                                                                EXP20032
00035  0 02000 0 00020          TRA CLA1                                                                 EXP20033
00036  0 50000 0 77776          CLA FACTOR                                                               EXP20034
D 00037 -3 00000 2 00044  TXL   TXL EXIT,2                                                               EXP20035
00040  0 50000 0 00046          CLA FLOONE                                                               EXP20036
00041  0 24000 0 77776          FDH FACTOR                                                               EXP20037
T 00042 -0 75400 0 00000        PXD                                                                      EXP20038
00043  0 76300 0 00043          LLS 35                                                                   EXP20039
00044 -0 53400 2 00022  EXIT    LXD SAVEX,2                                                              EXP20040
                                     WORKING STORAGE                                                     EXP20041
00045  0 02000 4 00001          TRA 1,4                                                                  EXP20042
00046 +201400000000     FLOONE DEC 1.0                                                                  EXP20043
00047  0 00000 0 00000  EXP                                                                              EXP20044
                          77777  POWER SYN -1                                                            EXP20045
                          77776 FACTOR SYN -2                                                            EXP20046
```

A 00000 END

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1          ABS
1                                          CONTROL CARD FOR EXP(3                                  XP3/C01
                        00000         ORG 0                                                          XP3/C02
00000   0 00000 0 00161                    113                                                      XP3/C03
00001   0 00000 0 77770                    -8                                                       XP3/C04
00002   256747740360          BCD 1EXP(3                                                           XP3/C05
00003   0 00000 0 00000       PZE                                                                  XP3/C06
00004   256747606060          BCD 1EXP                                                             XP3/C07
00005  -0 00000 0 00010       MZE 8                                                                XP3/C08
00006   434627606060          BCD 1LOG                                                             XP3/C09
00007  -0 00000 0 00107       MZE 71                                                               XP3/C10
                                           END OF EXP(3 CONTROL CARD.                              XP3/C11
                        00000         ORG 0                                                          EXP30001
                                           EXPONENTIATION SUBROUTINE                               EXP30002
                                           FLOATING POINT BASE, FLOATING POINT EXPONENT            EXP30003
00000   0 10000 4 00001  EXP(3 TZE 1,4                          BASE ZERO                          EXP30004
00001   0 76000 0 00003        SSP                                                                  EXP30005
00002  -0 63400 4 77770        SXD TXL,4                                                            EXP30006
00003  -0 60000 0 77772        STQ EXP1                                                             EXP30007
00004   0 07400 4 00111        TSX LOG,4                                                            EXP30008
00005   0 76500 0 00043        LRS 35                                                               EXP30009
00006   0 26000 0 77772        FMP EXP1                                                             EXP30010
00007   0 07400 4 00012        TSX EXP,4                                                            EXP30011
00010  -0 53400 4 77770  LXD   LXD TXL,4                                                            EXP30012
00011   0 02000 4 00001        TRA 1,4                                                              EXP30013
                                           LAS816 EXPONENTIAL SUBROUTINE                           EXP30014
00012   0 60100 0 77773 S816EX STO COMMON+00000,0,00000                                             EXP30015
00013   0 76000 0 00003        SSP 00000,0,00000                                                    EXP30016
00014   0 40200 0 00101        SUB S816EX+00055,0,00000                                             EXP30017
00015   0 76500 0 00000        LRS 00000,0,00000                                                    EXP30018
00016  -0 75400 0 00000        PXD 00000,0,00000                                                    EXP30019
00017   0 16200 0 00075        TQP S816EX+00051,0,00000                                             EXP30020
00020   0 40100 0 77773        ADM COMMON+00000,0,00000                                             EXP30021
00021   0 56000 0 00110        LDQ S816EX+00062,0,00000                                             EXP30022
00022   0 40200 0 00107        SUB S816EX+00061,0,00000                                             EXP30023
00023  -0 12000 0 00033        TMI S816EX+00017,0,00000                                             EXP30024
00024   0 76500 0 00033        LRS 00027,0,00000                                                    EXP30025
00025   0 62100 0 00027        STA S816EX+00013,0,00000                                             EXP30026
00026  -0 75400 0 00000        PXD 00000,0,00000                                                    EXP30027
00027   0 76300 0 00000        LLS 00000,0,00000                                                    EXP30028
00030   0 22000 0 00102        DVH S816EX+00056,0,00000                                             EXP30029
00031   0 77100 0 00010        ARS 00008,0,00000                                                    EXP30030
00032  -0 77300 0 00033        RQL 00027,0,00000                                                    EXP30031
00033   0 40000 0 00107        ADD S816EX+00061,0,00000                                             EXP30032
00034  -0 60000 0 77774        STQ COMMON+00001,0,00000                                             EXP30033
00035   0 30000 0 00107        FAD S816EX+00061,0,00000                                             EXP30034
00036   0 60100 0 77775        STO COMMON+00002,0,00000                                             EXP30035
00037   0 56000 0 77775        LDQ COMMON+00002,0,00000                                             EXP30036
00040   0 26000 0 77775        FMP COMMON+00002,0,00000                                             EXP30037
00041   0 60100 0 77776        STO COMMON+00003,0,00000                                             EXP30038
00042   0 30000 0 00103        FAD S816EX+00057,0,00000                                             EXP30039
00043   0 60100 0 77777        STO COMMON+00004,0,00000                                             EXP30040
00044   0 50000 0 00104        CLA S816EX+00058,0,00000                                             EXP30041
00045   0 24000 0 77777        FDH COMMON+00004,0,00000                                             EXP30042
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00046 -0 60000 0 77777          STQ COMMON+00004,0,00000          EXP30043
00047  0 50000 0 00105          CLA S816EX+00059,0,00000          EXP30044
00050  0 30000 0 77777          FAD COMMON+00004,0,00000          EXP30045
00051  0 60100 0 77777          STO COMMON+00004,0,00000          EXP30046
00052  0 56000 0 77777          LDQ COMMON+00004,0,00000          EXP30047
00053  0 26000 0 77776          FMP COMMON+00003,0,00000          EXP30048
00054  0 30000 0 00106          FAD S816EX+00060,0,00000          EXP30049
00055  0 60100 0 77776          STO COMMON+00003,0,00000          EXP30050
00056  0 30200 0 77775          FSB COMMON+00002,0,00000          EXP30051
00057  0 60100 0 77777          STO COMMON+00004,0,00000          EXP30052
00060  0 50000 0 77776          CLA COMMON+00003,0,00000          EXP30053
00061  0 30000 0 77775          FAD COMMON+00002,0,00000          EXP30054
00062  0 40000 0 77774          ADD COMMON+00001,0,00000          EXP30055
00063  0 60100 0 77776          STO COMMON+00003,0,00000          EXP30056
00064  0 56000 0 77773          LDQ COMMON+00000,0,00000          EXP30057
00065  0 16200 0 00071          TQP S816EX+00047,0,00000          EXP30058
00066  0 50000 0 77777          CLA COMMON+00004,0,00000          EXP30059
00067  0 56000 0 77776          LDQ COMMON+00003,0,00000          EXP30060
00070 -0 60000 0 77777          STQ COMMON+00004,0,00000          EXP30061
00071  0 24000 0 77777          FDH COMMON+00004,0,00000          EXP30062
00072 -0 60000 0 77773          STQ COMMON+00000,0,00000          EXP30063
00073  0 50000 0 77773          CLA COMMON+00000,0,00000          EXP30064
00074  0 02000 4 00001          TRA 00001,4,00000                 EXP30065
00075  0 56000 0 77773          LDQ COMMON+00000,0,00000          EXP30066
00076  0 04000 4 00001          TLQ 00001,4,00000                 EXP30067
00077  0 76000 0 00006          COM 00000,0,00000                 EXP30068
00100  0 02000 4 00001          TRA 00001,4,00000                 EXP30069
00101 +207535146314             DEC 8.73000000000E01              EXP30070
00102 +261344137676             OCT 261344137676                  EXP30071
00103 +206520000000             DEC 4.20000000000E01              EXP30072
00104 +203471463146             DEC 4.90000000000E00              EXP30073
00105 +174631463146             DEC 5.00000000000E-02             EXP30074
00106 +202400000000             DEC 2.00000000000E00              EXP30075
00107 +200000000000             OCT 200000000000                  EXP30076
00110 +000000000000             OCT 000000000000                  EXP30077
                                    LA S820 NATURAL LOGARITHM SUBROUTINE  EXP30078
                                                                  EXP30079
00111  0 10000 4 00001 LAS820   TZE 00001,4,00000                 EXP30080
00112  0 76000 0 00003          SSP                               EXP30081
00113  0 76500 0 00033          LRS 00027,0,00000                 EXP30082
00114 -0 60000 0 77773          STQ COMMON+00000,0,00000          EXP30083
00115  0 76700 0 00023          ALS 00019,0,00000                 EXP30084
00116 -0 50100 0 00147          ORA LAS820+00030,0,00000          EXP30085
00117  0 30200 0 00150          FSB LAS820+00031,0,00000          EXP30086
00120  0 60100 0 77774          STO COMMON+00001,0,00000          EXP30087
00121  0 50000 0 77773          CLA COMMON+00000,0,00000          EXP30088
00122  0 76500 0 00010          LRS 00008,0,00000                 EXP30089
00123 -0 50100 0 00151          ORA LAS820+00032,0,00000          EXP30090
00124  0 30000 0 00152          FAD LAS820+00033,0,00000          EXP30091
00125  0 60100 0 77773          STO COMMON+00000,0,00000          EXP30092
00126  0 30200 0 00153          FSB LAS820+00034,0,00000          EXP30093
00127  0 24000 0 77773          FDH COMMON+00000,0,00000          EXP30094
00130 -0 60000 0 77773          STQ COMMON+00000,0,00000          EXP30095
00131  0 26000 0 77773          FMP COMMON+00000,0,00000          EXP30096
00132  0 60100 0 77775          STO COMMON+00002,0,00000
```

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00133  0 56000 0 00156          LDQ LAS820+00037,0,00000   EXP30097
00134  0 26000 0 77775          FMP COMMON+00002,0,00000   EXP30098
00135  0 30000 0 00155          FAD LAS820+00036,0,00000   EXP30099
00136  0 76500 0 00043          LRS 00035,0,00000          EXP30100
00137  0 26000 0 77775          FMP COMMON+00002,0,00000   EXP30101
00140  0 30000 0 00154          FAD LAS820+00035,0,00000   EXP30102
00141  0 76500 0 00043          LRS 00035,0,00000          EXP30103
00142  0 26000 0 77773          FMP COMMON+00000,0,00000   EXP30104
00143  0 30000 0 77774          FAD COMMON+00001,0,00000   EXP30105
00144  0 76500 0 00043          LRS 00035,0,00000          EXP30106
00145  0 26000 0 00157          FMP LAS820+00038,0,00000   EXP30107
00146  0 02000 4 00001          TRA 00001,4,00000          EXP30108
00147 +210000000000             OCT 210000000000           EXP30109
00150 +210401000000             DEC 1.28500000000E02       EXP30110
00151 +200000000000             OCT 200000000000           EXP30111
00152 +200552023631             DEC 7.07106781187E-01      EXP30112
00153 +201552023631             DEC 1.41421356237E00       EXP30113
00154 +202561251001             DEC 2.88539129030E00       EXP30114
00155 +200754213603             DEC 9.61470632300E-01      EXP30115
00156 +200462532521             DEC 5.98978649600E-01      EXP30116
00157 +200542710277             DEC 6.93147180560E-01      EXP30117
                 77773 COMMON   SYN -5                     EXP30118
                 77772  EXP1    SYN -6                     EXP30119
                 77771  BASE    SYN -7                     EXP30120
                 77770  TXL     SYN -8                     EXP30121
                 00111  LOG     SYN LAS820                 EXP30122
                 00012  EXP     SYN S816EX                 EXP30123
                 00000          END                        EXP30124
```

A

```
1          ABS
1                                          CONTROL CARD FOR LOG.                                  LOG/C01
                          00000       ORG 0                                                         LOG/C02
00000  0 00000 0 00052                   42                                                        LOG/C03
00001  0 00000 0 77775               PZE COMMON                                                    LOG/C04
00002  434627606060                 BCD 1LOG                                                      LOG/C05
00003  0 00000 0 00000               PZE                                                           LOG/C06
                                           END OF LOG CONTROL CARD                                LOG/C07
A                         00000       ORG                                                           LOG 0002
                                           LAS820 NATURAL LOGARITHM SUBROUTINE                    LOG 0003
00000  0 10000 4 00001 LAS820 TZE 00001,4,00000                                                    LOG 0004
00001  0 76000 0 00003          SSP                                                               LOG 0005
00002  0 76500 0 00033          LRS 00027,0,00000                                                 LOG 0006
00003 -0 60000 0 77775          STQ COMMON+00000,0,00000                                          LOG 0007
00004  0 76700 0 00023          ALS 00019,0,00000                                                 LOG 0008
00005 -0 50100 0 00036          ORA LAS820+00030,0,00000                                          LOG 0009
00006  0 30200 0 00037          FSB LAS820+00031,0,00000                                          LOG 0010
00007  0 60100 0 77776          STO COMMON+00001,0,00000                                          LOG 0011
00010  0 50000 0 77775          CLA COMMON+00000,0,00000                                          LOG 0012
00011  0 76500 0 00010          LRS 00008,0,00000                                                 LOG 0013
00012 -0 50100 0 00040          ORA LAS820+00032,0,00000                                          LOG 0014
00013  0 30000 0 00041          FAD LAS820+00033,0,00000                                          LOG 0015
00014  0 60100 0 77775          STO COMMON+00000,0,00000                                          LOG 0016
00015  0 30200 0 00042          FSB LAS820+00034,0,00000                                          LOG 0017
00016  0 24000 0 77775          FDH COMMON+00000,0,00000                                          LOG 0018
00017 -0 60000 0 77775          STQ COMMON+00000,0,00000                                          LOG 0019
00020  0 26000 0 77775          FMP COMMON+00000,0,00000                                          LOG 0020
00021  0 60100 0 77777          STO COMMON+00002,0,00000                                          LOG 0021
00022  0 56000 0 00045          LDQ LAS820+00037,0,00000                                          LOG 0022
00023  0 26000 0 77777          FMP COMMON+00002,0,00000                                          LOG 0023
00024  0 30000 0 00044          FAD LAS820+00036,0,00000                                          LOG 0024
00025  0 76500 0 00043          LRS 00035,0,00000                                                 LOG 0025
00026  0 26000 0 77777          FMP COMMON+00002,0,00000                                          LOG 0026
00027  0 30000 0 00043          FAD LAS820+00035,0,00000                                          LOG 0027
00030  0 76500 0 00043          LRS 00035,0,00000                                                 LOG 0028
00031  0 26000 0 77775          FMP COMMON+00000,0,00000                                          LOG 0029
00032  0 30000 0 77776          FAD COMMON+00001,0,00000                                          LOG 0030
00033  0 76500 0 00043          LRS 00035,0,00000                                                 LOG 0031
00034  0 26000 0 00046          FMP LAS820+00038,0,00000                                          LOG 0032
00035  0 02000 4 00001          TRA 00001,4,00000                                                 LOG 0033
00036 +210000000000             OCT 210000000000                                                  LOG 0034
00037 +210401000000             DEC 1.28500000000E02                                              LOG 0035
00040 +200000000000             OCT 200000000000                                                  LOG 0036
00041 +200552023631             DEC 7.07106781187E-01                                             LOG 0037
00042 +201552023631             DEC 1.41421356237E00                                              LOG 0038
00043 +202561251001             DEC 2.88539129030E00                                              LOG 0039
00044 +200754213603             DEC 9.61470632300E-01                                             LOG 0040
00045 +200462532521             DEC 5.98978649600E-01                                             LOG 0041
00046 +200542710277             DEC 6.93147180560E-01                                             LOG 0042
                          77775 COMMON SYN -3                                                     LOG 0043
A                         00000       END                                                           LOG 0044
```

```
1          REL                                                                    F2SIN001
1                    00000          ORG 0                                                                  F2SIN002
                                        FORTRAN LIBRARY VERSION OF IB SIN 1                               F2SIN003
                                        COMPUTES SINE OR COSINE OF A SINGLE PRECISION NORMALIZED          F2SIN004
                                        FLOATING POINT ARGUMENT. TSX SIN  OR  TSX COS . REL. ERROR        F2SIN005
                                        LESS THAN 1/2 X 10 TO -8. TIMING ABOUT 2.03 SIN, 2.11  COS.       F2SIN006
 00000  0 30200 0 00153  COS    FSB FPHLF                                                                 F2SIN007
 00001  0 76000 0 00002         CHS                                                                       F2SIN008
 00002  0 60100 0 77774 SIN     STO SPMLT                                                                 F2SIN009
 00003  0 76500 0 00011         LRS 9                                                                     F2SIN010
 00004 -0 63400 1 00021         SXD SAVE,1                                                                F2SIN011
 00005 -0 73400 1 00000         PDX 0,1                                                                   F2SIN012
 00006 -0 14000 0 00134  OVTST  TNO NOVFL              OVERFLOW TEST                                      F2SIN013
 00007 -0 63400 4 00120         SXD INDIC,4            OVERFLOW TO BE RESTORED                            F2SIN014
 00010  3 00244 1 00022         TXH ERR,1,164                                                             F2SIN015
 00011  0 76300 0 00023         LLS 19                                                                    F2SIN016
 00012 -3 00202 1 00026         TXL SPEC,1,130                                                            F2SIN017
 00013  0 76500 1 00250  LRTSH  LRS 168,1              B3                                                 F2SIN018
 00014  0 22000 0 00136         DVH PI                 PI...B3,  BQ...35                                  F2SIN019
 00015 -0 77300 0 00043         RQL 35                 LAST BIT TO SIGN MQ                                F2SIN020
 00016  0 16200 0 00041         TQP FRLAR                                                                 F2SIN021
 00017  0 76000 0 00002         CHS                                                                       F2SIN022
 00020  0 60100 0 77774         STO SPMLT                                                                 F2SIN023
 00021 -3 00000 0 00041   SAVE  TXL FRLAR,0,**                                                            F2SIN024
 00022  0 02000 0 00117    ERR  TRA FINI-1                                                                F2SIN025
 00023  0 40200 0 00137   EQUA  SUB PIHLF                                                                 F2SIN026
 00024  0 60200 0 77775         SLW REDA                                                                  F2SIN027
 00025  1 00002 1 00057     SX  TXI COMCA,1,2          COSC,  XR...4                                      F2SIN028
                                                       SPECIAL CASE, ANGLE NEED NOT BE REDUCED            F2SIN029
 00026 -3 00162 1 00130   SPEC  TXL LOW,1,114                                                             F2SIN030
 00027 -0 76000 0 00001         PBT                                                                       F2SIN031
 00030  0 02000 0 00032         TRA SPEC+4                                                                F2SIN032
 00031  3 00201 1 00013         TXH LRTSH,1,129                                                           F2SIN033
 00032  0 76500 1 00205         LRS 133,1              B3                                                 F2SIN034
 00033  0 76000 0 00003         SSP                                                                       F2SIN035
 00034  0 56000 0 00142         LDQ TEST                                                                  F2SIN036
 00035  0 04000 0 00042         TLQ FRLAR+1                                                               F2SIN037
 00036  0 60100 0 77775         STO REDA                                                                  F2SIN038
 00037 -0 53400 1 00025         LXD SX,1                                                                  F2SIN039
 00040  0 02000 0 00057         TRA COMCA                                                                 F2SIN040
 00041  0 76000 0 00003  FRLAR  SSP                                                                       F2SIN041
 00042 -0 53400 1 00025         LXD SX,1                                                                  F2SIN042
 00043  0 34000 0 00137         CAS PIHLF                                                                 F2SIN043
 00044  0 40200 0 00136         SUB PI                 LARGER THAN PIHLF                                  F2SIN044
 00045  0 76000 0 00003         SSP                    EQUAL TO PIHLF                                     F2SIN045
 00046  0 56000 0 00142         LDQ TEST                                                                  F2SIN046
 00047  0 04000 0 00023         TLQ EQUA                                                                  F2SIN047
 00050  0 60100 0 77775         STO REDA               ANGLE IN FIRSF QUADRANT, B3                        F2SIN048
 00051  0 76500 0 00004  FLOAT  LRS 4                                                                     F2SIN049
 00052  0 40000 0 00140         ADD CHAR                                                                  F2SIN050
 00053  0 30000 0 00141         FAD CHAR+1             200                                                F2SIN051
 00054  0 56000 0 77774         LDQ SPMLT                                                                 F2SIN052
 00055  0 76300 0 00000         LLS 0                                                                     F2SIN053
 00056  0 60100 0 77774         STO SPMLT                                                                 F2SIN054
```

```
                                                        COMMON CALCULATION FOR SIN AND COS      F2SIN055
00057  0 56000 0 77775  COMCA LDQ Z                     COMMON CALC., B3                        F2SIN056
00060 -0 20000 0 77775         MPR Z                                                             F2SIN057
00061  0 60100 0 77777         STO ZSQ                  B6                                      F2SIN058
00062  0 40000 1 00147         ADD CONST+4,1            24.1B6, 50. B6                          F2SIN059
00063  0 60100 0 77776         STO SOR                                                          F2SIN060
00064  0 50000 1 00150         CLA CONST+5,1            2287B13, 1042B11                        F2SIN061
00065  0 22000 0 77776         DVH SOR                                                          F2SIN062
00066 -0 60000 0 77776         STQ SOR                                                          F2SIN063
00067  0 50000 0 77776         CLA SOR                                                          F2SIN064
00070  0 40000 1 00153         ADD CONST+8,1            82.5B7, -19.B5                          F2SIN065
00071  0 76700 0 00001         ALS 1                    B6, BITS IN P,Q                         F2SIN066
00072  0 40000 0 77777         ADD ZSQ                                                          F2SIN067
00073  0 77100 1 00006         ARS 6,1                  B8                                      F2SIN068
00074 -3 00002 1 00123         TXL S,1,2                                                        F2SIN069
00075  0 60100 0 77776         STO SOR                                                          F2SIN070
00076  0 50000 0 77777         CLA ZSQ                                                          F2SIN071
00077  0 76500 0 00002         LRS 2                                                            F2SIN072
00100  0 40000 0 77777         ADD ZSQ                                                          F2SIN073
00101  0 76300 0 00001         LLS 1                                                            F2SIN074
00102  0 40000 0 00150         ADD CONST+5              -3276B13                                F2SIN075
00103  0 22000 0 77776         DVH SOR                                                          F2SIN076
00104 -0 60000 0 77776         STQ SOR                                                          F2SIN077
00105  0 50000 0 77776         CLA SOR                                                          F2SIN078
00106  0 40000 0 00152         ADD CONST+7              19.477B5                                F2SIN079
00107  0 76500 0 00002         LRS 2                                                            F2SIN080
00110  0 40200 0 77777         SUB ZSQ                                                          F2SIN081
00111  0 56000 0 77774         LDQ SPMLT                                                        F2SIN082
00112  0 76300 0 00010         LLS 8                                                            F2SIN083
00113 -0 76000 0 00001         PBT                                                              F2SIN084
00114  1 00001 1 00115         TXI RTSH,1,1             XR...5 FOR OCOS                         F2SIN085
00115  0 77100 1 00015  RTSH   ARS 13,1                 9 OR 8                                  F2SIN086
00116  0 36100 1 00145         ACL CHAR+5,1             127 OR 128                              F2SIN087
00117 -0 53400 1 00021         LXD SAVE,1                                                       F2SIN088
U 00120  3       4 00122   FINI TXH FINI+2,4,..                                                 F2SIN089
00121  0 02000 4 00001         TRA 1,4                  LEAVE ON                                F2SIN090
00122  0 14000 0 00121         TQV FINI+1               TURN OFF                                F2SIN091
00123  0 40000 0 00141  S      ADD CHAR+1               128                                     F2SIN092
00124  0 60100 0 77777         STO ZSQ                                                          F2SIN093
00125  0 56000 0 77777         LDQ ZSQ                                                          F2SIN094
00126  0 26000 0 77774         FMP SPMLT                                                        F2SIN095
00127  0 02000 0 00117         TRA FINI-1                                                       F2SIN096
00130  0 50000 0 00120 LOW     CLA FINI                                                         F2SIN097
00131  0 76700 0 00011         ALS 9                                                            F2SIN97A
00132  0 50000 0 77774         CLA SPMLT                                                        F2SIN97B
00133  0 02000 0 00117         TRA FINI-1                                                       F2SIN098
00134 -0 63400 0 00120  NOVFL  SXD INDIC,0              CLEAR DECREMENT OF INDIC                F2SIN099
00135  0 02000 0 00010         TRA OVTST+2                                                      F2SIN100
                                                        CONSTANTS                               F2SIN101
                     00120  INDIC SYN FINI                                                       F2SIN102
00136 +144417665210      PI     DEC 3.1415926535 9B3                                             F2SIN103
00137 +062207732503      PIHLF  DEC 1.57079632679B3                                              F2SIN104
00140 +177000000000      CHAR   OCT 177000000000                                                 F2SIN105
00141 +200000000000             OCT 200000000000                                                 F2SIN106
```

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```
00142 +011463146314      TEST  DEC .3B3                                                    F2SIN107
00143 +140450575062      CONST DEC 24.1448946943B6,2287.443195687B13,50.0302454854B6       F2SIN108
00144 +107367056521
00145 +310075742536
00146 +202273236275            DEC 1042.9267081438B11,82.58030199563B7,-3276.33995164B13   F2SIN109
00147 +245122165275
00150 -146305340704
00151 -236610717605            DEC -19.845924263 2B5,19.477149451B5                       F2SIN110
00152 +233642316731
00153 +201622077325      FPHLF DEC 1.57079632679                                           F2SIN111
                 77774 COMMON EQU -4                                                       F2SIN112
                 77774  SPMLT EQU COMMON                                                   F2SIN113
                 77775   REDA EQU COMMON+1                                                 F2SIN114
                 77775      Z EQU COMMON+1                                                 F2SIN115
                 77776    SOR EQU COMMON+2                                                 F2SIN116
                 77777    ZSQ EQU COMMON+3                                                 F2SIN117
                 00000        END 0                                                        F2SIN118
                 00001 0   ..
```

```
1          REL                                                                  F2EXP001
1                    00000          ORG 0                                                                F2EXP002
                                       FLOATING POINT EXPONENTIAL SUBROUTINE, FORTRAN VERSION           F2EXP003
                                                                                                        F2EXP004
00000  0 60100 0 77777  EXP    STO M          STORE ARGUMENT                                            F2EXP005
00001  0 56000 0 00046         LDQ MAX        TEST IF OUT OF RANGE                                      F2EXP006
00002  0 04000 4 00001         TLQ 1,4        IF TOO LARGE ERROR RETURN                                 F2EXP007
00003  0 76000 0 00002         CHS                                                                      F2EXP008
00004  0 04000 0 00044         TLQ T1         IF TOO SMALL RETURN WITH ZERO                             F2EXP009
00005  0 76500 0 00033         LRS 27                                                                   F2EXP010
00006 -0 76000 0 00003         SSM                                                                      F2EXP011
00007  0 40000 0 00050         ADD CHAR       CONVERT TO FIXED POINT                                    F2EXP012
00010  0 62100 0 00012         STA SH1                                                                  F2EXP013
00011  0 20000 0 00047         MPY LOGE       X TIMES LOG E BASE 2                                      F2EXP014
A      0 76500 0 00000  SH1    LRS            SEPARATE INTEGER AND FRACTION                             F2EXP015
00013  0 76700 0 00033         ALS 27                                                                   F2EXP016
00014  0 60100 0 77777         STO M                                                                    F2EXP017
00015  0 76500 0 00004         LRS 4                                                                    F2EXP018
00016 -0 60000 0 77776         STQ F                                                                    F2EXP019
00017  0 20000 0 77776         MPY F          COMPUTE FRACTION SQUARED                                  F2EXP020
00020  0 60100 0 77775         STO SQ         COMPUTE CONTINUED FRACTION                                F2EXP021
00021  0 40000 0 00053         ADD A          8,27 SCALING                                              F2EXP022
00022  0 60100 0 77774         STO T          8,27                                                      F2EXP023
00023  0 50000 0 00054         CLA B          12,23                                                     F2EXP024
00024  0 22100 0 77774         DVP T          8,27 4,31                                                 F2EXP025
00025 -0 60000 0 77774         STQ T          4,31                                                      F2EXP026
00026  0 56000 0 77775         LDQ SQ         8,27                                                      F2EXP027
00027  0 20000 0 00055         MPY C          0,35 8,27                                                 F2EXP028
00030  0 76300 0 00004         LLS 4          4,31                                                      F2EXP029
00031  0 40200 0 77774         SUB T          4,31                                                      F2EXP030
00032  0 40000 0 00056         ADD D          4,31                                                      F2EXP031
00033  0 40200 0 77776         SUB F          4,31                                                      F2EXP032
00034  0 60100 0 77774         STO T          4,31                                                      F2EXP033
00035  0 50000 0 77776         CLA F          5,31 NUMERATOR EQUALS 2F                                  F2EXP034
00036  0 22100 0 77774         DVP T          4,31 1,34                                                 F2EXP035
00037 -0 60000 0 77774         STQ T                                                                    F2EXP036
00040  0 50000 0 77774         CLA T                                                                    F2EXP037
00041  0 76500 0 00010         LRS 8
00042 -0 50100 0 00052         ORA CH1
00043  0 30000 0 00051         FAD CH                                                                   F2EXP039
00044  0 40000 0 77777  T1     ADD M                                                                    F2EXP040
00045  0 02000 4 00001         TRA 1,4        RETURN                                                    F2EXP041
                                              CONSTANTS                                                 F2EXP042
00046 +207540071260     MAX    DEC 88.028                                                               F2EXP043
00047 -270524354513     LOGE   DEC -1.4426950409B1                                                      F2EXP044
00050 +000000000242     CHAR   OCT 242                                                                  F2EXP045
00051 +201400000000     CH     OCT 201400000000
00052 +201000000000       CH1  OCT 201000000000                                                         F2EXP046
00053 +127325604305     A      DEC 87.417497202B8                                                       F2EXP047
00054 +046477071523     B      DEC 617.9722695B12                                                       F2EXP048
00055 +010676467774     C      DEC .03465735903B0                                                       F2EXP049
00056 +237214030720     D      DEC 9.9545957821B4                                                       F2EXP050
                                              ERASABLES                                                 F2EXP051
                  77777  M      EQU -1                                                                  F2EXP052
                  77776  F      EQU -2
```

```
77775  SQ     EQU -3                                   F2EXP053
77774  T      EQU -4                                   F2EXP054
G0000         END 0                                    F2EXP055
```

```
1          ABS
1                                        CONTROL CARD FOR SQRT.                                  SQRT/C01
                        00000        ORG 0                                                        SQRT/C02
00000  0 00000 0 00025               PZE C+3                                                      SQRT/C03
00001  0 00000 0 77776               PZE COMMON                                                   SQRT/C04
00002  625051636060                  BCD 1SQRT                                                    SQRT/C05
00003  0 00000 0 00000               PZE                                                          SQRT/C06
                                         END OF SQRT CONTROL CARD.                                SQRT/C07
                        00000        ORG 0                                                        SQRT0001
                                         CL SQR3 SQUARE ROOT SUBROUTINE                           SQRT0002
                                         FUNCTION NAME ... SQRTF                                  SQRT0003
00000  0 10000 4 00001  SQRT   TZE 1,4                    SQRT OF ZERO IS ZERO                    SQRT0004
00001  0 76000 0 00003         SSP                        SET SIGN X PLUS                         SQRT0005
00002  0 60100 0 77776  P2     STO COMMON                 X                                       SQRT0006
00003 -0 50100 0 00022         ORA C                      MAKE POWER ODD                          SQRT0007
00004  0 77100 0 00001         ARS 1                                                              SQRT0008
00005  0 40000 0 00023         ADD C+1                    NORMALIZED YO IN A.C.                   SQRT0009
00006 -0 63400 4 00024         SXD C+2,4                                                          SQRT0010
00007  0 53400 4 00024         LXA C+2,4                  4 TO INDEX                              SQRT0011
00010  0 60100 0 77777  P1     STO COMMON+1               S TO RE YO                              SQRT0012
00011  0 50000 0 77776         CLA COMMON                 1X1 TO A.C.                             SQRT0013
00012  0 24000 0 77777         FDH COMMON+1               1C1/YO TO A.C.                          SQRT0014
00013  0 50000 0 77777         CLA COMMON+1               YO TO A.C.                              SQRT0015
00014 -0 60000 0 77777         STQ COMMON+1               Q1 TO COMMON+1                          SQRT0016
00015  0 30000 0 77777         FAD COMMON+1               YO+Q1 TO A.C.                           SQRT0017
00016  0 40200 0 00022         SUB C                      (YO+Q1)/2 TO A.C.                       SQRT0018
00017  2 00001 4 00010         TIX P1,4,1                 REDUCE INDEX BY 1                       SQRT0019
00020 -0 53400 4 00024         LXD C+2,4                                                          SQRT0020
00021  0 02000 4 00001         TRA 1,4                                                            SQRT0021
00022 +001000000000     C      OCT 1000000000,100000000000,4                                      SQRT0022
00023 +100000000000
00024 +000000000004
                        77776 COMMON SYN -2                                                       SQRT0023
A                       00000        END                                                          SQRT0024
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1          REL                                                                    F2ATN001
1                        00000          ORG 0                                                          F2ATN002
                                            FLOATING POINT ARCTANGENT SUBROUTINE, FORTRAN VERSION      F2ATN003
     00000 -0 63400 1 00121  ATAN   SXD I1,1          SAVE INDEX REGISTER ONE                         F2ATN004
     00001 -0 12000 0 00063         TMI T100          SET ARGUMENT POSITIVE                           F2ATN005
     00002  0 60100 0 77777  T30    STO X             STORE ARGUMENT                                  F2ATN006
     00003  0 40200 0 00072         SUB MAX           TEST IF OUT OF RANGE                            F2ATN007
     00004 -0 12000 0 00007         TMI T21                                                           F2ATN008
     00005  0 50000 0 00120         CLA PIOV2         IF TOO LARGE, RETURN WIJH PI/2                  F2ATN009
     00006  0 02000 4 00001         TRA 1,4                                                           F2ATN010
     00007  0 40000 0 00071  T21    ADD MIN                                                           F2ATN011
     00010  0 12000 0 00013         TPL T22                                                           F2ATN012
     00011  0 50000 0 77777         CLA X                                                             F2ATN013
     00012  0 02000 4 00001         TRA 1,4           IF TOO SMALL, RETURN WITH ARGUMENT              F2ATN014
     00013  0 53400 1 00121  T22    LXA I1,1                                                          F2ATN015
     00014  0 50000 0 77777  T17    CLA X             TEST FOR INTERVAL CONTAINING X                  F2ATN016
     00015  0 40200 1 00076         SUB A,1                                                           F2ATN017
     00016 -0 12000 0 00020         TMI T1                                                            F2ATN018
     00017  1 00001 1 00014         TXI T17,1,1                                                       F2ATN019
     00020  3 00000 1 00024  T1     TXH T2,1,0        IF IN INTERVAL ONE LET Z=9X/55                  F2ATN020
     00021  0 56000 0 77777         LDQ X                                                             F2ATN021
     00022  0 26000 0 00117         FMP L                                                             F2ATN022
     00023  0 02000 0 00037         TRA T11                                                           F2ATN023
     00024 -0 75400 1 00000  T2     PXD 0,1           TAKE NEGATIVE OF INDEX REGISTER ONE             F2ATN024
     00025  0 40200 0 00123         SUB CHAR                                                          F2ATN025
     00026 -0 73400 1 00000         PDX 0,1                                                           F2ATN026
     00027  0 50000 0 77777  T3     CLA X             COMPUTE Z=A-B/C+X FOR PROPER INTERVAL           F2ATN027
     00030  0 30000 1 00072         FAD MAX,1                                                         F2ATN028
     00031  0 60100 0 77776         STO T                                                             F2ATN029
     00032  0 50200 1 00102         CLS B,1                                                           F2ATN030
     00033  0 24100 0 77776         FDP T                                                             F2ATN031
     00034 -0 60000 0 77776         STQ T                                                             F2ATN032
     00035  0 50000 0 77776         CLA T                                                             F2ATN033
     00036  0 30000 1 00076         FAD A,1                                                           F2ATN034
     00037  0 60100 0 77777  T11    STO X                                                             F2ATN035
     00040  0 56000 0 77777         LDQ X                                                             F2ATN036
     00041  0 26000 0 77777         FMP X             COMPUTE Z SQUARED                               F2ATN037
     00042  0 60100 0 77775         STO SQ            COMPUTE CONTINUED FRACTION                      F2ATN038
     00043  0 30000 0 00114         FAD C1                                                            F2ATN039
     00044  0 60100 0 77776         STO T                                                             F2ATN040
     00045  0 50200 0 00115         CLS C2                                                            F2ATN041
     00046  0 24100 0 77776         FDP T                                                             F2ATN042
     00047 -0 60000 0 77776         STQ T                                                             F2ATN043
     00050  0 50000 0 77776         CLA T                                                             F2ATN044
     00051  0 30000 0 00116         FAD C3                                                            F2ATN045
     00052  0 30000 0 77775         FAD SQ                                                            F2ATN046
     00053  0 60100 0 77776         STO T                                                             F2ATN047
     00054  0 50000 0 77777         CLA X                                                             F2ATN048
     00055  0 24100 0 77776         FDP T                                                             F2ATN049
     00056 -0 60000 0 77776         STQ T                                                             F2ATN050
     00057  0 50000 0 77776         CLA T                                                             F2ATN051
     00060  0 30000 1 00107         FAD N,1           ADD INTERVAL CONSTANT                           F2ATN052
     00061 -0 53400 1 00121         LXD I1,1                                                          F2ATN053
     00062  0 02000 4 00001         TRA 1,4           RETURN                                          F2ATN054
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00063 -0 63400 4 00122  T100   SXD I4,4          IF ARGUMENT NEGATIVE, SET RETURN NEGATIVE  F2ATN055
00064  0 76000 0 00003         SSP                                                          F2ATN056
00065  0 07400 4 00002         TSX T30,4         ARRANGE TO SET RETURN NEGATIVE             F2ATN057
00066 -0 53400 4 00122         LXD I4,4                                                     F2ATN058
00067 -0 76000 0 00003         SSM                                                          F2ATN059
00070  0 02000 4 00001         TRA 1,4                                                      F2ATN060
                                                 CONSTANTS                                  F2ATN061
00071 +070000000000     MIN    OCT 070000000000                                             F2ATN062
00072 +233000000000     MAX    OCT 233000000000                                             F2ATN063
00073 +202537532534            DEC 2.7474774195                                             F2ATN064
00074 +201461055415            DEC 1.1917535926                                             F2ATN065
00075 +200447464721            DEC .57735026919                                             F2ATN066
00076 +176551074172     A      DEC .17632698071                                             F2ATN067
00077 +177714301134            DEC .44958721409                                             F2ATN068
00100 +176617307170            DEC .19501422424                                             F2ATN069
00101 +175602761366            DEC .94475498595E-1                                          F2ATN070
00102 +173730570600     B      DEC .288535059E-1                                            F2ATN071
00103 +201546070234            DEC 1.398867082                                              F2ATN072
00104 +177625431617            DEC .39604526598                                             F2ATN073
00105 +176676654157            DEC .21818181818                                             F2ATN074
00106 +176531427747            DEC .1687240152                                              F2ATN075
00107 +000000000000     N      DEC 0                                                        F2ATN076
00110 +177545343022            DEC .3490658504                                              F2ATN077
00111 +200545343022            DEC .6981317008                                              F2ATN078
00112 +201414052216            DEC 1.047197551                                              F2ATN079
00113 +201545343022            DEC 1.396263402                                              F2ATN080
00114 +174642612432     C1     DEC .051119459                                               F2ATN081
00115 +170543147755     C2     DEC .00270998425                                             F2ATN082
00116 +176673545053     C3     DEC .21664913599                                             F2ATN083
00117 +176517101123     L      DEC .16363636363                                             F2ATN084
00120 +201622077325     PIOV2  DEC 1.57079633                                               F2ATN085
00121  0 00000 0 00000  I1                                                                  F2ATN086
00122  0 00000 0 00000  I4                                                                  F2ATN087
00123 +200000000000     CHAR   OCT 200000000000                                             F2ATN088
                                                 ERASABLES                                  F2ATN089
                77777   X      EQU -1                                                       F2ATN090
                77776   T      EQU -2                                                       F2ATN091
                77775   SQ     EQU -3                                                       F2ATN092
                00000          END 0                                                        F2ATN093
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1          REL                                                                    F2TNH001
1                        00000          ORG 0                                                                  F2TNH002
                                   FLOATING POINT HYPERBOLIC TANGENT SUBROUTINE, FORTRAN VERSIONF2TNH003
                                                                                                               F2TNH004
     00000  0 60100 0 77776  TANH  STO F                                                                       F2TNH005
     00001  0 76000 0 00003        SSP                                                                         F2TNH006
     00002  0 40200 0 00115        SUB MIN                                                                     F2TNH007
     00003  0 12000 0 00006        TPL T5                                                                      F2TNH008
     00004  0 50000 0 77776        CLA F                 TEST IF ARGUMENT LESS THAN .00034                     F2TNH009
     00005  0 02000 4 00001        TRA 1,4               IF SO LET TANH X EQUAL X                              F2TNH010
     00006  0 40200 0 00114  T5    SUB MAX                TEST IF ARGUMENT LARGER THAN 12                      F2TNH011
     00007 -0 12000 0 00012        TMI T6                                                                      F2TNH012
     00010  0 50000 0 00120        CLA CH                IF SO LET TANH X EQUAL ONE                            F2TNH013
     00011  0 02000 4 00001        TRA 1,4                                                                     F2TNH014
     00012  0 50000 0 77776  T6    CLA F                                                                       F2TNH015
     00013  0 76500 0 00033        LRS 27                                                                      F2TNH016
     00014 -0 76000 0 00003        SSM                                                                         F2TNH017
     00015  0 40000 0 00117        ADD CHAR              CONVERT TO FIXED POINT                                F2TNH018
     00016  0 62100 0 00020        STA SH1                                                                     F2TNH019
     00017  0 20000 0 00116        MPY LOGE              X TIMES LOG E BASE 2                                  F2TNH020
A    00020  0 76500 0 00000  SH1   LRS                   SEPARATE INTEGER AND FRACTION                         F2TNH021
     00021  0 76700 0 00033        ALS 27                                                                      F2TNH022
     00022  0 60100 0 77777        STO M                                                                       F2TNH023
     00023  0 76300 0 00002        LLS 2                                                                       F2TNH024
     00024  0 10000 0 00071        TZE T2                IF ARGUMENT LESS THAN .25 TRANSFER                    F2TNH025
     00025  0 76500 0 00006        LRS 6                 IF GREATER COMPUTE E TO THE X                         F2TNH026
     00026 -0 60000 0 77776        STQ F                                                                       F2TNH027
     00027  0 20000 0 77776        MPY F                 COMPUTE FRACTION SQUARED                              F2TNH028
     00030  0 60100 0 77775        STO SQ                COMPUTE CONTINUED FRACTION                            F2TNH029
     00031  0 40000 0 00121        ADD A                 8,27 SCALING                                          F2TNH030
     00032  0 60100 0 77774        STO T                 8,27                                                  F2TNH031
     00033  0 50000 0 00122        CLA B                 12,23                                                 F2TNH032
     00034  0 22100 0 77774        DVP T                 8,27 4,31                                             F2TNH033
     00035 -0 60000 0 77774        STQ T                 4,31                                                  F2TNH034
     00036  0 56000 0 77775        LDQ SQ                8,27                                                  F2TNH035
     00037  0 20000 0 00123        MPY C                 00,35 8,27                                            F2TNH036
     00040  0 76300 0 00004        LLS 4                 4,31                                                  F2TNH037
     00041  0 40200 0 77774        SUB T                 4,31                                                  F2TNH038
     00042  0 40000 0 00124        ADD D                 4,31                                                  F2TNH039
     00043  0 40200 0 77776        SUB F                 4,31                                                  F2TNH040
     00044  0 60100 0 77774        STO T                 4,31                                                  F2TNH041
     00045  0 50000 0 77776        CLA F                 5,31 NUMERATOR EQUALS 2F                              F2TNH042
     00046  0 22100 0 77774        DVP T                                                                       F2TNH043
     00047 -0 60000 0 77774        STQ T                                                                       F2TNH044
     00050  0 50000 0 77774        CLA T                                                                       F2TNH045
     00051  0 76500 0 00010        LRS 8                                                                       F2TNH046
     00052  0 40000 0 00120        ADD CH                ADD ONE AND CONVERT TO FLOATING POINT                 F2TNH047
     00053  0 40000 0 77777  T1    ADD M                                                                       F2TNH048
     00054  0 60100 0 77777        STO M                 COMPUTE TANH X FROM E TO THE X                        F2TNH049
     00055  0 50000 0 00120        CLA CH                                                                      F2TNH050
     00056  0 24100 0 77777        FDP M                                                                       F2TNH051
     00057 -0 60000 0 77776        STQ F                                                                       F2TNH052
     00060  0 50000 0 77777        CLA M                                                                       F2TNH053
     00061  0 30000 0 77776        FAD F                                                                       F2TNH054
     00062  0 60100 0 77774        STO T
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00063  0 50000 0 77777          CLA M                                  F2TNH055
00064  0 30200 0 77776          FSB F                                  F2TNH056
00065  0 24100 0 77774   T10    FDP T                                  F2TNH057
00066 -0 60000 0 77774          STQ T                                  F2TNH058
00067  0 50000 0 77774          CLA T                                  F2TNH059
00070  0 02000 4 00001          TRA 1,4                                F2TNH060
                                                  RETURN               F2TNH061
00071  0 56000 0 77776   T2     LDQ F                                  F2TNH062
                                                  COMPUTE TANH 4LOGE IF X SMALL
00072  0 26000 0 00130          FMP 4LOGE                              F2TNH063
                                                  COMPUTE X TIMES 4LOGE
00073  0 60100 0 77776          STO F                                  F2TNH064
00074  0 56000 0 77776          LDQ F                                  F2TNH065
00075  0 26000 0 77776          FMP F                                  F2TNH066
00076  0 60100 0 77775          STO SQ                                 F2TNH067
00077  0 30000 0 00127          FAD D1                                 F2TNH068
                                                  COMPUTE CONTINUED FRACTION
00100  0 60100 0 77774          STO T                                  F2TNH069
00101  0 50000 0 00126          CLA C1                                 F2TNH070
00102  0 24100 0 77774          FDP T                                  F2TNH071
00103 -0 60000 0 77774          STQ T                                  F2TNH072
00104  0 50000 0 77774          CLA T                                  F2TNH073
00105  0 30000 0 00125          FAD B1                                 F2TNH074
00106  0 76500 0 00043          LRS 35                                 F2TNH075
00107  0 26000 0 77775          FMP SQ                                 F2TNH076
00110  0 30000 0 00130          FAD 4LOGE                              F2TNH077
00111  0 60100 0 77774          STO T                                  F2TNH078
00112  0 50000 0 77776          CLA F                                  F2TNH079
00113  0 02000 0 00065          TRA T10                                F2TNH080
                                                  CONSTANTS            F2TNH081
00114 +017000000000     MAX    OCT 017000000000                       F2TNH082
00115 +165544410070     MIN    DEC .00034                             F2TNH083
00116 +270524354513     LOGE   DEC 1.4426950409B1                     F2TNH084
00117 +000000000242     CHAR   OCT 242                                F2TNH085
00120 +201400000000     CH     OCT 201400000000                       F2TNH086
00121 +127325604305     A      DEC 87.417497202B8                     F2TNH087
00122 +046477071523     B      DEC 617.9722695B12                     F2TNH088
00123 +010676467774     C      DEC .03465735903B0                     F2TNH089
00124 +237214030720     D      DEC 9.9545957821B4                     F2TNH090
00125 +173433723377     B1     DEC .01732867951                       F2TNH091
00126 +204704333566     C1     DEC 14.1384114018                      F2TNH092
00127 +211535527021     D1     DEC 349.6699888                        F2TNH093
00130 +203561250731     4LOGE  DEC 5.7707801636                       F2TNH094
                                                  ERASABLES            F2TNH095
                77777   M      EQU -1                                 F2TNH096
                77776   F      EQU -2                                 F2TNH097
                77775   SQ     EQU -3                                 F2TNH098
                77774   T      EQU -4                                 F2TNH099
                00000          END 0
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                                  REVISED FORTRAN EDITING PROGRAM      EDT 0001
                                                                       EDT 0002
                                                                       EDT 0003
                 00040      ORG 32                                     EDT 0004
00040  0 77200 0 00201      REW 1          REWIND                      EDT 0005
00041  0 77200 0 00205      REW 5              TAPES                   EDT 0006
00042 -0 50000 0 00162      CAL IDEOF      INITIALISE THIS CARD        EDT 0007
00043  0 60200 0 00163      SLW THISCD         TO END FILE             EDT 0008
00044  0 07400 4 00166      TSX ONE2CS,4   TSX TO TRANSCRIBE SPECIAL FIRST RCD EDT 0009
00045 -0 50000 0 00163 REENTR CAL THISCD   MAIN LOOP REENTRY           EDT 0010
00046  0 76700 0 00003      ALS 3              MOVE THIS CARD          EDT 0011
00047  0 60200 0 00164      SLW LASTCD         INTO LAST CARD          EDT 0012
00050  0 76200 0 00321      RCD            READ                        EDT 0013
00051 -0 53400 1 00161      LXD ZERO14,1       THE NEXT CARD           EDT 0014
00052  0 70000 1 00010 A1   CPY CDBUF,1       INTO                    EDT 0015
00053  1 77777 1 00052      TXI A1,1,-1        CARD BUFFER             EDT 0016
00054  0 00000 0 00054 A2   HTR A2          FALSE END OF FILE IN READING CARD EDT 0017
00055 -0 50000 0 00010      CAL CDBUF      TEST                        EDT 0018
00056  0 76000 0 00006      COM                                        EDT 0019
00057  0 62200 0 00063      STD A4                                     EDT 0020
00060 -0 50000 0 00010      CAL CDBUF          CHECK                   EDT 0021
00061 -0 53400 1 00161      LXD ZERO14,1                               EDT 0022
00062  1 77777 1 00063 A3   TXI A4,1,-1                                EDT 0023
00063 -3 00063 1 00066 A4   TXL A5,1,*         SUM                     EDT 0024
00064  0 36100 1 00011      ACL CDBUF+1,1                              EDT 0025
00065  0 02000 0 00062      TRA A3                                     EDT 0026
00066  0 76000 0 00006 A5   COM                                        EDT 0027
00067  0 36100 0 00011      ACL CDBUF+1                                EDT 0028
00070  0 76000 0 00006      COM                                        EDT 0029
00071  0 10000 0 00073      TZE A6                                     EDT 0030
00072  0 42000 0 00000      HPR            CHECK SUM ERROR IN READING CARD EDT 0031
00073 -0 50000 0 00010 A6   CAL CDBUF      SET UP                      EDT 0032
00074  0 77100 0 00041      ARS 33             THIS CARD               EDT 0033
00075  0 62100 0 00163      STA THISCD         AND                     EDT 0034
00076 -0 50100 0 00164      ORA LASTCD         SITUATION               EDT 0035
00077  0 60200 0 00165      SLW SITWD          WORD                    EDT 0036
00100  0 53400 1 00161      LXA ZERO14,1   TABLE SEARCH                EDT 0037
00101 -0 50000 1 00161 A7   CAL TABLE+14,1                             EDT 0038
00102  0 76500 0 00022      LRS 18             FOR                     EDT 0039
00103  0 34000 0 00165      CAS SITWD                                  EDT 0040
00104  0 02000 0 00106      TRA A8             SITUATION               EDT 0041
00105  0 02000 0 00110      TRA A9                                     EDT 0042
00106  2 00001 1 00101 A8   TIX A7,1,1                                 EDT 0043
00107  0 00000 0 00107 ILLEGL HTR ILLEGL   SEARCH FAILED. ILLEGAL SITUATION. EDT 0044
00110  0 76300 0 00022 A9   LLS 18                                     EDT 0045
00111  0 62100 0 00112      STA A10                                    EDT 0046
00112  0 02000 0 00112 A10  TRA *                                      EDT 0047
                                                                       EDT 0048
                                  THERE FOLLOW THE 8 POSSIBLE SITUATION SUBROUTINES EDT 0049
                                                                       EDT 0050
00113  0 07400 4 00210 EOFEND TSX LB,4      SEQUENCE EOF-END            EDT 0051
00114  0 07400 4 00214 EOFMR  TSX SAVE,4    SEQUENCE EOF-MR             EDT 0052
00115  0 07400 4 00225      TSX CLEAR,4                                EDT 0053
00116  0 07400 4 00233      TSX READ,4
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00117  0 02000 0 00045          TRA REENTR                                EDT 0054
00120  0 07400 4 00214 EOFNR    TSX SAVE,4                SEQUENCE EOF-NR  EDT 0055
00121  0 07400 4 00225          TSX CLEAR,4                               EDT 0056
00122  0 02000 0 00045          TRA REENTR                                EDT 0057
00123  0 07400 4 00302 PRGEND   TSX WRITE,4               SEQUENCE PROG-END EDT 0058
00124  0 07400 4 00210          TSX LB,4                       MR-END     EDT 0059
00125  0 07400 4 00302 PRGEOF   TSX WRITE,4               SEQUENCE PROG-EOF EDT 0060
00126  0 77000 0 00221          WEF 145                        MR-EOF     EDT 0061
00127  0 02000 0 00045          TRA REENTR                                EDT 0062
00130  0 07400 4 00330 PRGPRG   TSX MOVE,4                SEQUENCE PROG-PROG EDT 0063
00131  0 02000 0 00045          TRA REENTR                     MR-PROG, NR-PROG EDT 0064
00132  0 07400 4 00302 PRGMR    TSX WRITE,4               SEQUENCE PROG-MR EDT 0065
00133  0 07400 4 00214          TSX SAVE,4                     MR-MR      EDT 0066
00134  0 07400 4 00225          TSX CLEAR,4                               EDT 0067
00135  0 07400 4 00233          TSX READ,4                                EDT 0068
00136  0 02000 0 00045          TRA REENTR                                EDT 0069
00137  0 07400 4 00302 PRGNR    TSX WRITE,4               SEQUENCE PROG-NR EDT 0070
00140  0 07400 4 00214          TSX SAVE,4                     MR-NR      EDT 0071
00141  0 07400 4 00225          TSX CLEAR,4                               EDT 0072
00142  0 02000 0 00045          TRA REENTR                                EDT 0073
00143  0 00047 0 00113 TABLE        EOFEND,0,39           TABLE OF SITUATIONS EDT 0074
00144  0 00041 0 00114               EOFMR,0,33                          EDT 0075
00145  0 00042 0 00120               EOFNR,0,34                          EDT 0076
00146  0 00007 0 00123               PRGEND,0,7                          EDT 0077
00147  0 00004 0 00125               PRGEOF,0,4                          EDT 0078
00150  0 00000 0 00130               PRGPRG,0,0                          EDT 0079
00151  0 00001 0 00132               PRGMR,0,1                           EDT 0080
00152  0 00002 0 00137               PRGNR,0,2                           EDT 0081
00153  0 00017 0 00123               PRGEND,0,15                         EDT 0082
00154  0 00014 0 00125               PRGEOF,0,12                         EDT 0083
00155  0 00010 0 00130               PRGPRG,0,8                          EDT 0084
00156  0 00011 0 00132               PRGMR,0,9                           EDT 0085
00157  0 00012 0 00137               PRGNR,0,10                          EDT 0086
00160  0 00020 0 00130               PRGPRG,0,16                         EDT 0087
00161  0 00000 0 00016 ZERO14        14                                  EDT 0088
00162  0 00000 0 00004 IDEOF         4                                   EDT 0089
00163  0 00000 0 00000 THISCD                                            EDT 0090
00164  0 00000 0 00000 LASTCD                                            EDT 0091
00165  0 00000 0 00000 SITWD                                             EDT 0092
                      00010 CDBUF   SYN 8                                EDT 0093
                                                                         EDT 0094
                                THERE FOLLOW THE 7 SUBROUTINES           EDT 0095
                                     ONE2CS, LB, SAVE, CLEAR, READ, WRITE, MOVE EDT 0096
                                                                         EDT 0097
00166 -0 76000 0 00012 ONE2CS RTT                      TRANSCRIBES       EDT 0098
00167  0 76100 0 00000         NOP                          SPECIAL      EDT 0099
00170  0 76200 0 00225         RTB 5                        1ST RECORD
00171 -0 53400 1 00161         LXD ZERO14,1
00172  0 53400 2 00207         LXA ZEROTW,2
00173  0 76200 0 00321         RCD
00174  0 70000 1 00353 CS1     CPY MAINBF,1
00175  1 77777 1 00174         TXI CS1,1,-1
00176  0 00000 0 00176         HTR *
00177  2 00001 2 00173         TIX CS1-1,2,1
00200 -0 53400 1 00161         LXD ZERO14,1
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00201  0 76600 0 00221          WTB 1
00202  0 70000 1 00353 CS2      CPY MAINBF,1
00203  1 77777 1 00204          TXI CS3,1,-1
00204  3 77745 1 00202 CS3      TXH CS2,1,-27
00205  0 76600 0 00333          IOD
00206  0 02000 4 00001          TRA 1,4
00207  0 00000 0 00002 ZEROTW       2
                                                                    EDT 0124
00210  0 76200 0 00321 LB       RCD
                                PRESSES LOAD CARDS BUTTON           EDT 0125
00211  0 70000 0 00000          CPY 0                               EDT 0126
00212  0 70000 0 00001          CPY 1                               EDT 0127
00213  0 02000 0 00000          TRA 0                               EDT 0128
                                                                    EDT 0129
00214 -0 50000 0 00012 SAVE     CAL CDBUF+2                         EDT 0130
                                SAVES CONTROL INFORMATION
00215  0 60200 0 00222          SLW EIGHTL      FROM MR OR NR CARD  EDT 0131
00216  0 62100 0 00224          STA NEWBEG                          EDT 0132
00217 -0 50000 0 00013          CAL CDBUF+3                         EDT 0133
00220  0 60200 0 00223          SLW EIGHTR                          EDT 0134
00221  0 02000 4 00001          TRA 1,4                             EDT 0135
00222  0 00000 0 00000 EIGHTL                                       EDT 0136
00223  0 00000 0 00000 EIGHTR                                       EDT 0137
00224  0 00000 0 00000 NEWBEG                                       EDT 0138
                                                                    EDT 0139
00225 -0 75400 0 00000 CLEAR    PXD 0,0                             EDT 0140
                                CLEARS MAIN BUFFER
00226  0 53400 1 00232          LXA BUFSIZ,1                        EDT 0141
00227  0 60200 1 00000 CL1      SLW 0,1                             EDT 0142
00230  2 00001 1 00227          TIX CL1,1,1                         EDT 0143
00231  0 02000 4 00001          TRA 1,4                             EDT 0144
00232  0 00000 0 77425 BUFSIZ       -MAINBF                        EDT 0145
                                                                    EDT 0146
00233 -0 76000 0 00012 READ     RTT                                 EDT 0147
                                READS RECORD
00234  0 76100 0 00000          NOP                                 EDT 0148
                                     FROM
00235  0 76200 0 00225          RTB 5                               EDT 0149
                                     MASTER TAPE
00236 -0 75400 0 00000          PXD 0,0                             EDT 0150
                                     INTO MAIN BUFFER
00237 -0 53400 1 00161          LXD ZERO14,1                        EDT 0151
00240  0 70000 0 00277          CPY CHKSUM                          EDT 0152
00241  0 02000 0 00243          TRA RD1                             EDT 0153
00242  0 02000 0 00233          TRA READ                            EDT 0154
00243 -0 70000 0 00300 RD1      CAD FSTWD                           EDT 0155
00244 -0 32000 0 00301          ANA ADDMK                           EDT 0156
00245  0 40200 0 00224          SUB NEWBEG                          EDT 0157
00246 -0 12000 0 00267          TMI RD6                             EDT 0158
00247  0 76000 0 00006          COM                                 EDT 0159
00250  0 73400 1 00000 RD2      PAX 0,1                             EDT 0160
00251 -0 50000 0 00300          CAL FSTWD                           EDT 0161
00252 -3 00352 1 00271 RD3      TXL RD7,1,MAINBF-1                  EDT 0162
00253 -0 70000 1 00352          CAD MAINBF-1,1                      EDT 0163
00254  1 77777 1 00252 RD4      TXI RD3,1,-1                        EDT 0164
00255  0 00000 0 00001 L1       HTR 1                               EDT 0165
                                FALSE EOF IN READING MASTER TAPE
00256 -0 77300 0 00377 RD5      RQL 255                             EDT 0166
00257 -0 77300 0 00377          RQL 255                             EDT 0167
00260 -0 76000 0 00012          RTT                                 EDT 0168
00261  0 02000 0 00275          TRA RD8                             EDT 0169
00262  0 76000 0 00006          COM                                 EDT 0170
```

```
00263  0 36100 0 00277          ACL CHKSUM
00264  0 76000 0 00006          COM
00265 -0 10000 0 00275          TNZ RD8
00266  0 02000 4 00001          TRA 1,4
00267  0 40000 0 00255 RD6      ADD L1
00270  0 02000 0 00250          TRA RD2
00271 -0 70000 0 00000 RD7      CAD 0
00272  0 02000 0 00254          TRA RD4
00273  0 02000 0 00255          TRA L1
00274  0 02000 0 00256          TRA RD5
00275  0 76400 0 00205 RD8      BST 5
00276  0 00000 0 00233          HTR READ
00277  0 00000 0 00000 CHKSUM
00300  0 00000 0 00000 FSTWD
00301  0 00000 0 77777 ADDMK        -1

00302  0 50000 0 00223 WRITE    CLA EIGHTR
00303  0 40200 0 00224          SUB NEWBEG
00304 -0 12000 4 00001          TMI 1,4
00305  0 76700 0 00022          ALS 18
00306  0 76000 0 00006          COM
00307  0 62200 0 00315          STD WR2
00310  0 62200 0 00324          STD WR4
00311 -0 53400 3 00161          LXD ZERO14,3
00312 -0 50000 0 00222          CAL EIGHTL
00313  0 36100 1 00353 WR1      ACL MAINBF,1
00314  1 77777 1 00315          TXI WR2,1,-1
00315  3 00315 1 00313 WR2      TXH WR1,1,*
00316  0 60200 0 00277          SLW CHKSUM
00317  0 76600 0 00221          WTB 1
00320  0 70000 0 00277          CPY CHKSUM
00321  0 70000 0 00222          CPY EIGHTL
00322  0 70000 2 00353 WR3      CPY MAINBF,2
00323  1 77777 2 00324          TXI WR4,2,-1
00324  3 00324 2 00326 WR4      TXH WR5,2,*
00325  0 02000 4 00001          TRA 1,4
00326  3 00353 2 00322 WR5      TXH WR3,2,MAINBF
00327  0 00000 4 00001          HTR 1,4

00330 -0 50000 0 00010 MOVE     CAL CDBUF
00331  0 76000 0 00006          COM
00332  0 62200 0 00343          STD MV3
00333 -0 53400 1 00161          LXD ZERO14,1
00334 -0 50000 0 00010          CAL CDBUF
00335 -0 32000 0 00301          ANA ADDMK
00336  0 40200 0 00224          SUB NEWBEG
00337 -0 12000 0 00350          TMI MV5
00340  0 76000 0 00006          COM
00341  0 73400 2 00000 MV1      PAX 0,2
00342  1 77777 1 00343 MV2      TXI MV3,1,-1
00343 -3 00343 1 00352 MV3      TXL MV6,1,*
00344 -0 50000 1 00011          CAL CDBUF+1,1
00345 -3 00352 2 00347          TXL MV4,2,MAINBF-1
00346  0 60200 2 00352          SLW MAINBF-1,2
```

```
                                                    EDT 0171
                                                    EDT 0172
                                                    EDT 0173
                                                    EDT 0174
                                                    EDT 0175
                                                    EDT 0176
                                                    EDT 0177
                                                    EDT 0178
                                                    EDT 0179
                                                    EDT 0180
                                                    EDT 0181
ERROR IN READING MASTER TAPE                        EDT 0182
                                                    EDT 0183
                                                    EDT 0184
                                                    EDT 0185
                                                    EDT 0186
WRITES RECORD FROM MAIN BUFFER                      EDT 0187
     ONTO SECONDARY TAPE                            EDT 0188
                                                    EDT 0189
                                                    EDT 0190
                                                    EDT 0191
                                                    EDT 0192
                                                    EDT 0193
                                                    EDT 0194
                                                    EDT 0195
                                                    EDT 0196
                                                    EDT 0197
                                                    EDT 0198
                                                    EDT 0199
                                                    EDT 0200
                                                    EDT 0201
                                                    EDT 0202
                                                    EDT 0203
                                                    EDT 0204
                                                    EDT 0205
                                                    EDT 0206
                                                    EDT 0207
TRYING TO WRITE TOO LONG A RECORD                   EDT 0208
                                                    EDT 0209
MOVES A PROGRAM CARD FROM                           EDT 0210
     THE CARD BUFFER INTO THE                       EDT 0211
     CORRECT PART OF THE MAIN BUFFER                EDT 0212
                                                    EDT 0213
                                                    EDT 0214
                                                    EDT 0215
                                                    EDT 0216
                                                    EDT 0217
                                                    EDT 0218
                                                    EDT 0219
                                                    EDT 0220
                                                    EDT 0221
                                                    EDT 0222
                                                    EDT 0223
                                                    EDT 0224
```

```
00347  1 77777 2 00342 MV4     TXI MV2,2,-1                                    EDT 0225
00350  0 40000 0 00255 MV5     ADD L1                                          EDT 0226
00351  0 02000 0 00341         TRA MV1                                         EDT 0227
00352  0 02000 4 00001 MV6     TRA 1,4                                         EDT 0228
                                                                               EDT 0229
00353  0 00000 0 00000 MAINBF                          MAIN BUFFER STARTS HERE EDT 0230
                     00040     END 32                                          EDT 0231
```

```
1          ORG 24
1                        00030          ORG 24
           00030  0 53400 3 00173 START  LXA L(0),3          PERMANENT LIBRARIAN ENTRY POINT
           00031  0 60000 0 00200        STZ ERASE
           00032  0 76200 0 00321 RCD    RCD
           00033 -0 70000 0 00174        CAD 9L
           00034  0 02000 0 00036        TRA CPY9R
           00035  0 02000 0 00160        TRA EXIT              EOF
           00036  0 70000 0 00175 CPY9R  CPY 9R
           00037  0 50000 0 00174        CLA 9L
           00040  0 10000 0 00160        TZE EXIT
           00041  0 76000 0 00006        COM
           00042 -0 73400 4 00000        PDX 0,4
           00043  1 00001 4 00044        TXI CPY9R+6,4,1
           00044 -3 77700 4 00164        TXL PASSGL,4,-64
           00045  0 50000 0 00174        CLA 9L
           00046  0 76700 0 00001        ALS 1
           00047 -0 76000 0 00001        PBT
           00050  0 02000 0 00071        TRA BINARY CARD
           00051  1 77776 4 00053        TXI CPAREL-2,4,-2
           00052 -0 63400 4 00057        SXD TXHREL,4
T          00053 -0 75400 0 00000        PXD
           00054  0 60000 0 00200        STZ ERASE
           00055 -0 70000 2 00202 CPAREL CAD RELREG,2
           00056  1 77777 2 00057        TXI TXHREL,2,-1
           00057  3 00057 2 00055 TXHREL TXH CPAREL,2,*
           00060  0 07400 4 00121        TSX CHSTST,4
           00061  0 76600 0 00221        WTB 1
           00062 -3 00000 1 00065        TXL TSXREL,1,0
           00063  0 07400 4 00141        TSX WRBIN,4
           00064  0 76600 0 00221        WTB 1
           00065  0 07400 4 00132 TSXREL TSX WRREL,4
           00066  0 60000 0 00176        STZ 9LB,0,STZ
           00067  0 60000 0 00177        STZ 9RB,0,STZ
           00070  0 02000 0 00032        TRA RCD
T          00071 -0 75400 0 00000 BINARY PXD
           00072 -0 70000 1 00230 CPABIN CAD BINREG,1
           00073  1 77777 1 00074        TXI TXHBIN-1,1,-1
           00074  1 00001 4 00075        TXI TXHBIN,4,1
           00075  3 00000 4 00072 TXHBIN TXH CPABIN,4,0
           00076  0 07400 4 00121        TSX CHSTST,4
           00077  0 50000 0 00174        CLA 9L
           00100  0 40000 0 00176        ADD 9LB
           00101  0 60100 0 00176        STO 9LB
           00102  0 50000 0 00200        CLA ERASE
           00103  0 10000 0 00116        TZE CHER
           00104  0 50000 0 00175        CLA 9R
           00105 -0 12000 0 00110        TMI CHSIGN
           00106  0 36100 0 00201        ACL L(1)
           00107  0 02000 0 00111        TRA NORM
           00110  0 76000 0 00003 CHSIGN SSP
           00111  0 60200 0 00175 NORM   SLW 9R
           00112 -0 50000 0 00175        CAL 9R
           00113  0 36100 0 00177        ACL 9RB
```

```
00114  0 60200 0 00177          SLW 9RB
00115  0 02000 0 00032          TRA RCD
00116  0 50000 0 00201 CHER     CLA L(1)
00117  0 60100 0 00200          STO ERASE
00120  0 02000 0 00112          TRA NORM+1
00121  0 36100 0 00174 CHSTST   ACL 9L
00122  0 60200 0 00172          SLW CHS
00123  0 76600 0 00333          IOD
00124  0 76600 0 00333          IOD
00125  0 50000 0 00175          CLA 9R
00126  0 34000 0 00172          CAS CHS
00127  0 00000 4 00001          HTR 1,4                CARD READING ERROR
00130  0 02000 4 00001          TRA 1,4
00131  0 02000 0 00127          TRA WRREL-3
00132  0 50000 0 00171 WRREL    CLA L(REL)
00133  0 62100 0 00151          STA CPY
00134 -0 63400 2 00153          SXD CPY+2,2
00135  0 70000 0 00174          CPY 9L
00136  0 53400 2 00173          LXA L(0),2
00137  0 70000 0 00175          CPY 9R
00140 -3 00000 0 00147 RETURN   TXL XR,0
00141  0 50000 0 00170 WRBIN    CLA L(BIN)
00142  0 62100 0 00151          STA CPY
00143  0 70000 0 00176          CPY 9LB
00144 -0 63400 1 00153          SXD CPY+2,1
00145  0 53400 1 00173          LXA L(0),1
00146  0 70000 0 00177          CPY 9RB
00147 -0 63400 4 00140 XR       SXD RETURN,4
00150  0 53400 4 00173          LXA L(0),4
00151  0 70000 4 00151 CPY      CPY *,4
00152  1 77777 4 00153          TXI CPY+2,4,-1
00153  3 00153 4 00151          TXH CPY,4,*
00154 -0 53400 4 00140          LXD RETURN,4
00155  0 76600 0 00333          IOD
00156  0 76600 0 00333          IOD
00157  0 02000 4 00001          TRA 1,4
00160  0 76200 0 00321 EXIT     RCD
00161  0 70000 0 00000          CPY 0
00162  0 70000 0 00001          CPY 1
00163  0 02000 0 00000          TRA 0
00164 -0 53400 4 00167 PASSGL   LXD PASSGL+3,4         BY-PASS
00165  0 76200 0 00321          RCD                    GENERAL
00166  2 00001 4 00165          TIX PASSGL+1,4,1       LIBRARIAN
00167 -3 00016 0 00030          TXL RCD-2,0,14         G.L. CARD COUNT
00170  0 00000 0 00230 L(BIN)      BINREG
00171  0 00000 0 00202 L(REL)      RELREG
00172  0 00000 0 00000 CHS
00173  0 00000 0 00000 L(0)
00174  0 00000 0 00000 9L
00175  0 00000 0 00000 9R
00176  0 00000 0 00000 9LB
00177  0 00000 0 00000 9RB
00200  0 00000 0 00000 ERASE    HTR 0
00201 +377777777777    L(1)     OCT 377777777777
```

D

```
00202 RELREG BSS 22
00230 BINREG BSS 1
60000 STZ    EQU 24576
00030        END START
```

```
1          REM GENERAL LIBRARIAN     GLIB2
1                                       GENERAL LIBRARIAN    GLIB2
                        00030         ORG 24
      00030  0 77200 0 00225 DUP000 REW SOURCE              GENERAL LIBRARIAN
      00031  0 77200 0 00221        REW OBJECT
      00032 -0 76000 0 00012        RTT                      TURN OFF RTT TRIGGER
ATD   00033  3 00000 0 00000        TXH
      00034 -0 53400 7 00040        LXD DUP020,7             INITIALIZE INDEX REGISTERS TO 27*
      00035  0 76200 0 00225        RDS SOURCE               READ 1-CS FROM SOURCE
      00036  0 70000 1 00507 DUP010 CPY RECORD+27,1
      00037  1 77777 1 00036        TXI DUP010,1,-1
      00040  0 00033 0 00000 DUP020 HTR 0,0,27               MACHINE ERROR
      00041  0 76600 0 00333        IOD                      EOR-DELAY
      00042 -0 76000 0 00012        RTT
      00043  0 00000 0 00030        HTR DUP000               RTT ERROR-- TRY AGAIN
      00044  0 76600 0 00221        WRS OBJECT               WRITE 1-CS ONTO OBJECT
      00045  0 70000 2 00507 DUP030 CPY RECORD+27,2
      00046  2 00001 2 00045        TIX DUP030,2,1
      00047  0 76600 0 00333        IOD
      00050 -0 76000 0 00012        RTT                      TURN OFF RTT TRIGGER
      00051  3 00000 0 00156 DUP031 TXH DUP170,0,0
      00052  0 76400 0 00221        BST OBJECT
      00053  0 76200 0 00221        RDS OBJECT               READ BACK 1-CS FROM OBJECT
      00054  0 70000 0 00453 DUP040 CPY DUMMY
      00055  0 02000 0 00060        TRA DUP050
A     00056  0 00000 0 00000        HTR
      00057  0 02000 0 00065        TRA DUP060               EOR
      00060  0 50000 4 00507 DUP050 CLA RECORD+27,4
      00061  0 34000 0 00453        CAS DUMMY
      00062  0 00000 0 00030        HTR DUP000               WORD COMP. FAILS-READING
      00063  1 77777 4 00054        TXI DUP040,4,-1
      00064  0 00000 0 00030        HTR DUP000               FROM OBJECT
      00065  3 00000 4 00427 DUP060 TXH DUP280,4,0           ERROR-INCOMPLETE OBJECT RECORD
      00066  0 76600 0 00333        IOD
      00067 -0 76000 0 00012        RTT
      00070  0 00000 0 00030        HTR DUP000               RTT ERROR READING BACK OBJECT 1-CS
      00071 -0 53400 7 00051 DUP070 LXD DUP031,7             INITIALIZE INDEX REG TO 0
T     00072 -0 75400 0 00000        PXD                      CLEAR AC
      00073  0 76200 0 00225 DUP071 RDS SOURCE               READ SOURCE 1ST/2ND FILE RECORD
      00074  0 70000 1 00454        CPY RECORD,1
      00075  1 77777 1 00100        TXI DUP090,1,-1
      00076  0 02000 0 00144 DUP080 TRA DUP160               EOF
A     00077  0 00000 0 00000        HTR                      MACHINE ERROR
      00100 -0 70000 1 00454 DUP090 CAD RECORD,1
      00101  1 77777 1 00100        TXI DUP090,1,-1
A     00102  0 00000 0 00000        HTR                      MACHINE ERROR
      00103  0 76000 0 00006        COM                      EOR
      00104  0 36100 0 00454        ACL RECORD
      00105  0 76000 0 00006        COM
      00106  0 10000 0 00110        TZE DUP100
      00107  0 00000 0 00430        HTR DUP290               CKSM FAILS READING SOURCE 1ST/2ND FILE
      00110  0 76600 0 00333 DUP100 IOD
      00111 -0 76000 0 00012        RTT
      00112  0 00000 0 00432        HTR DUP300               RTT ERROR-BST AND TRY AGAIN
```

```
        00113 -0 63400 1 00120         SXD DUP120,1
        00114 -0 63400 1 00137         SXD DUP150,1
        00115  0 76600 0 00221         WRS OBJECT          WRITE OBJECT 1ST/2ND FILE RECORD
        00116  0 70000 2 00454 DUP110  CPY RECORD,2
        00117  1 77777 2 00120         TXI DUP120,2,-1
        00120  3 00000 2 00116 DUP120  TXH DUP110,2,**
        00121  0 76600 0 00333 DUP121  IOD
        00122 -0 76000 0 00012         RTT                 TURN OFF RTT TRIGGER
ATD     00123  3 00000 0 00000         TXH
        00124  0 76400 0 00221         BST OBJECT
        00125  0 76200 0 00221         RDS OBJECT          READ BACK OBJECT 1ST/2ND FILE RECORD
        00126  0 70000 0 00453 DUP130  CPY DUMMY
        00127  0 02000 0 00132         TRA DUP140
A       00130  0 00000 0 00000         HTR                 MACHINE ERROR
        00131  0 02000 0 00137         TRA DUP150          EOR
        00132  0 50000 4 00454 DUP140  CLA RECORD,4
        00133  0 34000 0 00453         CAS DUMMY
        00134  0 00000 0 00434         HTR DUP310          COMP. ERROR ON 1ST/2ND FILE RECORD
        00135  1 77777 4 00126         TXI DUP130,4,-1
        00136  0 00000 0 00434         HTR DUP310          COMP. ERROR ON 1ST/2ND FILE RECORD.
        00137  3 00000 4 00436 DUP150  TXH DUP320,4,**     ERROR-INCOMPLETE OBJECT RECORD
        00140  0 76600 0 00333         IOD
        00141 -0 76000 0 00012         RTT
        00142  0 00000 0 00434         HTR DUP310          RTT ERROR-BST AND TRY AGAIN
        00143  0 02000 0 00071         TRA DUP070
        00144  0 76600 0 00333 DUP160  IOD
        00145 -0 76000 0 00012         RTT
        00146  0 00000 0 00444         HTR DUP340          RTT ERROR - BST TWICE ON SOURCE
        00147  0 77000 0 00221         WEF OBJECT          WRITE 1ST EOF
        00150  0 76600 0 00333         IOD
        00151 -0 76000 0 00012         RTT                 TURN OFF RTT TRIGGER
ATD     00152  3 00000 0 00000         TXH
        00153  0 50000 0 00051         CLA DUP031
        00154  0 62100 0 00076         STA DUP080
        00155  0 02000 0 00071         TRA DUP070
        00156  0 76600 0 00333 DUP170  IOD
        00157 -0 76000 0 00012         RTT
        00160  0 00000 0 00444         HTR DUP340          RTT ERROR- BST TWICE ON SOURCE
        00161  0 77000 0 00221         WEF OBJECT          WRITE 2ND EOF
        00162  0 76600 0 00333 DUP171  IOD
        00163 -0 76000 0 00012         RTT                 TURN OFF RTT TRIGGER
ATD     00164  3 00000 0 00000         TXH
        00165 -0 53400 7 00051 DUP180  LXD DUP031,7        INITIALIZE INDEX REG TO 0
T       00166 -0 75400 0 00000         PXD                 CLEAR AC
        00167  0 76200 0 00225 DUP181  RDS SOURCE          READ SOURCE 3RD FILE RECORD
        00170 -0 70000 1 00454         CAD RECORD,1
        00171  1 77777 1 00174         TXI DUP190,1,-1
A       00172  0 00000 0 00000         HTR                 FALSE 3RD FILE EOF MARK.
A       00173  0 00000 0 00000         HTR                 MACHINE ERROR
        00174  0 70000 1 00454 DUP190  CPY RECORD,1        CPY CKSM INTO RECORD+1
        00175  1 77777 1 00176         TXI DUP200,1,-1
        00176 -0 70000 1 00454 DUP200  CAD RECORD,1
        00177  1 77777 1 00176         TXI DUP200,1,-1
A       00200  0 00000 0 00000         HTR                 MACHINE ERROR
```

```
        00201  0 76100 0 00000 SWITCH NOP                          EOR
        00202  0 76000 0 00006        COM
        00203  0 36100 0 00455        ACL RECORD+1
        00204  0 76000 0 00006        COM
        00205  0 10000 0 00207        TZE DUP210
        00206  0 00000 0 00450        HTR DUP350                   CKSM FAILS READING SOURCE 3RD FILE
        00207  0 76600 0 00333 DUP210 IOD
        00210 -0 76000 0 00012        RTT
        00211  0 00000 0 00450        HTR DUP350                   RTT ERROR-BST
        00212 -0 63400 1 00217        SXD DUP230,1
        00213 -0 63400 1 00236        SXD DUP260,1
        00214  0 76600 0 00221        WRS OBJECT                   WRITE OBJECT 3RD FILE RECORD
        00215  0 70000 2 00454 DUP220 CPY RECORD,2
        00216  1 77777 2 00217        TXI DUP230,2,-1
        00217  3 00000 2 00215 DUP230 TXH DUP220,2,**
        00220  0 76600 0 00333 DUP231 IOD
        00221 -0 76000 0 00012        RTT                          TURN OFF RTT TRIGGER
ATD     00222  3 00000 0 00000        TXH
        00223  0 76400 0 00221        BST OBJECT
        00224  0 76200 0 00221        RDS OBJECT                   READ BACK  OBJECT 3RD FILE RECORD
        00225  0 70000 0 00453 DUP240 CPY DUMMY
        00226  0 02000 0 00231        TRA DUP250
A       00227  0 00000 0 00000        HTR                          MACHINE ERROR
        00230  0 02000 0 00236        TRA DUP260                   EOR
        00231  0 50000 4 00454 DUP250 CLA RECORD,4
        00232  0 34000 0 00453        CAS DUMMY
        00233  0 00000 0 00452        HTR DUP360                   COMP. ERROR ON 3RD FILE
        00234  1 77777 4 00225        TXI DUP240,4,-1
        00235  0 00000 0 00452        HTR DUP360                   ERROR- INCOMPLETE OBJECT RECORD
D       00236  3 00000 4 00454 DUP260 TXH DUP370,4
        00237  0 76600 0 00333        IOD
        00240 -0 76000 0 00012        RTT
        00241  0 00000 0 00452        HTR DUP360
        00242 -0 50000 0 00460        CAL RECORD+4
        00243  0 40200 0 00416        SUB NAME
        00244 -0 10000 0 00165        TNZ DUP180
        00245 -0 50000 0 00425        CAL TRAN
        00246  0 60200 0 00201        SLW SWITCH
        00247  0 02000 0 00165        TRA DUP180
        00250  0 53400 3 00415 EXIT1  LXA L(0),3
        00251  0 60000 0 00423        STZ ERASE
        00252  0 76200 0 00321 RCD    RCD
        00253 -0 70000 0 00417        CAD 9L
        00254  0 02000 0 00256        TRA CPY9R
        00255  0 02000 0 00406        TRA EXIT                     EOF
        00256  0 70000 0 00420 CPY9R  CPY 9R
        00257  0 50000 0 00417        CLA 9L
        00260  0 10000 0 00406        TZE EXIT
        00261  0 76000 0 00006        COM
        00262 -0 73400 4 00000        PDX 0,4
        00263  1 00001 4 00264        TXI CPY9R+6,4,1
        00264  0 50000 0 00417        CLA 9L
        00265  0 76700 0 00001        ALS 1
        00266 -0 76000 0 00001        PBT
```

```
        00267  0 02000 0 00310          TRA BINARY CARD
        00270  1 77776 4 00272          TXI CPAREL-2,4,-2
        00271 -0 63400 4 00276          SXD TXHREL,4
T       00272 -0 75400 0 00000          PXD
        00273  0 60000 0 00423          STZ ERASE
        00274 -0 70000 2 00460 CPAREL   CAD RELREG,2
        00275  1 77777 2 00276          TXI TXHREL,2,-1
        00276  3 00276 2 00274 TXHREL   TXH CPAREL,2,*
        00277  0 07400 4 00340          TSX CHSTST,4
        00300  0 76600 0 00221          WTB 1
        00301 -3 00000 1 00304          TXL TSXREL,1,0
        00302  0 07400 4 00360          TSX WRBIN,4
        00303  0 76600 0 00221          WTB 1
        00304  0 07400 4 00351 TSXREL   TSX WRREL,4
        00305  0 60000 0 00421          STZ 9LB,0,STZ
        00306  0 60000 0 00422          STZ 9RB,0,STZ
        00307  0 02000 0 00252          TRA RCD
T       00310 -0 75400 0 00000 BINARY   PXD
        00311 -0 70000 1 00506 CPABIN   CAD BINREG,1
        00312  1 77777 1 00313          TXI TXHBIN-1,1,-1
        00313  1 00001 4 00314          TXI TXHBIN,4,1
        00314  3 00000 4 00311 TXHBIN   TXH CPABIN,4,0
        00315  0 07400 4 00340          TSX CHSTST,4
        00316  0 50000 0 00417          CLA 9L
        00317  0 40000 0 00421          ADD 9LB
        00320  0 60100 0 00421          STO 9LB
        00321  0 50000 0 00423          CLA ERASE
        00322  0 10000 0 00335          TZE CHER
        00323  0 50000 0 00420          CLA 9R
        00324 -0 12000 0 00327          TMI CHSIGN
        00325  0 36100 0 00424          ACL L(1)
        00326  0 02000 0 00330          TRA NORM
        00327  0 76000 0 00003 CHSIGN   SSP
        00330  0 60200 0 00420 NORM     SLW 9R
        00331 -0 50000 0 00420          CAL 9R
        00332  0 36100 0 00422          ACL 9RB
        00333  0 60200 0 00422          SLW 9RB
        00334  0 02000 0 00252          TRA RCD
        00335  0 50000 0 00424 CHER     CLA L(1)
        00336  0 60100 0 00423          STO ERASE
        00337  0 02000 0 00331          TRA NORM+1
        00340  0 36100 0 00417 CHSTST   ACL 9L
        00341  0 60200 0 00414          SLW CHS
        00342  0 76600 0 00333          IOD
        00343  0 76600 0 00333          IOD
        00344  0 50000 0 00420          CLA 9R
        00345  0 34000 0 00414          CAS CHS
        00346  0 00000 4 00001          HTR 1,4                CARD READING ERROR
        00347  0 02000 4 00001          TRA 1,4
        00350  0 02000 0 00346          TRA WRREL-3
        00351  0 50000 0 00413 WRREL    CLA L(REL)
        00352  0 62100 0 00370          STA CPY
        00353 -0 63400 2 00372          SXD CPY+2,2
        00354  0 70000 0 00417          CPY 9L
```

```
        00355  0 53400 2 00415          LXA L(0),2
        00356  0 70000 0 00420          CPY 9R
D       00357 -3 00000 0 00366 RETURN   TXL XR,0
        00360  0 50000 0 00412 WRBIN    CLA L(BIN)
        00361  0 62100 0 00370          STA CPY
        00362  0 70000 0 00421          CPY 9LB
        00363 -0 63400 1 00372          SXD CPY+2,1
        00364  0 53400 1 00415          LXA L(0),1
        00365  0 70000 0 00422          CPY 9RB
        00366 -0 63400 4 00357 XR       SXD RETURN,4
        00367  0 53400 4 00415          LXA L(0),4
        00370  0 70000 4 00370 CPY      CPY *,4
        00371  1 77777 4 00372          TXI CPY+2,4,-1
        00372  3 00372 4 00370          TXH CPY,4,*
        00373 -0 53400 4 00357          LXD RETURN,4
        00374  0 76600 0 00333          IOD
        00375  0 76600 0 00333          IOD
        00376  0 02000 4 00001          TRA 1,4
        00377  0 60200 0 00426 RELBIN   SLW HOLD
        00400  0 50000 0 00417          CLA 9L
        00401  0 76700 0 00001          ALS 1
        00402 -0 76000 0 00001          PBT
        00403  0 02000 0 00250          TRA EXIT1              RECORD IS THE 1ST CONTROL CARD OF GEN. LIB.
        00404 -0 50000 0 00426          CAL HOLD
        00405  0 02000 0 00202          TRA SWITCH+1           RETURN TO READING PERMANENT LIB.
        00406  0 76200 0 00321 EXIT     RCD                    PULL IN FNDE2
        00407  0 70000 0 00000          CPY 0
        00410  0 70000 0 00001          CPY 1
        00411  0 02000 0 00000          TRA 0
        00412  0 00000 0 00506 L(BIN)       BINREG
        00413  0 00000 0 00460 L(REL)       RELREG
        00414  0 00000 0 00000 CHS
        00415  0 00000 0 00000 L(0)
        00416  256747740360    NAME     BCD 1EXP(3
        00417  0 00000 0 00000 9L
        00420  0 00000 0 00000 9R
        00421  0 00000 0 00000 9LB
        00422  0 00000 0 00000 9RB
        00423  0 00000 0 00000 ERASE    HTR 0
        00424 +377777777777    L(1)     OCT 377777777777
        00425  0 02000 0 00377 TRAN     TRA RELBIN
        00426  0 00000 0 00000 HOLD
        00427  0 00000 0 00030 DUP280   HTR DUP000
        00430 -0 76000 0 00012 DUP290   RTT
ATD     00431  3 00000 0 00000          TXH
        00432  0 76400 0 00225 DUP300   BST SOURCE
        00433  0 02000 0 00071          TRA DUP070
        00434 -0 53400 4 00051 DUP310   LXD DUP031,4
        00435  0 02000 0 00121          TRA DUP121
        00436  0 00000 0 00437 DUP320   HTR DUP330
        00437 -0 76000 0 00012 DUP330   RTT
ATD     00440  3 00000 0 00000          TXH
        00441  0 76400 0 00225          BST SOURCE
        00442  0 76400 0 00221          BST OBJECT
```

```
00443  0 02000 0 00071         TRA DUP070
00444  0 76400 0 00225 DUP340 BST SOURCE
00445  0 76400 0 00225         BST SOURCE
00446  0 76200 0 00225         RDS SOURCE
00447  0 02000 0 00073         TRA DUP071
00450  0 76400 0 00225 DUP350 BST SOURCE
00451  0 02000 0 00162         TRA DUP171
00452 -0 53400 4 00051 DUP360 LXD DUP031,4
00453  0 02000 0 00220         TRA DUP231
00454  0 00000 0 00455 DUP370 HTR DUP380
00455  0 76400 0 00225 DUP380 BST SOURCE
00456  0 76400 0 00221         BST OBJECT
00457  0 02000 0 00162         TRA DUP171
                 00460 RELREG BSS 22
                 00506 BINREG BSS 1
                 60000 STZ    EQU 24576
                 00225 SOURCE SYN 149
                 00221 OBJECT SYN 145
                 00454 RECORD SYN 300
                 00453 DUMMY  SYN 299
                 00030        END 24
```

```
1          REM TAPE DUPLICATING PROGRAM    F2TCVP
1                                          TAPE DUPLICATING PROGRAM    F2TCVP
                        00030          ORG 24
      00030  0 77200 0 00225 DUP000 REW SOURCE
      00031  0 77200 0 00221        REW OBJECT
      00032 -0 76000 0 00012        RTT                      TURN OFF RTT TRIGGER
ATD   00033  3 00000 0 00000        TXH
      00034 -0 53400 7 00040        LXD DUP020,7             INITIALIZE INDEX REGISTERS TO 27
      00035  0 76200 0 00225        RDS SOURCE               READ 1-CS FROM SOURCE
      00036  0 70000 1 00507 DUP010 CPY RECORD+27,1
      00037  1 77777 1 00036        TXI DUP010,1,-1
      00040  0 00033 0 00000 DUP020 HTR 0,0,27               MACHINE ERROR
      00041  0 76600 0 00333        IOD                      EOR-DELAY
      00042 -0 76000 0 00012        RTT
      00043  0 00000 0 00030        HTR DUP000               RTT ERROR-- TRY AGAIN
      00044  0 76600 0 00221        WRS OBJECT               WRITE 1-CS ONTO OBJECT
      00045  0 70000 2 00507 DUP030 CPY RECORD+27,2
      00046  2 00001 2 00045        TIX DUP030,2,1
      00047  0 76600 0 00333        IOD
      00050 -0 76000 0 00012        RTT                      TURN OFF RTT TRIGGER
      00051  3 00000 0 00156 DUP031 TXH DUP170,0,0
      00052  0 76400 0 00221        BST OBJECT
      00053  0 76200 0 00221        RDS OBJECT               READ BACK 1-CS FROM OBJECT
      00054  0 70000 0 00453 DUP040 CPY DUMMY
      00055  0 02000 0 00060        TRA DUP050
A     00056  0 00000 0 00000        HTR
      00057  0 02000 0 00065        TRA DUP060               EOR
      00060  0 50000 4 00507 DUP050 CLA RECORD+27,4
      00061  0 34000 0 00453        CAS DUMMY
      00062  0 00000 0 00030        HTR DUP000               WORD COMP. FAILS-READING
      00063  1 77777 4 00054        TXI DUP040,4,-1
      00064  0 00000 0 00030        HTR DUP000               FROM OBJECT
      00065  3 00000 4 00321 DUP060 TXH DUP280,4,0           ERROR-INCOMPLETE OBJECT RECORD
      00066  0 76600 0 00333        IOD
      00067 -0 76000 0 00012        RTT
      00070  0 00000 0 00030        HTR DUP000               RTT ERROR READING BACK OBJECT 1-CS
      00071 -0 53400 7 00051 DUP070 LXD DUP031,7             INITIALIZE INDEX REG TO 0
T     00072 -0 75400 0 00000        PXD                      CLEAR AC
      00073  0 76200 0 00225 DUP071 RDS SOURCE               READ SOURCE  1ST/2ND FILE RECORD
      00074  0 70000 1 00454        CPY RECORD,1
      00075  1 77777 1 00100        TXI DUP090,1,-1
      00076  0 02000 0 00144 DUP080 TRA DUP160               EOF
A     00077  0 00000 0 00000        HTR                      MACHINE ERROR
      00100 -0 70000 1 00454 DUP090 CAD RECORD,1
      00101  1 77777 1 00100        TXI DUP090,1,-1
A     00102  0 00000 0 00000        HTR                      MACHINE ERROR
      00103  0 76000 0 00006        COM                      EOR
      00104  0 36100 0 00454        ACL RECORD
      00105  0 76000 0 00006        COM
      00106  0 10000 0 00110        TZE DUP100
      00107  0 00000 0 00322        HTR DUP290               CKSM FAILS READING SOURCE 1ST/2ND FILE
      00110  0 76600 0 00333 DUP100 IOD
      00111 -0 76000 0 00012        RTT
      00112  0 00000 0 00324        HTR DUP300               RTT ERROR-BST AND TRY AGAIN
```

```
        00113 -0 63400 1 00120          SXD DUP120,1
        00114 -0 63400 1 00137          SXD DUP150,1
        00115  0 76600 0 00221          WRS OBJECT          WRITE OBJECT 1ST/2ND FILE RECORD
        00116  0 70000 2 00454 DUP110   CPY RECORD,2
        00117  1 77777 2 00120          TXI DUP120,2,-1
        00120  3 00000 2 00116 DUP120   TXH DUP110,2,**
        00121  0 76600 0 00333 DUP121   IOD
        00122 -0 76000 0 00012          RTT                 TURN OFF RTT TRIGGER
ATD     00123  3 00000 0 00000          TXH
        00124  0 76400 0 00221          BST OBJECT
        00125  0 76200 0 00221          RDS OBJECT          READ BACK OBJECT 1ST/2ND FILE RECORD
        00126  0 70000 0 00453 DUP130   CPY DUMMY
        00127  0 02000 0 00132          TRA DUP140
A       00130  0 00000 0 00000          HTR                 MACHINE ERROR
        00131  0 02000 0 00137          TRA DUP150          EOR
        00132  0 50000 4 00454 DUP140   CLA RECORD,4
        00133  0 34000 0 00453          CAS DUMMY
        00134  0 00000 0 00326          HTR DUP310          COMP. ERROR ON 1ST/2ND FILE RECORD
        00135  1 77777 4 00126          TXI DUP130,4,-1
        00136  0 00000 0 00326          HTR DUP310          DITTO
        00137  3 00000 4 00330 DUP150   TXH DUP320,4,**     ERROR-INCOMPLETE OBJECT RECORD
        00140  0 76600 0 00333          IOD
        00141 -0 76000 0 00012          RTT
        00142  0 00000 0 00326          HTR DUP310          RTT ERROR-BST AND TRY AGAIN
        00143  0 02000 0 00071          TRA DUP070
        00144  0 76600 0 00333 DUP160   IOD
        00145 -0 76000 0 00012          RTT
        00146  0 00000 0 00336          HTR DUP340          RTT ERROR - BST TWICE ON SOURCE
        00147  0 77000 0 00221          WEF OBJECT          WRITE 1ST EOF
        00150  0 76600 0 00333          IOD
        00151 -0 76000 0 00012          RTT                 TURN OFF RTT TRIGGER
ATD     00152  3 00000 0 00000          TXH
        00153  0 50000 0 00051          CLA DUP031
        00154  0 62100 0 00076          STA DUP080
        00155  0 02000 0 00071          TRA DUP070
        00156  0 76600 0 00333 DUP170   IOD
        00157 -0 76000 0 00012          RTT
        00160  0 00000 0 00336          HTR DUP340          RTT ERROR- BST TWICE ON SOURCE
        00161  0 77000 0 00221          WEF OBJECT          WRITE 2ND EOF
        00162  0 76600 0 00333 DUP171   IOD
        00163 -0 76000 0 00012          RTT                 TURN OFF RTT TRIGGER
ATD     00164  3 00000 0 00000          TXH
        00165 -0 53400 7 00051 DUP180   LXD DUP031,7        INITIALIZE INDEX REG TO 0
T       00166 -0 75400 0 00000          PXD                 CLEAR AC
        00167  0 76200 0 00225 DUP181   RDS SOURCE          READ SOURCE 3RD FILE RECORD
        00170 -0 70000 1 00454          CAD RECORD,1
        00171  1 77777 1 00174          TXI DUP190,1,-1
        00172  0 02000 0 00242          TRA DUP270          EOF
A       00173  0 00000 0 00000          HTR                 MACHINE ERROR
        00174  0 70000 1 00454 DUP190   CPY RECORD,1        CPY CKSM INTO RECORD+1
        00175  1 77777 1 00176          TXI DUP200,1,-1
        00176 -0 70000 1 00454 DUP200   CAD RECORD,1
        00177  1 77777 1 00176          TXI DUP200,1,-1
A       00200  0 00000 0 00000          HTR                 MACHINE ERROR
```

```
        00201  0 76000 0 00006          COM                    EOR
        00202  0 36100 0 00455          ACL RECORD+1
        00203  0 76000 0 00006          COM
        00204  0 10000 0 00206          TZE DUP210
        00205  0 00000 0 00342          HTR DUP350             CKSM FAILS READING SOURCE 3RD FILE
        00206  0 76600 0 00333 DUP210   IOD
        00207 -0 76000 0 00012          RTT
        00210  0 00000 0 00342          HTR DUP350             RTT ERROR-BST
        00211 -0 63400 1 00216          SXD DUP230,1
        00212 -0 63400 1 00235          SXD DUP260,1
        00213  0 76600 0 00221          WRS OBJECT             WRITE OBJECT 3RD FILE RECORD
        00214  0 70000 2 00454 DUP220   CPY RECORD,2
        00215  1 77777 2 00216          TXI DUP230,2,-1
        00216  3 00000 2 00214 DUP230   TXH DUP220,2,**
        00217  0 76600 0 00333 DUP231   IOD
        00220 -0 76000 0 00012          RTT                    TURN OFF RTT TRIGGER
ATD     00221  3 00000 0 00000          TXH
        00222  0 76400 0 00221          BST OBJECT
        00223  0 76200 0 00221          RDS OBJECT             READ BACK  OBJECT 3RD FILE RECORD
        00224  0 70000 0 00453 DUP240   CPY DUMMY
        00225  0 02000 0 00230          TRA DUP250
A       00226  0 00000 0 00000          HTR                    MACHINE ERROR
        00227  0 02000 0 00235          TRA DUP260             EOR
        00230  0 50000 4 00454 DUP250   CLA RECORD,4
        00231  0 34000 0 00453          CAS DUMMY
        00232  0 00000 0 00344          HTR DUP360             COMP. ERROR ON 3RD FILE
        00233  1 77777 4 00224          TXI DUP240,4,-1
        00234  0 00000 0 00344          HTR DUP360             ERROR- INCOMPLETE OBJECT RECORD
D       00235  3 00000 4 00346 DUP260   TXH DUP370,4
        00236  0 76600 0 00333          IOD
        00237 -0 76000 0 00012          RTT
        00240  0 00000 0 00344          HTR DUP360             RTT ERROR-BST
        00241  0 02000 0 00165          TRA DUP180
        00242  0 76600 0 00333 DUP270   IOD
        00243 -0 76000 0 00012          RTT
        00244  0 00000 0 00352          HTR DUP390             RTT ERROR - BST TWICE
        00245  0 77000 0 00221          WEF OBJECT             WRITE 3RD FILE EOF
        00246 -0 53400 7 00051 FILE40   LXD DUP031,7           DUPLICATE FILE 4
T       00247 -0 75400 0 00000          PXD
        00250  0 76200 0 00225          RDS SOURCE             READ SOURCE FILE 4 RECORD
        00251  0 70000 1 00454 FILE41   CPY RECORD,1
        00252  1 77777 1 00251          TXI FILE41,1,-1
        00253  0 02000 0 00310          TRA FILE47             EOF
        00254  0 76600 0 00333          IOD                    EOR
        00255 -0 76000 0 00012          RTT
        00256  0 00000 0 00356          HTR FIL4E1             RTT ERROR - BST AND TRY AGAIN
        00257 -0 63400 1 00264          SXD FILE43,1
        00260 -0 63400 1 00303          SXD FILE46,1
        00261  0 76600 0 00221          WRS OBJECT             WRITE OBJECT 4TH FILE RECORD
        00262  0 70000 2 00454 FILE42   CPY RECORD,2
        00263  1 77777 2 00264          TXI FILE43,2,-1
        00264  3 00000 2 00262 FILE43   TXH FILE42,2,**
        00265  0 76600 0 00333 FILE50   IOD
        00266 -0 76000 0 00012          RTT                    TURN OFF RTT TRIGGER
```

```
ATD   00267  3 00000 0 00000          TXH
      00270  0 76400 0 00221          BST OBJECT
      00271  0 76200 0 00221          RDS OBJECT          READ BACK OBJECT 4TH FILE RECORD
      00272  0 70000 0 00453 FILE44   CPY DUMMY
      00273  0 02000 0 00276          TRA FILE45
A     00274  0 00000 0 00000          HTR                 MACHINE ERROR
      00275  0 02000 0 00303          TRA FILE46          EOR
      00276  0 50000 4 00454 FILE45   CLA RECORD,4
      00277  0 34000 0 00453          CAS DUMMY
      00300  0 00000 0 00360          HTR FIL4E2          COMP. ERROR ON 4TH FILE RECORD
      00301  1 77777 4 00272          TXI FILE44,4,-1
      00302  0 00000 0 00360          HTR FIL4E2          COMP. ERROR ON 4TH FILE RECORD
      00303  3 00000 4 00366 FILE46   TXH FIL4E4,4,**     ERROR - INCOMPLETE OBJECT RECORD
      00304  0 76600 0 00333          IOD
      00305 -0 76000 0 00012          RTT
      00306  0 00000 0 00360          HTR FIL4E2          RTT ERROR - BST AND TRY AGAIN
      00307  0 02000 0 00246          TRA FILE40
      00310  0 76600 0 00333 FILE47   IOD
      00311 -0 76000 0 00012          RTT
      00312  0 00000 0 00362          HTR FIL4E3          RTT ERROR - BST TWICE ON SOURCE
      00313  0 77000 0 00221          WEF OBJECT          WRITE 4TH FILE EOF
      00314  0 77200 0 00225          REW SOURCE
      00315  0 77200 0 00221          REW OBJECT
      00316 -0 76000 0 00012          RTT
ATD   00317  3 00000 0 00000          TXH
A     00320  0 00000 0 00000          HTR                 FINAL STOP.
      00321  0 00000 0 00030 DUP280   HTR DUP000
      00322 -0 76000 0 00012 DUP290   RTT
ATD   00323  3 00000 0 00000          TXH
      00324  0 76400 0 00225 DUP300   BST SOURCE
      00325  0 02000 0 00071          TRA DUP070
      00326 -0 53400 4 00051 DUP310   LXD DUP031,4
      00327  0 02000 0 00121          TRA DUP121
      00330  0 00000 0 00331 DUP320   HTR DUP330
      00331 -0 76000 0 00012 DUP330   RTT
ATD   00332  3 00000 0 00000          TXH
      00333  0 76400 0 00225          BST SOURCE
      00334  0 76400 0 00221          BST OBJECT
      00335  0 02000 0 00071          TRA DUP070
      00336  0 76400 0 00225 DUP340   BST SOURCE
      00337  0 76400 0 00225          BST SOURCE
      00340  0 76200 0 00225          RDS SOURCE
      00341  0 02000 0 00073          TRA DUP071
      00342  0 76400 0 00225 DUP350   BST SOURCE
      00343  0 02000 0 00162          TRA DUP171
      00344 -0 53400 4 00051 DUP360   LXD DUP031,4
      00345  0 02000 0 00217          TRA DUP231
      00346  0 00000 0 00347 DUP370   HTR DUP380
      00347  0 76400 0 00225 DUP380   BST SOURCE
      00350  0 76400 0 00221          BST OBJECT
      00351  0 02000 0 00162          TRA DUP171
      00352  0 76400 0 00225 DUP390   BST SOURCE
      00353  0 76400 0 00225          BST SOURCE
      00354  0 76200 0 00225          RDS SOURCE
```

```
      00355  0 02000 0 00167          TRA DUP181
      00356  0 76400 0 00225 FIL4E1 BST SOURCE
      00357  0 02000 0 00246          TRA FILE40
      00360 -0 53400 4 00051 FIL4E2 LXD DUP031,4
      00361  0 02000 0 00265          TRA FILE50
      00362  0 76400 0 00225 FIL4E3 BST SOURCE
      00363  0 76400 0 00225          BST SOURCE
      00364  0 76200 0 00225          RDS SOURCE
      00365  0 02000 0 00250          TRA FILE40+2
      00366  0 00000 0 00367 FIL4E4 HTR FIL4E5
      00367 -0 76000 0 00012 FIL4E5 RTT
ATD   00370  3 00000 0 00000          TXH
      00371  0 76400 0 00225          BST SOURCE
      00372  0 76400 0 00221          BST OBJECT
      00373  0 02000 0 00246          TRA FILE40
                       00225 SOURCE SYN 149
                       00221 OBJECT SYN 145
                       00454 RECORD SYN 300
                       00453 DUMMY  SYN 299
                       00030        END 24
```

```
1          REM BINARY AND SYMBOLIC SUBROUTINE LOADER FOR 704 FORTRAN II
1                                      BINARY AND SYMBOLIC SUBROUTINE LOADER FOR 704 FORTRAN II
                         77477  LIST   SYN 32575
                         77452  TABL   SYN 32554
                         77453 TOOMCH  SYN LIST-20
                         00000         ORG 0
     00000  0 53400 1 00000  VR        LXA 0,1
     00001  0 70000 1 00002  SM        CPY 2,1
     00002  1 77777 1 00001            TXI SM,1,-1
     00003  0 00000 1 00000  TG        HTR 0,1
     00004 -0 76000 0 00007            LTM
     00005  0 76200 0 00321 X          RCD
     00006  0 70000 1 77452 RB         CPY LIST-21,1
     00007  1 77777 1 00006  LB        TXI RB,1,-1
     00010  0 00000 0 00000 R
     00011  3 77470 1 00005            TXH X,1,-200
     00012 -0 53400 1 77715            LXD M,1
     00013 -0 63400 1 77715            SXD M,1
     00014  0 60000 0 77453            STZ LIST-20
     00015  0 76200 0 00321  READ      RCD
     00016  0 70000 0 00000            CPY VR
     00017  0 02000 0 77500            TRA TEST
     00020  0 00000 0 00015            HTR READ
     00021  0 60000 2 00000  END       STZ 0,2
     00022  2 00001 2 00021            TIX END,2,1
     00023  0 14000 0 00024            TOV PROG
A    00024  0 02000 0 00000  PROG      TRA
     00025  0 00000 0 00000 T
     00026  0 00000 0 00030  S             24
     00027 +000000077777     ADDRS     OCT 000000077777
                         77500         ORG LIST+1
     77500  0 50000 0 00000  TEST      CLA VR
     77501  0 70000 0 00001            CPY SM
     77502 -0 12000 0 77626            TMI PASS1          PREFIX IS  4 IF PROGRAM CARD
     77503  0 10000 0 00015            TZE READ
     77504  0 60000 0 77777            STZ PRTST          SIGNAL END LOADING SEQUENTIAL PROG. CARDS
     77505 -0 53400 1 00000            LXD VR,1
     77506 -3 00037 1 77516            TXL REG,1,31
     77507  3 00040 1 00000            TXH 0,1,32
     77510  0 62100 0 00025            STA T
     77511  0 40000 0 00026            ADD S
     77512  0 62100 0 00026            STA S
     77513  0 50000 0 00001            CLA SM
     77514  0 62100 0 77520            STA U
     77515  0 02000 0 00015            TRA READ
     77516  0 62100 0 00010  REG       STA R
     77517  0 77100 0 00017            ARS 15
     77520 -0 73400 4 00000  U         PDX 0,4
     77521 -3 00001 4 77524            TXL NR,4,1
     77522  0 07400 2 77611            TSX LT,2
     77523  0 62100 0 00010            STA R
     77524 -0 50000 0 00000  NR        CAL VR
     77525  0 77100 0 00022            ARS 18
     77526  0 40000 0 00010            ADD R
```

```
      77527  0 62100 0 77531          STA TR
      77530 -0 53400 2 00000          LXD VR,2
D     77531 -3 00000 2 00000   TR     TXL 0,2
      77532  0 62100 0 77577          STA TA
      77533  0 62100 0 77601          STA SA
      77534  0 62100 0 77572          STA SD
      77535  0 62100 0 77566          STA TD
      77536  0 62100 0 77543   B      STA CP
      77537 -0 50000 0 00000          CAL VR
      77540 -3 00001 4 77543          TXL CP,4,1
      77541 -0 70000 0 00007          CAD LB
      77542 -0 70000 0 00006          CAD RB
      77543 -0 70000 2 00000   CP     CAD 0,2
      77544  2 00001 2 77543          TIX CP,2,1
      77545 -3 00000 4 77551          TXL CT,4,0
      77546 -3 00001 4 00015          TXL READ,4,1
      77547 -3 00002 4 77551          TXL CT,4,2
      77550 -3 00003 4 77561          TXL RL,4,3
      77551  0 60200 0 00000   CT     SLW VR
      77552  0 50000 0 00001          CLA SM
      77553  0 10000 0 77557          TZE RT
      77554  0 40200 0 00000          SUB VR
      77555  0 10000 0 77557          TZE RT
      77556  0 42000 0 00000          HPR
      77557 -3 00001 4 00015   RT     TXL READ,4,1
      77560  3 00003 4 77642          TXH SR,4,3
      77561  0 56000 0 00006   RL     LDQ RB
      77562  0 50000 0 00007   DB     CLA LB
      77563 -0 76300 0 00001          LGL 1
      77564  0 60200 0 00007          SLW LB
      77565  0 12000 0 77573          TPL AB
      77566  0 50000 1 00000   TD     CLA 0,1
      77567  0 77100 0 00022          ARS 18
      77570  0 07400 2 77604          TSX CB,2
      77571  0 76700 0 00022          ALS 18
      77572  0 62200 1 00000   SD     STD 0,1
      77573  0 50000 0 00007   AB     CLA LB
      77574 -0 76300 0 00001          LGL 1
      77575  0 60200 0 00007          SLW LB
      77576  0 12000 0 77602          TPL TV
      77577  0 50000 1 00000   TA     CLA 0,1
      77600  0 07400 2 77604          TSX CB,2
      77601  0 62100 1 00000   SA     STA 0,1
      77602  2 00001 1 77562   TV     TIX DB,1,1
      77603  0 02000 0 00015          TRA READ
      77604  0 62100 0 00010   CB     STA R
      77605  0 50000 0 00007          CLA LB
      77606 -0 76300 0 00001          LGL 1
      77607  0 60200 0 00007          SLW LB
      77610 -0 12000 0 77612          TMI LTA      WILL ADDRESS BE MISLEADING
      77611  0 76000 0 00141   LT     SLN 1        NO, CODE IS 10, TURN ON SENSE LIGHT
      77612  0 50200 0 00010   LTA    CLS R        DOES THIS ADDRESS REFER TO PROGRAM OR DATA
      77613  0 40000 0 00025          ADD T
      77614  0 12000 0 77622          TPL ADDS
```

```
77615 -0 76000 0 00141          SLT 1        APPEARS TO BE DATA, BUT WHAT WAS CODE
77616  0 02000 0 77624          TRA PROGRM   ACTUALLY PROGRAM, ADD CURRENT INCREMENT
77617  0 50000 0 00010  DATA    CLA R        IS DATA REFERENCE, DECREMENT
77620  0 40100 0 77520          ADM U
77621  0 02000 2 00001          TRA 1,2
77622 -0 76000 0 00141  ADDS    SLT 1        APPEARS TO BE PROGRAM, WHAT WAS CODE
77623  0 02000 0 77617          TRA DATA     ACTUALLY IS DATA REFERENCE, DECREMENT
77624  0 40200 0 00026 PROGRM   SUB S
77625  0 02000 2 00001          TRA 1,2
77626 -0 73400 2 00000  PASS1   PDX 0,2                 - WORD COUNT IN DEC. OF AC
77627 -3 00000 2 77770          TXL PASS2,2,0           WORD COUNT IS 0, GO TO 2ND PASS
77630  0 40000 0 77771          ADD TAG                 - LENGTH OF SYMB. TABLE IN DEC.
77631  0 40000 0 77640          ADD DECTWO              TO ALLOW SPACE IN TABLE FOR LOC. + LENGTH
77632  0 62200 0 77713          STD STOP                STORE NEW LENGTH IN INST. TO STOP RELOC.
77633  0 40200 0 77715          SUB M                   ADDRS. TABLE + 1 - WORD COUNT + LENGTH TAB
77634  0 62200 0 77667          STD OVLP                STORE LOWEST ADDRS. FOUND, TO COMPARE TO S
77635  0 36100 0 00000          ACL VR
77636  0 40200 0 77640          SUB DECTWO
77637  0 77100 0 00022          ARS 18
77640  2 00002 2 77641 DECTWO   TIX TXB,2,2
77641  0 07400 4 77536 TXB      TSX B,4                FORCE IR 4 FOR CHECK SUM, BUT NOT RELOCATE
77642 -0 53400 1 77771  SR      LXD TAG,1               LOAD OLD TABLE LENGTH
77643  0 50000 0 77777          CLA PRTST               HAS ANOTHER PROGRAM CARD PRECEEDED
77644  0 10000 0 77652          TZE ONLY1               THIS ONE
77645  0 50000 0 00007          CLA LB                  YES, LB HAS NAME, RB HAS
77646  0 60100 1 77451          STO TABL-1,1            ENTRY POINT
77647  0 50000 0 00006          CLA RB
77650  0 60100 1 77452          STO TABL,1
77651  2 00002 1 77704          TIX NCARDS,1,2          SKIP, COMPARISONS ALREADY DONE
77652  0 50000 0 00026  ONLY1   CLA S                   STORE LOCATION OF TRA VECTOR IN
77653  0 60000 1 77451          STZ TABL-1,1
77654  0 60100 1 77452          STO TABL,1             SYMBOL TABLE,  S  HAS ADDRESS ONLY
77655 -0 53400 4 00007          LXD LB,4
77656  3 00000 4 77661          TXH CLAS,4,0
77657  0 50000 0 77776          CLA BTMASK
77660  0 60100 1 77451          STO TABL-1,1
77661  0 50000 0 00007  CLAS    CLA LB                  STORE LENGTH OF VECTOR IN
77662  0 62200 1 77451          STD TABL-1,1            SYMBOL TABLE
77663  0 62100 0 00025          STA T                   STORE LENGTH OF ROUTINE IN T
77664  0 40000 0 00026          ADD S                   UPDATE S
77665  0 62100 0 00026          STA S
77666  0 73400 2 00000          PAX 0,2                 COMPARE S TO LOWEST ADDRESS OF TABLE
77667  3 00000 2 00003 OVLP     TXH TG,2,0              TRA TG, TABLE + INST. OVERLAP
77670  0 50000 0 77520          CLA U                   FIND LOWEST ADDRESS DATA WILL USE
77671  0 40200 0 00006          SUB RB
77672  0 73400 4 00000          PAX 0,4
77673 -0 75400 4 00000          PXD 0,4
77674  0 77100 0 00022          ARS 18
77675  0 10000 0 77677          TZE ACLA
77676  0 34000 0 00027          CAS ADDRS
77677  0 50000 0 00027 ACLA     CLA ADDRS
77700  0 76100 0 00000          NOP
77701  0 60100 0 00027          STO ADDRS
77702  0 40200 0 00026          SUB S
```

```
77703 -0 12000 0 77453          TMI TOOMCH          TRA TOOMCH, DATA + INSTR. WILL OVERLAP
77704 -0 63400 2 77777 NCARDS   SXD PRTST,2         SIGNAL TO SEQUENTIAL PROGRAM CARDS
77705  0 60000 0 00007          STZ LB              MAY COMPLEMENT IF 1 IS FOUND
77706  1 00002 1 77707          TXI LTT,1,2         TO GET PAST LOC. + LENGTH OF VECTOR
77707  0 50000 1 77452 LTT      CLA TABL,1
77710  0 07400 2 77604          TSX CB,2            RELOCATE ENTRY POINTS IN TABLE
77711  0 62100 1 77452          STA TABL,1
77712  1 00002 1 77713          TXI STOP,1,2
77713 -3 00000 1 77707  STOP    TXL LTT,1,0
77714 -0 63400 1 77771          SXD TAG,1           SAVE LENGTH OF TABLE
77715 -2 77452 0 00015 M        TNX READ,0,TABL
77716 -0 50000 2 77453  VEC     CAL TABL+1,2
77717 -0 10000 0 77723          TNZ G3
77720  0 50000 2 77454          CLA TABL+2,2
77721  0 62100 0 00024          STA PROG
77722  0 02000 0 77770          TRA PASS2
77723 -0 32000 0 77776  G3      ANA BTMASK
77724 -0 10000 0 77770          TNZ PASS2
77725  0 50000 2 77453          CLA TABL+1,2
77726 -0 73400 4 00000  OLDU    PDX 0,4             LENGTH OF VECTOR
77727  0 77100 0 00022          ARS 18
77730  0 40000 2 77454          ADD TABL+2,2        PLUS LOACTION OF VECTOR
77731  0 62100 0 77736          STA A
77732  0 62100 0 77764          STA AA
77733  0 62100 0 77766          STA AAA
77734  0 62100 0 77741          STA ABB
77735 -0 53400 1 77771  NXTVC   LXD TAG,1           LENGTH OF SYMBOL TABLE
77736 -0 50000 4 00000 A        CAL 0,4
77737 -0 32000 0 77776          ANA BTMASK
77740  0 10000 0 77767          TZE TIXVEC
77741  0 50000 4 00000  ABB     CLA 0,4             LOOK FOR FIRST NAME IN TRA VECTOR
77742  0 34000 1 77453 NXTNAM   CAS TABL+1,1        IN SYMBOL TABLE
77743  0 02100 0 77745  TTR     TTR G4
77744  0 02000 0 77763          TRA FIX
77745  2 00002 1 77742  G4      TIX NXTNAM,1,2      LOOK AT NEXT NAME IN TABLE
77746  0 60100 0 00006 SAVNAM   STO RB
77747 -0 53400 1 77753          LXD TWTY,1
77750  0 50000 1 77477  CMPR    CLA LIST,1
77751  0 10000 0 77757          TZE STONAM          STORE IN FIRST EMPTY CELL
77752  0 34000 0 00006          CAS RB              IF NEW NAME
77753 -2 00024 0 77755  TWTY    TNX G2,0,20
77754  0 02000 0 77767          TRA TIXVEC          ALREADY IN TABLE, IGNORE
77755  2 00001 1 77750  G2      TIX CMPR,1,1
77756  0 00000 0 77770          HTR PASS2           MORE THAN 20 ENTRIES TO BE SEARCHED FOR
77757  0 50000 0 00006 STONAM   CLA RB
77760  0 60100 1 77477          STO LIST,1
77761  0 60000 1 77500          STZ LIST+1,1
77762  0 02000 0 77767          TRA TIXVEC
77763  0 50000 0 77743  FIX     CLA TTR
77764  0 60100 4 00000  AA      STO 0,4
77765  0 50000 1 77454          CLA TABL+2,1
77766  0 62100 4 00000  AAA     STA 0,4
77767  2 00001 4 77735 TIXVEC   TIX NXTVC,4,1       GET NEXT NAME IN VECTOR
77770  1 00002 2 77771  PASS2   TXI TAG,2,2         IR 2 IS 0 AT BEGINING
```

```
77771 -3 00000 2 77716  TAG    TXL VEC,2,0
77772  0 50000 0 77453         CLA TABL+1          0 IF ALL NAMES WERE FOUND
77773 -0 10000 0 77775         TNZ SEARCH
77774  1 00324 2 00021         TXI END,2,212       CLEARS SYMBOL TABLE, LIST + LOADER
77775  0 00000 0 00014 SEARCH HTR READ-1
77776 -300000000000    BTMASK OCT 700000000000
77777  0 00000 0 00000  PRTST
A                      00000         END
```

```
1          FUL
1                        01303 LOCREC SYN 707
                         00000        ORG 0
00000   0 53400 1 00000 A       LXA 0,1          BOOTSTRAP FOR FIRST CARD
00001   0 70000 1 00002 B       CPY 2,1
00002   1 77777 1 00001 C       TXI 1,1,-1
00003   0 00001 0 00000 ONEDEC  HTR 0,0,1
00004  -3 77540 1 00012 RD      TXL WEF1,1,-160
00005   0 76200 0 00321         RCD
00006   0 70000 1 05642 CPLODR  CPY 3000-22,1    COPY REST OF EDITOR INTO UPPER MEMORY
00007   1 77777 1 00006         TXI CPLODR,1,-1
00010   0 00000 0 00004         HTR RD
00011   0 02000 0 00004         TRA RD
00012   0 77000 0 00201 WEF1    WEF 1
00013  -0 76000 0 00012         RTT              TURN OFF INDICATOR
00014   0 76100 0 00000         NOP
00015   0 02000 0 05670         TRA RCD
00016   0 00000 0 00001 ONE     HTR 1
00017   0 00000 0 00036 REC2    HTR 30
00020   0 00000 0 01303 ERREC   HTR LOCREC
00021   0 00000 0 00001 RDREC   HTR 1            REC NUMBER IN DIAG FILE, 1ST WORD OF REC
00022   0 00006 0 00000 RDWDC   HTR 0,0,6        WORD COUNT OF RECORD READ FROM TAPE 5
00023   0 00000 0 00000 REC     HTR 0            REC NUMBER FROM NEW REC CARD
00024   0 00000 0 00000 ERAS    HTR 0
00025   0 00006 0 00000 WDC     HTR 0,0,6
00026   0 00000 0 00006 SIX     HTR 6
00027   0 00000 0 00000 TPCONT  HTR 0
                         05670        ORG 3000
05670   0 76200 0 00321 RCD     RCD
05671   0 70000 0 00000         CPY A
05672   0 02000 0 05674         TRA TEST
05673   0 00000 0 05670         HTR RCD
05674   0 70000 0 00001 TEST    CPY B
05675   0 50000 0 00000         CLA A
05676  -0 12000 0 05715         TMI CONCRD       MINUS IF NEW RECORD CARD
05677   0 62100 0 05705         STA COPY         SAVE ADDRESS OF FIRST INSTRUCTION
05700   0 77100 0 00022         ARS 18
05701   0 73400 4 00000         PAX 0,4          WORD COUNT INTO IR 4
05702   0 40200 0 05705         SUB COPY         ADD FIRST ADDRESS
05703   0 62100 0 05705         STA COPY         STORE BASE ADDRESS IN COPY LOOP
05704  -0 50000 0 00000         CAL A
05705  -0 70000 4 00000 COPY    CAD 0,4
05706   2 00001 4 05705         TIX COPY,4,1
05707   0 60200 0 00002         SLW C
05710   0 50000 0 00001         CLA B
05711   0 10000 0 05670         TZE RCD
05712   0 40200 0 00002         SUB C
05713   0 10000 0 05670         TZE RCD
05714   0 00000 0 05670         HTR RCD          IGNORE CHECK SUM
05715   0 70000 0 00001 CONCRD  CPY B            8L OVER 9R, REST OF CARD IS IGNORED
05716   0 02000 0 06101         TRA END2         WILL BE REPLACED BY NOP
05717   0 50000 0 00023         CLA REC          INIT. 0, OR HAS NUMBER OF DIAG. REC. FROM
05720   0 10000 0 05741         TZE NX           LAST NEW REC. CARD, REMAINS 0 IF WEF ONLY
05721   0 50000 0 00000         CLA A            IS NEW CONTROL CARD WEF,  9L IS -0
```

```
05722 -0 10000 0 05741          TNZ NX
05723  0 02000 0 05733          TRA WTREC1      WRITE CURRENT BUFFER
05724  0 07400 4 05777 ALL      TSX READ,4      YES, END OF CHANGES, HAS ALL OF MASTER
05725  0 50000 0 00021          CLA RDREC       BEEN WRITTEN, RDREC WILL BE -
05726 -0 12000 0 05735          TMI END
05727  0 50000 0 00022          CLA RDWDC       NO, READ IN NEXT RECORD FROM MASTER
05730  0 62200 0 00025          STD WDC
05731  0 50000 0 06013          CLA RDLOOP
05732  0 62100 0 06051          STA WTLOOP
05733  0 07400 4 06046 WTREC1   TSX WRITE,4     WRITE ON NEW TAPE
05734  0 02000 0 05724          TRA ALL         AND GET NEXT FROM MASTER
05735  0 77000 0 00201 END      WEF 1
05736  0 77200 0 00201          REW 1
05737  0 60000 0 07777          STZ 4095
05740  0 02000 0 07777          TRA 4095
05741  0 50000 0 00000 NX       CLA A           IF ONLY THIS PROGRAM AND WEF CARD
05742  0 10000 0 05733          TZE WTREC1      WRITE ALL OF MASTER WITHOUT CHANGES
05743  0 62100 0 00023          STA REC         OTHERWISE SAVE NEW RECORD NUMBER
05744  0 50000 0 00021 NX1      CLA RDREC       GET NUMBER OF REC LEFT IN CORES BY READ
05745 -0 12000 0 05761          TMI NX4         MINUS IF NO MORE RECORDS ON MASTER
05746  0 40200 0 00023          SUB REC         IS RECORD IN CORE THE ONE CALLED FOR
05747  0 12000 0 05757          TPL NX3
05750  0 50000 0 00022          CLA RDWDC       NOT YET, WRITE CORE RECORD ON NEW TAPE
05751  0 62200 0 00025          STD WDC
05752  0 50000 0 06013          CLA RDLOOP
05753  0 62100 0 06051          STA WTLOOP
05754  0 07400 4 06046          TSX WRITE,4
05755  0 07400 4 05777          TSX READ,4      BRING NEXT RECORD FROM MASTER AND
05756  0 02000 0 05744          TRA NX1         TEST AGAINST NEW RECORD CARD
05757  0 10000 0 05761 NX3      TZE NX4         IF CORRECT REC, SET WORD COUNT ETC.
05760  0 76400 0 00205          BST 5           READ 1 TOO MANY, SOME REC DELETED
05761  0 50000 0 00001 NX4      CLA B
05762  0 40000 0 00016          ADD ONE         ADD 1 TO LAST ADDRESS FOR WRITE LOOP
05763  0 62100 0 06051          STA WTLOOP
05764  0 62100 0 00024          STA ERAS
05765  0 77100 0 00022          ARS 18
05766  0 40200 0 00024          SUB ERAS        IF LAST ADDRESS NOT GREATER THAN
05767  0 10000 0 05774          TZE DELETE      FIRST ADDRESS DELETE THIS REC WHEN COPYING
05770  0 12000 0 05774          TPL DELETE      MASTER
05771  0 76700 0 00022          ALS 18
05772  0 62200 0 00025          STD WDC
05773  0 02000 0 05670          TRA RCD
05774  0 60000 0 00022 DELETE   STZ RDWDC
05775  0 60000 0 00025          STZ WDC
05776  0 02000 0 05670          TRA RCD
05777  0 50000 0 00021 READ     CLA RDREC
06000 -0 12000 0 06033          TMI OUT         HAS END OF FILE BEEN REACHED
06001  0 40200 0 00016          SUB ONE         IF 1ST RECORD STILL IN CORE, SET
06002 -0 10000 0 06005          TNZ RD2         ADDRESS TO READ IN 2ND RECORD
06003  0 50000 0 00017          CLA REC2
06004  0 02000 0 06006          TRA RD3
06005  0 50000 0 00020 RD2      CLA ERREC       3RD, 4TH ETC, ADDRESS IS LOCREC IN REC 2
06006  0 62100 0 06013 RD3      STA RDLOOP
06007  0 62100 0 06031          STA SETREC
```

```
06010  0 60000 0 00027          STZ TPCONT
06011 -0 53400 2 00016 RDAGIN   LXD ONE,2          IE., ZERO
06012  0 76200 0 00225          RTB 5
06013  0 70000 2 00037 RDLOOP   CPY 31,2
06014  1 77777 2 06013          TXI RDLOOP,2,-1
06015  0 02000 0 06034          TRA SETEOF
06016  0 76600 0 00333          IOD
06017 -0 76000 0 00012          RTT
06020  0 02000 0 06037          TRA BSTP5
06021 -0 75400 2 00000 FXWDC    PXD 0,2
06022  0 76000 0 00006          COM
06023  0 40000 0 00003          ADD ONEDEC          RECOMPLIMENT WORD COUNT
06024  0 62200 0 00022          STD RDWDC           AND FIND BASE ADDRESS
06025  0 77100 0 00022          ARS 18
06026  0 76000 0 00003          SSP
06027  0 40000 0 06013          ADD RDLOOP          ADD WORD COUNT TO FIRST ADDRESS
06030  0 62100 0 06013          STA RDLOOP
06031  0 50000 0 00000 SETREC   CLA 0               FIRST WORD OF RECORD HAS RECORD NUMBER
06032  0 62100 0 00021          STA RDREC
06033  0 02000 4 00001 OUT      TRA 1,4
06034 -0 76000 0 00003 SETEOF   SSM                 SET RDREC - IF END OF MASTER FILE
06035  0 60100 0 00021          STO RDREC
06036  0 02000 4 00001          TRA 1,4
06037 -0 53400 1 00027 BSTP5    LXD TPCONT,1
06040 -3 00017 1 06042          TXL TRABST,1,15
06041  0 00000 0 06021          HTR FXWDC           PRESS START TO ACCEPT
06042  0 76400 0 00205 TRABST   BST 5
06043  1 00001 1 06044          TXI MM,1,1
06044 -0 63400 1 00027 MM       SXD TPCONT,1
06045  0 02000 0 06011          TRA RDAGIN
06046 -0 53400 2 00025 WRITE    LXD WDC,2           WORD COUNT ZERO TO DELETE RECORD
06047 -3 00000 2 06053          TXL WTOUT,2,0
06050  0 76600 0 00221          WTB 1
06051  0 70000 2 00037 WTLOOP   CPY 31,2
06052  2 00001 2 06051          TIX WTLOOP,2,1
06053  0 02000 4 00001 WTOUT    TRA 1,4
06054  0 76200 0 00225 ISDIAG   RTB 5               SPACE OVER LIBRARY
06055  0 70000 0 06101          CPY RTB1+1
06056  0 02000 0 06054          TRA ISDIAG
06057  0 76200 0 00225          RTB 5
06060  0 53400 2 00026          LXA SIX,2           IF MASTER FILE DOES NOT HAVE DIAG.,
06061  0 70000 2 00037 ISCP     CPY 31,2            SET READ TO IGNORE, OTHERWISE
06062  2 00001 2 06061          TIX ISCP,2,1        FIRST RECORD WILL BE IN CORES
06063  0 76100 0 00000 NOP      NOP
06064  0 50000 0 00031          CLA 25
06065  0 40200 0 06077          SUB TEST1
06066 -0 10000 0 06072          TNZ TST1
06067  0 50000 0 00032          CLA 26
06070  0 40200 0 06100          SUB RTB1
06071  0 10000 0 06074          TZE TST2
06072 -0 76000 0 00003 TST1     SSM
06073  0 60100 0 00021          STO RDREC
06074  0 50000 0 06063 TST2     CLA NOP
06075  0 60100 0 05716          STO CONCRD+1
```

```
        06076  0 02000 0 05717          TRA CONCRD+2
TD      06077  3 00000 0 00001 TEST1    TXH 1
        06100  0 76200 0 00221 RTB1     RTB 1
        06101  0 76200 0 00225 END2     RTB 5
        06102  0 02000 0 06054          TRA ISDIAG
A                       00000           END
```

SPACE OVER END FILE GAP AT END FILE 2

```
1          REM EXAMPLE OF DIAGNOSTIC CALLER FOR 704 FORTRAN II
1                                   EXAMPLE OF DIAGNOSTIC CALLER FOR 704 FORTRAN II

                                    RECNBR IS SYNONYMOUS WITH THE NUMBER OF THE RECORD TO WHICH
                                    THE DIAGNOSTIC CALLER PERTAINS. REC*** IS THE FORTRAN RECORD
                                    NUMBER ASSIGNED TO THE DIAGNOSTIC CALLER.
                                    BEGIN IS SYNONYMOUS WITH THE LOAD ADDRESS OF THE DIAGNOSTIC
                                    CALLER. BEG**** HAS THE SAME VALUE AS BEGIN.

                    00000 RECNBR SYN ***                                                    REC  ***
                    00000 BEGIN  SYN ****                                                   BEG ****
                    00000        ORG 0                  FORCE NEW MASTER RECORD             MR 1
00000  0 00000 0 00000        HTR BEGIN,0,BEGIN      CARD FOR EDITOR, NEEDS              MR 2
00001  0 00000 0 00021        HTR STOP               9 ROW, COL. 3 PUNCH                 MR 3
                    00000        ORG BEGIN              CALL DIAG FROM FILE *               CD1  1
00000 -0 63400 2 00000        SXD 0,2                                                    CD1  2
00001 -0 53400 1 00014        LXD MEM,1                                                  CD1  3
00002 -0 53400 2 00012        LXD FILTST,2           * FILES TO BE SPACED OVER           CD1  4
00003  0 76600 0 00304        WDR 4                  0 TO 2047 WRITTEN ON DRUM 4         CD1  5
00004  0 70000 1 04000 COPY   CPY 2048,1                                                  CD1  6
00005  2 00001 1 00004        TIX COPY,1,1           NEXT TIME LOOP WILL COPY INTO 25    CD1  7
00006  1 03746 1 00010        TXI A,1,2022           UNTIL END OF RECORD SKIP            CD1  8
00007  0 02000 0 00032        TRA 26                 IGNORE RECORD NUMBER                CD1  9
00010  0 76200 0 00221 A      RTB 1                                                      CD1 10
00011  0 70000 0 00000        CPY BEGIN              SPACE OVER RECORDS IN THIS FILE     CD1 11
00012 -2 00003 0 00010 FILTST TNX A,0,3                                                  CD1 12
00013  0 02000 0 00015        TRA B                  HAVE ALL 3 FILES BEEN SPACED OVER   CD1 13
00014  0 04000 0 00000 MEM    HTR RECNBR,0,2048                                          CD1 14
00015  2 00001 2 00010 B      TIX A,2,1              NO, GO BACK TO A                    CD1 15
00016  0 50000 0 00014        CLA MEM                                                    CD1 16
00017  0 62100 0 00002        STA 2                                                      CD1 17
00020  0 76200 0 00221        RTB 1                  YES, READ IN MAIN DIAGNOSTIC        CD1 18
00021  0 02000 0 00004 STOP   TRA COPY                                                   CD1 19
A                   00000        END                                                    CD1 20
```

```
1            ORG 1                    FORCE NEW RECORD
1                          00001        ORG 1                 FORCE NEW RECORD
       00001  0 00031 0 00036           HTR X-1,0,25          CARD FOR DE
                           00031        ORG 25
 TD    00031  3 00000 0 00001           TXH 1                 READ IN REST OF DIAGNOSTIC
       00032  0 76200 0 00221           RTB 1                 READ INTO 30, TABLE SEARCH AND ALL
       00033 -0 53400 1 00036           LXD ZERO,1            CONVERTING + PRINT ETC, ROUTINES
       00034  0 70000 1 00036 CP        CPY 30,1
       00035  1 77777 1 00034           TXI CP,1,-1           END RECORD SKIP, EXIT TO 31
       00036  0 00000 0 00000 ZERO      HTR 0                 RECORD NUMBER OF NEXT COPIED HERE
       00037  0 00000 0 00000 X
 A                         00000        END
```

```
1            ORG 2                    FORCE NEW RECORD
1                        00002          ORG 2                  FORCE NEW RECORD
      00002   0 00036 0 03630          HTR XZY-1,0,30         CARD FOR DE
                        00036          ORG 30
 TD   00036   3 00000 0 00002          TXH 2                  MAIN RECORD
                        77777 LIST     SYN 32767
      00037   0 53400 1 01227          LXA ADDMSK,1           FIND NUMBER TO SUBTRACT FROM TSX
      00040  -0 75400 1 00000          PXD 0,1                TO GET ORIGINAL LOCATION
      00041   0 40000 0 01233          ADD DECONE             THIS WILL BE USED TO RE-COMPLIMENT ANY
      00042   0 60100 0 01234          STO PREFX1             OF THE TSX S TO THE DIAGNOSTIC
      00043  -0 75400 4 00000          PXD 0,4                IR 4 HAS BEEN SET BY TSX
      00044   0 40200 0 01234          SUB PREFX1
      00045   0 62200 0 01235          STD ERWORD
      00046   0 76600 0 00361          WPR
      00047   0 76000 0 00367          SPR 7                  TEST FOR SAP BOARD
      00050   0 07400 4 00740          TSX PRINT,4            PRINT TITLE
      00051   0 00172 0 00155          HTR PR1,0,PR1+13
      00052   0 76600 0 00361          WPR
      00053   0 76600 0 00361          WPR
      00054   0 76600 0 00361          WPR
      00055   0 76600 0 00361          WPR
      00056   0 76100 0 00000          NOP
      00057   0 76100 0 00000          NOP
      00060   0 50000 0 00002          CLA 2                  LOC. 2 HAS NUMBER OF FORTRAN RECORD
      00061  -0 32000 0 01227          ANA ADDMSK             PRECEDING THE CALL IN OF THE DIAG.
      00062   0 60100 0 01236          STO RECORD
      00063   0 40200 0 00220          SUB TW13               IF NON-ARITHMETIC HAS CALLED DIAG
      00064  -0 10000 0 00070          TNZ NOTNA              PRINT OTHER HEADER
      00065   0 07400 4 00740          TSX PRINT,4
      00066   0 00220 0 00205          HTR ISNONA,0,ISNONA+11
      00067   0 02000 0 00117          TRA SEARCH-1
      00070   0 50000 0 01236 NOTNA    CLA RECORD
      00071   0 07400 4 00676          TSX BINDEC,4           CONVERT TO BCD + LEFT ADJUST WORD
      00072   0 07400 4 00602          TSX LAJUST,4
      00073   0 60200 0 00204          SLW FOREC
      00074   0 07400 4 00740          TSX PRINT,4            PRINT NUMBER OF RECORD IN WHICH
      00075   0 00205 0 00172          HTR PR2,0,FOREC+1      ERROR FOUND
      00076   0 50000 0 01235          CLA ERWORD             IN DECREMENT
      00077   0 77100 0 00022          ARS 18
      00100   0 07400 4 00730          TSX OCTBCD,4
      00101   0 60200 0 01257          SLW ERAS
      00102  -0 50000 0 01255          CAL LOC+3
      00103   0 77100 0 00030          ARS 24
      00104   0 56000 0 01257          LDQ ERAS
      00105  -0 76300 0 00030          LGL 24
      00106   0 60200 0 01255          SLW LOC+3
      00107  -0 76300 0 00014          LGL 12
      00110   0 56000 0 00717          LDQ BLANKS
      00111  -0 76300 0 00030          LGL 24
      00112   0 60200 0 01256          SLW LOC+4
      00113   0 07400 4 00740          TSX PRINT,4            PRINT LOCATION OF STOP
      00114   0 01257 0 01252          HTR LOC,0,LOC+5
      00115   0 76600 0 00361          WPR
      00116   0 76600 0 00361          WPR
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00117 -0 53400 4 02346        LXD ERLIST,4
00120  0 50000 4 02346 SEARCH CLA ERLIST,4          ASSORTED TSX IN DEC FIELD
00121  0 34000 0 01235        CAS ERWORD            OF FIRST WORD OF LIST
00122  0 02000 0 00124        TRA TIXA
00123  0 02000 0 00130        TRA HAVE
00124  2 00002 4 00120 TIXA   TIX SEARCH,4,2
00125  0 02000 0 00137        TRA LXDA              UNIDENTIFYABLE, BRING IN RECORD ZERO
00126  0 76100 0 00000        NOP
00127  0 76100 0 00000        NOP
00130  0 50000 4 02347 HAVE   CLA ERLIST+1,4        DUPLICATE STOPS SHOULD BE MARKED MINUS
00131 -0 12000 0 00145        TMI DUP               SECOND WORD HAS NUMBER OF RECORDS
00132 -0 73400 4 00000 PD     PDX 0,4               TO BE SPACED OVER BEFORE READING
00133  2 00003 4 00134        TIX RTBA,4,3          REDUCE NUMBER IF NOT REC 1, NOW SAME AS
00134  0 76200 0 00221 RTBA   RTB 1                 EDITOR RECORD NUMBER
00135  0 70000 0 00031        CPY 25
00136  2 00001 4 00134        TIX RTBA,4,1
00137 -0 53400 4 01232 LXDA   LXD ZERO,4
00140  0 76200 0 00221        RTB 1
00141  0 70000 4 01303 CPYREC CPY LOCREC,4           END RECORD SKIP WILL CONTROL
00142  1 77777 4 00141        TXI CPYREC,4,-1       COPY AND TRANSFER
00143  0 76100 0 00000 NOP    NOP
00144  0 02000 0 01304        TRA LOCREC+1          SKIP RECORD NUMBER
00145 -0 32000 0 01227 DUP    ANA ADDMSK            2ND WORD WILL HAVE CORRECT ERROR RECORD
00146  0 34000 0 01236        CAS RECORD            NUMBER IN ADDRESS, FOR CORRECT FORTRAN
00147  0 02000 0 00151        TRA NOTREC            RECORD NUMBER IN THE CASE OF
00150  0 02000 0 00153        TRA HAVREC            DUPLICATE STOPS.
00151  2 00002 4 00120 NOTREC TIX SEARCH,4,2
00152  0 02000 0 00137        TRA LXDA              IF END OF LIST, PRINT REC. ZERO
00153  0 50000 4 02347 HAVREC CLA ERLIST+1,4
00154  0 02000 0 00132        TRA PD
00155  606060606060     PR1   BCD 7
00156  606060606060
00157  606060606060
00160  606060606060
00161  606060606060
00162  606060606060
00163  606060606060
00164  264651635121           BCD 6FORTRAN DIAGNOSTIC PROGRAM RESULTS
00165  456024312127
00166  454662633123
00167  604751462751
00170  214460512562
00171  644363626060
00172  606060606060     PR2   BCD 2
00173  606060606060
00174  255151465160           BCD 8ERROR WHILE COMPILING IN FORTRAN RECORD NUMBER
00175  663031432560
00176  234644473143
00177  314527603145
00200  602646516351
00201  214560512523
00202  465124604564
00203  442225516060
A 00204  0 00000 0 00000 FOREC HTR
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00205  606060606060     ISNONA BCD 2
00206  606060606060
00207  255151465160            BCD 9ERROR FOUND DURING SCAN OF TABLES COMPILED BY 1 PRIME.
00210  264664452460
00211  246451314527
00212  606223214560
00213  462660632122
00214  432562602346
00215  444731432524
00216  602270600160
00217  475131442533
00220   0 00000 0 00325 TW13   HTR 213
00221  -0 53400 2 00000 DIGRTN LXD 0,2                RESET MEMORY
00222   0 50000 0 00314        CLA CPDR               LOOP AT LOC. 0,1 AND 2 WILL
00223   0 60100 0 00000        STO 0                  COPY 2045 WORDS FROM DRUM 4
00224   0 50000 0 00315        CLA TIXO               BEGINNING AT LOC. 3
00225   0 60100 0 00001        STO 1
00226   0 50000 0 00316        CLA HTR4
00227   0 60100 0 00002        STO 2
00230   0 50000 0 00674 RESTRT CLA PRTEST             SHOULD FOOTNOTE BE PRINTED
00231   0 10000 0 00235        TZE WPREND
00232   0 76600 0 00361        WPR                    YES
00233   0 07400 4 00740        TSX PRINT,4
00234   0 00505 0 00463        HTR NEARBT,0,NEARBT+18
00235   0 76600 0 00361 WPREND WPR
00236   0 76600 0 00361        WPR
00237   0 76600 0 00361        WPR
00240   0 76600 0 00361        WPR
00241   0 77200 0 00202        REW 2                  REWIND SO PROBLEM CAN BE RE-RUN
00242   0 77200 0 00201        REW 1
00243   0 76100 0 00000        NOP                J CANNON
00244   0 76100 0 00000        NOP
00245   0 76000 0 00166 SIXTST SWT 6                  SHOULD CHOICE TO NEXT BATCH BE PRINTED
00246   0 02000 0 00251        TRA SPACE1              NO
00247   0 50000 0 00304        CLA PRALT              SURE
00250   0 60100 0 00261        STO PRNT1
00251   0 76200 0 00221 SPACE1 RTB 1                  SPACE OVER FIRST FILE IN SYSTEM
00252   0 70000 0 01257        CPY ERAS
00253   0 02000 0 00251        TRA SPACE1
00254   0 76200 0 00221 SKIP   RTB 1       OVER REC 1, FILE 2, OUR TRA 4, THEIR WHO KNOWS
00255   0 76100 0 00000        NOP
00256   0 07400 4 00740        TSX PRINT,4
00257   0 00360 0 00320        HTR END,0,END+32
00260   0 07400 4 00740        TSX PRINT,4
00261   0 00376 0 00360 PRNT1  HTR END1,0,END1+14
00262   0 76600 0 00361        WPR
00263  +076000000140           OCT 076000000140       TURN OFF ALL SENSE LIGHTS
00264   0 76600 0 00361        WPR
00265   0 76000 0 00362        SPR 2                  EJECT SHEET
00266   0 76600 0 00333 DONE   IOD
00267  -0 76000 0 00012        RTT
00270   0 76100 0 00000        NOP
00271   0 02000 0 03534        TRA ENDPCH
00272   0 50000 0 00317 SPEND  CLA BST1               BACKSPACE OVER FILE MARK
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00273  0 60100 0 00254          STO SKIP                AND OVER SOURCE ERROR RECORD
00274  0 60100 0 00255          STO SKIP+1
00275  0 76000 0 00166          SWT 6
00276  0 02000 0 00305          TRA NDWP
00277  0 50000 0 00311          CLA PRNT2
00300  0 60100 0 00261          STO PRNT1
00301  0 50000 0 00143 FX6TST   CLA NOP
00302  0 60100 0 00245          STO SIXTST
00303  0 02000 0 00221          TRA DIGRTN
00304  0 03631 0 03540 PRALT    HTR MACEN,0,MACEN+57
00305  0 50000 0 00143 NDWP     CLA NOP                 DO NOT PRINT A LAST COMMENT
00306  0 60100 0 00260          STO PRNT1-1
00307  0 60100 0 00261          STO PRNT1
00310  0 02000 0 00301          TRA FX6TST
00311  0 00417 0 00376 PRNT2    HTR END2,0,END2+17      MAY CONTINUE NEXT BATCH
00312  0 00463 0 00417 PRNT4    HTR END3,0,END3+36
00313  0 03775 0 00003 DRUM     HTR 3,0,2045
00314  0 70000 4 04000 CPDR     CPY 2048,4
00315  2 00001 4 00000 TIXO     TIX 0,4,1
00316  0 02000 0 00004 HTR4     TRA 4
00317  0 76400 0 00201 BST1     BST 1
00320  606060606060     END     BCD 7
00321  606060606060
00322  606060606060
00323  606060606060
00324  606060606060
00325  606060606060
00326  606060606060
00327  254524604626             BCD  END OF DIAGNOSTIC PROGRAM RESULTS.
00330  602431212745
00331  466263312360
00332  475146275121
00333  446051256264
00334  436362336060
00335  606060606060.
00336  606060606060
00337  606060606060
00340  606060606060
00341  606060606060             BCD
00342  606060606060
00343  606060606060
00344  606060606060
00345  606060606060
00346  606060606060
00347  606060606060
00350  606060606060
00351  606060606060
00352  606060606060
00353  475146275121             BCD 5PROGRAM CANNOT BE CONTINUED.
00354  446023214545
00355  466360222560
00356  234645633145
00357  642524336060
00360  606060606060     END1    BCD 7
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00361  606060606060
00362  606060606060
00363  606060606060
00364  606060606060
00365  606060606060
00366  606060606060
00367  475125626260          BCD 7PRESS START IF YOU WISH TO RE-RUN PROBLEM.
00370  626321516360
00371  312660704664
00372  606631623060
00373  634660512540
00374  516445604751
00375  462243254433
00376  606060606060    END2  BCD 7
00377  606060606060
00400  606060606060
00401  606060606060
00402  606060606060
00403  606060606060
00404  606060606060
00405  633025606270          BCD  THE SYSTEM WILL CONTINUE BATCH COMPILING
00406  626325446066
00407  314343602346
00410  456331456425
00411  602221632330
00412  602346444731
00413  433145276060
00414  606060606060
00415  606060606060
00416  606060606060
00417  606060606060    END3  BCD 7
00420  606060606060
00421  606060606060
00422  606060606060
00423  606060606060
00424  606060606060
00425  606060606060
00426  475125626260          BCD  PRESS START IF YOU WISH TO CONTINUE BATCH COMPILING, OR KEY
00427  626321516360
00430  312660704664
00431  606631623060
00432  634660234645
00433  633145642560
00434  222163233060
00435  234644473143
00436  314527736046
00437  516042257060
00440  314560000706          BCD  IN 076000 000141,
00441  000000600000
00442  000104017360
00443  606060606060
00444  606060606060
00445  606060606060
00446  606060606060
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00447  606060606060
00450  606060606060
00451  606060606060
00452  214524604751            BCD 9AND PRESS START IF YOU WISH TO RE-RUN PROBLEM.
00453  256262606263
00454  215163603126
00455  607046646066
00456  316230606346
00457  605125405164
00460  456047514622
00461  432544336060
00462  606060606060
00463  606060606060     NEARBT BCD 1
00464  546063303162            BCD  * THIS STATEMENT HAS NO FORMULA NUMBER.  THE FORMULA NUMBER
00465  606263216325
00466  442545636030
00467  216260454660
00470  264651446443
00471  216045644422
00472  255133606063
00473  302560264651
00474  446443216045
00475  644422255160
00476  216262312745            BCD 7ASSIGNED A NEIGHBORING STATEMENT IS GIVEN.
00477  252460216045
00500  253127302246
00501  513145276062
00502  632163254425
00503  456360316260
00504  273165254533
00505 -0 63400 4 00531 FX4PR   SXD IR4,4              THIS ROUTINE PRINTS ALPH DO BETA FOR I
00506  0 50000 0 00527         CLA ALFBET             GETS ALPHA, OR NEAREST PRECEDING ALPHA,
00507  0 77100 0 00022         ARS 18                 AND BETA FROM WORD ALFBET, SYMBOL
00510 -0 32000 0 01227         ANA ADDMSK             FROM WORD SYM
00511  0 07400 4 00613         TSX EXBETA,4
00512  0 60200 0 00536         SLW DOALF              BLANKS ARE TO RIGHT OF WORD
00513  0 50000 0 00527         CLA ALFBET
00514 -0 32000 0 01227         ANA ADDMSK
00515  0 07400 4 00613         TSX EXBETA,4
00516  0 07400 4 00602         TSX LAJUST,4           ADJUST FOR TRAILING BLANKS
00517  0 60200 0 00540         SLW DOBET
00520 -0 50000 0 00530         CAL SYM
00521  0 07400 4 00543         TSX ZEROUT,4           UNPACK WORD
00522  0 60200 0 00542         SLW DOSYM
00523  0 07400 4 00740         TSX PRINT,4
00524  0 00543 0 00532         HTR PRDO,0,PRDO+9
00525 -0 53400 4 00531         LXD IR4,4
00526  0 02000 4 00001         TRA 1,4
A      00527  0 00000 0 00000 ALFBET HTR
A      00530  0 00000 0 00000 SYM    HTR
A      00531  0 00000 0 00000 IR4    HTR
00532  606060606060     PRDO   BCD 4
00533  606060606060
00534  606060606060
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      00535  606060606060
A     00536  0 00000 0 00000 DOALF  HTR
      00537  606024466060           BCD 1  DO
A     00540  0 00000 0 00000 DOBET  HTR
      00541  602646516060           BCD 1 FOR
A     00542  0 00000 0 00000 DOSYM  HTR
      00543 -0 63400 4 00563 ZEROUT SXD ZER6,4          ENTER CAL BCD WORD WHICH FORTRAN HAS STORED
      00544 -0 53400 4 00564        LXD SIX,4           LEFT ADJUSTED, FOLLOWED BY 1 BLANK AND
      00545  0 60200 0 00562 ZER1   SLW ZER5            PADDLED OUT WITH ZEROS
      00546 -0 32000 0 01231        ANA CHMASK          IE., OCT 000000000077
      00547 -0 10000 0 00553        TNZ ZER2
      00550 -0 50000 0 00562        CAL ZER5            LAST CHARACTER WAS ZERO
      00551  0 77100 0 00006        ARS 6               SHIFT OUT OF AC
      00552  2 00001 4 00545        TIX ZER1,4,1
      00553 -0 50000 0 00562 ZER2   CAL ZER5
      00554  0 56000 0 00717        LDQ BLANKS
      00555  3 00005 4 00560 ZER3   TXH ZER4,4,5
      00556 -0 76300 0 00006        LGL 6               NOW SHIFT IN A BLANK FOR EVERY 0 TAKEN OUT
      00557  1 00001 4 00555        TXI ZER3,4,1
      00560 -0 53400 4 00563 ZER4   LXD ZER6,4          LEAVE, BCD AND BLANKS, MUST BE SAVED
      00561  0 02000 4 00001        TRA 1,4             WITH SLW
A     00562  0 00000 0 00000 ZER5   HTR
A     00563  0 00000 0 00000 ZER6   HTR
      00564  0 00006 0 00000 SIX    HTR 0,0,6
      00565  0 60200 0 00577 RAJUST SLW RAJ1            ENTER, CAL BCD, LEFT ADJUSTED PLUS BLANKS
      00566 -0 32000 0 01231        ANA CHMASK          IE., OCT 000000000077
      00567  0 40200 0 00600        SUB 01BLNK
      00570 -0 10000 0 00575        TNZ RAJ2
      00571 -0 50000 0 00577        CAL RAJ1            YES, MOVE WORD AND ADD BLANK AT FRONT
      00572  0 77100 0 00006        ARS 6               IS LAST CHARACTER A BLANK
      00573  0 36100 0 00601        ACL RBLNK
      00574  0 02000 0 00565        TRA RAJUST
      00575 -0 50000 0 00577 RAJ2   CAL RAJ1            LEAVES AC WITH LEADING BLANKS, MUST BE
      00576  0 02000 4 00001        TRA 1,4             SAVED WITH SLW
A     00577  0 00000 0 00000 RAJ1   HTR
      00600  000000000060    01BLNK BCD 100000
      00601  600000000000    RBLNK  BCD 1 00000
      00602  0 56000 0 00612 LAJUST LDQ BLNKO           ENTER, CAL BCD NUMBER, LEADING BLANKS
      00603  0 14000 0 00604 LAJ1   TOV LAJ2            TURN OFF INDICATOR
      00604 -0 76300 0 00001 LAJ2   LGL 1               NUMBER HAS ZERO ZONE, BLANK WILL TURN
      00605 -0 14000 0 00610        TNO LAJ3            ON INDICATOR
      00606 -0 76300 0 00005        LGL 5
      00607  0 02000 0 00603        TRA LAJ1
      00610  0 77100 0 00001 LAJ3   ARS 1               FIRST BIT FROM Q BACK TO P
      00611  0 02000 4 00001        TRA 1,4             EXIT TRAILING BLANKS,MUST BE SAVED WITH SLW
      00612  606060606000    BLNKO  BCD 1     0        WILL STOP ROUTINE IF WORD IS ALL BLANKS.
                                    ENTER WITH INTERNAL FORMULA NUMBER IN ADDRESS OF AC
                                    EXIT WITH EXTERNAL FORMULA NUMBER, OR NEAREST PRECEDING
                                    EXTERNAL FORMULA NUMBER, IN BCD IN LOGICAL PORTION
                                    OF AC. THIS MUST BE SAVED WITH SLW. NUMBER WILL
                                    BE FOLLOWED BY ASTERISK WHEN EXACT MATCH IS NOT FOUND
                     77013 TEIFIN SYN LIST-500
      00613  0 76700 0 00022 EXBETA ALS 18
      00614  0 62200 0 00675        STD BETAEX
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00615 -0 63400 4 00671          SXD XB10,4
00616 -0 53400 4 00640          LXD INCOR,4
00617  3 00000 4 00644          TXH XB4,4,0          IF TEIFNO IN MEMORY, SKIP READ IN
00620  0 77200 0 00202          REW 2
00621  0 53400 4 00671          LXA XB10,4           4 FILES TO BE SPACED OVER
00622  0 76200 0 00222 XB1      RTB 2
00623  0 70000 0 77012          CPY TEIFIN-1
00624  0 02000 0 00622          TRA XB1              SPACE OVER RECORDS UNTIL END FILE SKIP
00625  2 00001 4 00622          TIX XB1,4,1
00626  0 53400 4 00640          LXA INCOR,4
00627  0 76200 0 00222 XB2      RTB 2
00630  0 70000 0 77012          CPY TEIFIN-1
00631  2 00001 4 00627          TIX XB2,4,1
00632 -0 53400 4 01232          LXD ZERO,4
00633  0 76200 0 00222          RTB 2
00634  0 70000 0 77012          CPY TEIFIN-1         IGNORE IDENTIFICATION AND WORD COUNT
00635  0 70000 0 77012          CPY TEIFIN-1
00636  0 70000 4 77012 XB3      CPY TEIFIN-1,4       READ IN TEIFNO UNTIL END OF RECORD SKIP
00637  1 00001 4 00636          TXI XB3,4,1
00640  0 00000 0 00004 INCOR    HTR 4
00641  3 00000 4 00643          TXH XB4A,4,0
00642 -0 53400 4 01233          LXD DECONE,4         SET READ IN TO FAIL IF NO TEIFNO ENTRIES
00643 -0 63400 4 00640 XB4A     SXD INCOR,4
00644  0 50000 4 77013 XB4      CLA TEIFIN,4         COMPARE INTERNAL FORMULA NUMBERS
00645 -0 32000 0 01230          ANA DECMSK
00646  0 34000 0 00675          CAS BETAEX           TO THE ONE BEING ASKED FOR
00647  0 02000 0 00665          TRA XB8
00650  0 02000 0 00667          TRA XB9
00651  0 50000 0 01227 XB5      CLA ADDMSK           SET TEST TO ADD ASTERISK TO END OF NUMBER
00652  0 60100 0 00674          STO PRTEST           SET END OF DIAG TO PRINT FOOTNOTE
00653  0 60100 0 00672          STO XB11
00654  0 50000 4 77013 XB6      CLA TEIFIN,4         GET EXTERNAL FORMULA NUMBER
00655 -0 32000 0 01227          ANA ADDMSK
00656  0 07400 4 00676          TSX BINDEC,4         CONVERT TO BCD DECIMAL
00657  0 53400 4 00672          LXA XB11,4
00660  0 56000 0 00673          LDQ ASTRSK
00661 -3 00000 4 00663          TXL XB7,4,0          SHOULD ASTERISK BE ADDED
00662 -0 76300 0 00006          LGL 6                YES
00663 -0 53400 4 00671 XB7      LXD XB10,4
00664  0 02000 4 00001          TRA 1,4
00665  2 00001 4 00644 XB8      TIX XB4,4,1          COMPARE TO NEXT, OR
00666  0 02000 0 00651          TRA XB5              PRINT FIRST ENTRY WITH ASTERISK
00667  0 60000 0 00672 XB9      STZ XB11             SET TEST TO PRINT NUMBER ONLY
00670  0 02000 0 00654          TRA XB6
00671  0 00000 0 00004 XB10     HTR 4,0,0
00672  0 00000 0 00000 XB11     HTR 0
00673  546060606060     ASTRSK BCD 1*
00674  0 00000 0 00000 PRTEST   HTR 0
00675  0 00000 0 00000 BETAEX   HTR 0
                                ENTER, BINARY NUMBER IN ADDRESS AC. EXIT DECIMAL
                                NUMBER IN BCD IN LOGICAL PORTION OF AC. MUST BE
                                SAVED WITH SLW
00676  0 76000 0 00003 BINDEC   SSP                   JUST IN CASE
00677  0 76500 0 00043          LRS 35
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00700 -0 63400 4 00720          SXD BINA,4
00701 -0 53400 4 00714          LXD BINB,4
00702  0 50000 0 00721 CNV      CLA TEN                IF MQ LESS THAN 10, CONVERSION IS FINISHED
00703  0 04000 0 00710          TLQ FIN
00704 -0 75400 0 00000          PXD 0,0
00705  0 22100 0 00721          DVP TEN
00706  0 60200 4 00730          SLW DIG,4              SAVE REMAINDER IN 1 WORD OF BLOCK
00707  1 00001 4 00702          TXI CNV,4,1            UP WORD COUNT OF BLOCK
00710 -0 60000 4 00730 FIN      STQ DIG,4
00711 -0 50000 0 00717          CAL BLANKS             START WITH BLANKS
00712  0 76700 0 00006 DEC      ALS 6                  AND BRING IN REMAINDER FROM ABOVE
00713 -0 50100 4 00730          ORA DIG,4
00714  2 00001 4 00712 BINB     TIX DEC,4,1
00715 -0 53400 4 00720          LXD BINA,4
00716  0 02000 4 00001          TRA 1,4
00717  606060606060     BLANKS BCD 1
A 00720  0 00000 0 00000 BINA   HTR
00721 +000000000012     TEN     DEC 10
                  00730 DIG     BES 6
                                ENTER WITH OCTAL NUMBER IN ADDRESS OF AC. EXIT OCTAL
                                CONVERTED TO BCD IN LOGICAL PORTION OF AC. THIS MUST
                                BE SAVED WITH SLW
00730  0 76500 0 00017 OCTBCD   LRS 15
00731  0 50000 0 00737          CLA BLANK              AC ZERO EXEPT FOR END BLANK
00732 -0 14000 0 00733          TNO OCT                TURN OFF INDICATOR
00733  0 76700 0 00003 OCT      ALS 3
00734  0 76300 0 00003          LLS 3
00735 -0 14000 0 00733          TNO OCT                END BLANK WILL TURN ON INDICATOR
00736  0 02000 4 00001          TRA 1,4
00737  000000000060     BLANK  BCD 100000
                  00740  PRINT  BSS 0
                  00004 C       EQU 4
00740  0 50000 4 00001  RAN     CLA 1,4
00741  0 62100 0 00772          STA RNA
00742  0 77100 0 00022          ARS 18
00743  0 60100 0 00773          STO RNB
00744 -0 63400 4 00774          SXD RNC,4
00745  0 50000 0 00772  RN40    CLA RNA
00746  0 40000 0 00775          ADD RND
00747  0 34000 0 00773          CAS RNB
00750  0 76100 0 00000          NOP
00751  0 02000 0 00762          TRA RN50
00752  0 76700 0 00022          ALS 18
00753  0 40000 0 00772          ADD RNA
00754  0 60100 0 00760          STO RAN10
00755  0 77100 0 00022          ARS 18
00756  0 62100 0 00772          STA RNA
00757  0 07400 4 00776          TSX WOT,C
A 00760  0 00000 0 00000  RAN10 HTR
00761  0 02000 0 00745          TRA RN40
00762  0 50000 0 00773  RN50    CLA RNB
00763  0 76700 0 00022          ALS 18
00764  0 40000 0 00772          ADD RNA
00765  0 60100 0 00767          STO RN60
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     00766  0 07400 4 00776        TSX WOT,C
A    00767  0 00000 0 00000  RN60  HTR
     00770 -0 53400 4 00774        LXD RNC,C
     00771  0 02000 4 00002        TRA 2,C
A    00772  0 00000 0 00000  RNA   HTR
A    00773  0 00000 0 00000  RNB   HTR
A    00774  0 00000 0 00000  RNC   HTR
     00775  0 00000 0 00024  RND   HTR 20
     00776 -0 63400 1 01073  WOT   SXD X1,1
     00777 -0 63400 2 01101        SXD X2,2
     01000 -0 50000 4 00001        CLA 1,4
     01001  0 62200 0 01125        STD X4            X
     01002  0 77100 0 00022        ARS 18            X
     01003  0 40000 0 01125        ADD X4            X
     01004  0 62100 0 01032        STA CI9           X
     01005  0 40200 4 00001        SUB 1,4           B-A+1 IN AC
     01006  0 10000 4 00002        TZE 2,4
     01007 -0 12000 4 00002        TMI 2,4
     01010 -0 63400 4 01125        SXD X4,4
     01011  0 73400 4 00013  L11   PAX 11,4
     01012 -0 63400 4 01123        SXD PR6,4
     01013  0 76600 0 00361  RPR   WPR
     01014  0 76100 0 00000        NOP
     01015 -0 53400 4 01123        LXD PR6,4         X
D    01016 -2 00000 4 01022  PR8   TNX PR5,4
     01017 -3 00014 4 01021        TXL PR3,4,12
     01020  0 76000 0 00370        SPR 8             FIRST CYCLE
     01021 -0 53400 4 01123  PR3   LXD PR6,4         INITIALIZE GROUP COUNT
     01022  0 53400 2 01024  PR5   LXA PR7,2         INITIALIZE LEFT SETUP
     01023 -0 53400 1 01066        LXD YZ1,1         CLEAR CARD IMAGE
T    01024 -0 75400 0 00000  PR7   PXD               X
     01025  0 60200 1 01173  PR4   SLW LT,1          X
     01026  0 60200 1 01153        SLW RT,1          X
     01027  2 00001 1 01025        TIX PR4,1,1       X
     01030 -0 50000 0 01131  CIR   CAL COL1          INITIALIZE COLUMN INDICATOR
     01031  0 60200 0 01132  CI2   SLW COL           X
     01032  0 56000 4 00000  CI9   LDQ 0,4           OBTAIN GROUP
     01033 -0 63400 4 01226        SXD OZ2,4         STORE GROUP COUNT
     01034  0 53400 4 01036        LXA Q6,4          SET CHARACTER COUNT
T    01035 -0 75400 0 00000  CI1   PXD
     01036 -0 76300 0 00006  Q6    LGL 6
     01037  0 73400 1 00000        PAX 0,1
     01040 -0 50000 0 01132        CAL COL           POSITION COLUMN INDICATOR
     01041  0 77100 4 00006        ARS 6,4           X
     01042  2 00020 1 01066        TIX YZ1,1,16      TEST FOR DIGIT
     01043  3 00017 1 01071        TXH YZ2,1,15      TEST FOR Y-ZONE
     01044 -0 60200 3 01170  CI5   ORS D,3           STORE DIGIT
     01045  2 00001 4 01035  CI4   TIX CI1,4,1       COUNT CHARACTERS
     01046  0 77100 0 00001  CI3   ARS 1             SHIFT AND TEST COLUMN
     01047 -0 53400 4 01226        LXD OZ2,4         RESTORE GROUP COUNT
     01050  1 77777 4 01051        TXI CI6,4,-1      COUNT GROUPS
D    01051 -3 00000 4 01053  CI6   TXL CI7,4         TEST FOR LAST NON-BLANK GROUP
     01052 -0 10000 0 01031        TNZ CI2           TEST FOR END OF ROW
     01053 -0 50000 2 01155  CI7   CAL 8.3,2         FORM TRUE 8,4
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        01054 -0 60200 2 01160          ORS D-8,2        AND 3 ROWS AND
        01055 -0 60200 2 01165          ORS D-3,2        MOVE 8.4 AND 8.3
        01056  0 60200 2 01156          SLW 8.2,2        ROWS
        01057 -0 50000 2 01154          CAL 8.4,2        FORM TRUE 8.4
        01060 -0 60200 2 01160          ORS D-8,2        X
        01061 -0 60200 2 01164          ORS D-4,2        X
        01062  0 60200 2 01155          SLW 8.3,2        X
D       01063 -3 00000 4 01106  CI8     TXL WP,4         TEST FOR END
        01064  3 00017 2 01106          TXH WP,2,15      TEST FOR RIGHT HALF
        01065  1 00020 2 01030          TXI CIR,2,16     INITIALIZE RIGHT HALF
        01066  2 00020 1 01074  YZ1     TIX XZ1,1,16     TEST FOR 16/CH/32
        01067  3 00017 1 01077          TXH XZ2,1,15     TEST FOR X-ZONE
        01070 -0 60200 3 01170          ORS D,3          STORE DIGIT
        01071 -0 60200 2 01172  YZ2     ORS Y,2          STORE Y-ZONE
        01072  2 00001 4 01035          TIX CI1,4,1      COUNT CHARACTERS
TD      01073 -3 00000 0 01046  X1      TXL CI3          OBTAIN NEXT GROUP
        01074  2 00020 1 01102  XZ1     TIX OZ1,1,16     TEST FOR 32/CH/48
        01075  3 00017 1 01045          TXH CI4,1,15     TEST FOR BLANK
        01076 -0 60200 3 01170          ORS D,3          STORE DIGIT
        01077 -0 60200 2 01171  XZ2     ORS X,2          STORE X-ZONE
        01100  2 00001 4 01035          TIX CI1,4,1      COUNT CHARACTERS
TD      01101 -3 00000 0 01046  X2      TXL CI3          OBTAIN NEXT GROUP
        01102 -0 60200 2 01170  OZ1     ORS Z,2          STORE 0-ZONE
        01103 -0 60200 3 01170          ORS D,3          STORE DIGIT
        01104  2 00001 4 01035          TIX CI1,4,1      COUNT CHARACTERS
TD      01105 -3 00000 0 01046          TXL CI3
        01106  0 53400 1 01226 WP7      LXA OZ,1         COPY LOOP
        01107  0 70000 1 01157  CRAN    CPY LT-12,1
        01110  0 70000 1 01137          CPY RT-12,1      X
        01111  1 77777 1 01112          TXI T2,1,-1
        01112  3 77764 1 01107  T2      TXH CRAN,1,-12
D       01113  3 00000 4 01120  WP4     TXH WP5,4
        01114 -0 53400 1 01073          LXD X1,1         NO, RELOAD INDEX REGISTERS AND RETURN
        01115 -0 53400 2 01101          LXD X2,2         X
        01116 -0 53400 4 01125  WT2     LXD X4,4         X
        01117  0 02000 4 00002  L2      TRA 2,4          X
        01120  0 76600 0 00361  WP5     WPR
        01121  0 76000 0 00371  .       SPR 9            SECOND CYCLE
        01122 -3 00014 0 01022  WP2     TXL PR5,0,12     CONVERT REST OF LINE
A       01123  0 00000 0 00000 PR6      HTR
        01124  606060606060     BLNKS   BCD 1
A       01125  0 00000 0 00000  X4      HTR
        01126 +000000000020     YZONE   OCT 20
        01127 +000000000060     BNK     OCT 60
        01130 +377777777777     MK2     OCT 377777777777
        01131 -0 00000 0 00000  COL1    MZE
                        01132   COL     BSS 1
                        01153   RT      BES 16
                        01153   8.5     BSS 1
                        01154   8.4     BSS 1
                        01155   8.3     BSS 1
                        01156   8.2     BSS 1
                        01170   D       BES 9
                        01170   Z       BSS 1
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                    01171  X      BSS 1
                    01172  Y      BSS 1
                    01173  LT     SYN Y+1
                    01155  8.4L   SYN LT-14
                    01135  8.4R   SYN RT-14
                    01173         BSS 27
A     01226  0 00000 0 00000 OZ     HTR
                    01226 OZ2     SYN OZ
                    01106 WP      SYN WP7
      01227 +000000077777    ADDMSK OCT 000000077777
      01230 +077777000000    DECMSK OCT 077777000000
      01231 +000000000077    CHMASK OCT 000000000077
      01232  0 00000 0 00000 ZERO   HTR 0
      01233 +000001000000    DECONE OCT 000001000000
      01234  0 00000 0 00000 PREFX1 HTR 0
      01235  0 00000 0 00000 ERWORD HTR 0
      01236  0 00000 0 00000 RECORD
      01237  606060606060    MACHIN BCD 2
      01240  606060606060
      01241  442123303145           BCD 3MACHINE ERROR
      01242  256025515146
      01243  516060606060
      01244  606060606060    SOURCE BCD 2
      01245  606060606060
      01246  624664512325           BCD 4SOURCE PROGRAM ERROR
      01247  604751462751
      01250  214460255151
      01251  465160606060
      01252  606060606060    LOC    BCD 2
      01253  606060606060
      01254  434623216331           BCD 3LOCATION
      01255  464560606060
      01256  606060606060
                    01257 ERAS    BSS 20                 FOR PATCHING ETC.
      01303  0 00000 0 00000 LOCREC HTR 0                 ALL ERROR RECORDS READ IN HERE OVER LIST
      01304 +001017000000          OCT 001017000000      ERROR IN 1 DOUBLE PRIME
      01305  0 00001 0 00000       HTR 0,0,1             ERROR RECORD 1
      01306 +000036000000          OCT 000036000000       53
      01307  0 00170 0 00000       HTR 0,0,120             36
      01310 +000037000000          OCT 000037000000       90
      01311  0 00216 0 00000       HTR 0,0,142             37
      01312 +000041000000          OCT 000041000000       60
      01313  0 00047 0 00000       HTR 0,0,39              41
      01314 +000046000000          OCT 000046000000       90
      01315  0 00140 0 00000       HTR 0,0,96              46
      01316 +000047000000          OCT 000047000000       58
      01317  0 00047 0 00000       HTR 0,0,39              47
      01320 +000051000000          OCT 000051000000       56
      01321  0 00163 0 00000       HTR 0,0,115             51
      01322 +000060000000          OCT 000060000000       56
      01323  0 00205 0 00000       HTR 0,0,133             60
      01324 +000061000000          OCT 000061000000       47
      01325  0 00101 0 00000       HTR 0,0,65              61
      01326 +000062000000          OCT 000062000000       53
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01327  0 00174 0 00000        HTR 0,0,124          62
01330 +000063000000           OCT 000063000000     53
01331  0 00174 0 00000        HTR 0,0,124          63
01332 +000064000000           OCT 000064000000     71
01333  0 00060 0 00000        HTR 0,0,48           64
01334 +000066000000           OCT 000066000000     53
01335  0 00174 0 00000        HTR 0,0,124          66
01336 +000067000000           OCT 000067000000     53
01337  0 00174 0 00000        HTR 0,0,124          67
01340 +000070000000           OCT 000070000000     92
01341  0 00047 0 00000        HTR 0,0,39           70
01342 +000072000000           OCT 000072000000     53
01343 -0 00174 0 00065        MZE 53,0,124         72
01344 +000072000000           OCT 000072000000     60
01345  0 00056 0 00000        HTR 0,0,46           72
01346 +000073000000           OCT 000073000000     53
01347  0 00174 0 00000        HTR 0,0,124          73
01350 +000074000000           OCT 000074000000     56
01351  0 00112 0 00000        HTR 0,0,74           74
01352 +000103000000           OCT 000103000000     67
01353  0 00060 0 00000        HTR 0,0,48           103
01354 +000106000000           OCT 000106000000     53
01355  0 00006 0 00000        HTR 0,0,6            106
01356 +000107000000           OCT 000107000000     58
01357 -0 00050 0 00072        MZE 58,0,40          107
01360 +000107000000           OCT 000107000000     92
01361  0 00046 0 00000        HTR 0,0,38           107
01362 +000116000000           OCT 000116000000     53
01363  0 00102 0 00000        HTR 0,0,66           116
01364 +000123000000           OCT 000123000000     47
01365 -0 00047 0 00057        MZE 47,0,39          123
01366 +000123000000           OCT 000123000000     53
01367  0 00160 0 00000        HTR 0,0,112          123
01370 +000124000000           OCT 000124000000     53
01371  0 00160 0 00000        HTR 0,0,112          124
01372 +000132000000           OCT 000132000000     53
01373 -0 00102 0 00065        MZE 53,0,66          132
01374 +000132000000           OCT 000132000000     60
01375  0 00274 0 00000        HTR 0,0,188          132
01376 +000140000000           OCT 000140000000     56
01377  0 00047 0 00000        HTR 0,0,39           140
01400 +000141000000           OCT 000141000000     92
01401  0 00142 0 00000        HTR 0,0,98           141
01402 +000150000000           OCT 000150000000     75
01403  0 00065 0 00000        HTR 0,0,53           150
01404 +000160000000           OCT 000160000000     67
01405  0 00060 0 00000        HTR 0,0,48           160
01406 +000161000000           OCT 000161000000     56
01407  0 00050 0 00000        HTR 0,0,40           161
01410 +000173000000           OCT 000173000000     60
01411  0 00274 0 00000        HTR 0,0,188          173
01412 +000216000000           OCT 000216000000     47
01413  0 00050 0 00000        HTR 0,0,40           216
01414 +000222000000           OCT 000222000000     94
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01415 -0 00066 0 00136        MZE 94,0,54          222
01416 +000222000000           OCT 000222000000     105
01417 -0 00047 0 00151        MZE 105,0,39         222
01420 +000222000000           OCT 000222000000     107
01421 -0 00067 0 00153        MZE 107,0,55         222
01422 +000222000000           OCT 000222000000     115
01423  0 00047 0 00000        HTR 0,0,39           222
01424 +000223000000           OCT 000223000000     113
01425  0 00155 0 00000        HTR 0,0,109          223
01426 +000227000000           OCT 000227000000     60
01427  0 00274 0 00000        HTR 0,0,188          227
01430 +000230000000           OCT 000230000000     101
01431  0 00047 0 00000        HTR 0,0,39           230
01432 +000241000000           OCT 000241000000     107
01433 -0 00070 0 00153        MZE 107,0,56         241
01434 +000241000000           OCT 000241000000     115
01435  0 00046 0 00000        HTR 0,0,38           241
01436 +000245000000           OCT 000245000000     9
01437 -0 00147 0 00011        MZE 9,0,103          245
01440 +000245000000           OCT 000245000000     105
01441  0 00046 0 00000        HTR 0,0,38           245
01442 +000246000000           OCT 000246000000     92
01443  0 00047 0 00000        HTR 0,0,39           246
01444 +003672000000           OCT 003672000000     115
01445  0 00222 0 00000        HTR 0,0,146          3672
01446 +000247000000           OCT 000247000000     101
01447  0 00046 0 00000        HTR 0,0,38           247
01450 +000252000000           OCT 000252000000     60
01451 -0 00274 0 00074        MZE 60,0,188         252
01452 +000252000000           OCT 000252000000     105
01453  0 00244 0 00000        HTR 0,0,164          252
01454 +000255000000           OCT 000255000000     103
01455  0 00156 0 00000        HTR 0,0,110          255
01456 +000256000000           OCT 000256000000     73
01457  0 00060 0 00000        HTR 0,0,48           256
01460 +000260000000           OCT 000260000000     96
01461 -0 00046 0 00140        MZE 96,0,38          260
01462 +000260000000           OCT 000260000000     98
01463  0 00046 0 00000        HTR 0,0,38           260
01464 +000263000000           OCT 000263000000     67
01465  0 00060 0 00000        HTR 0,0,48           263
01466 +000264000000           OCT 000264000000     7
01467  0 00150 0 00000        HTR 0,0,104          264
01470 +000270000000           OCT 000270000000     56
01471  0 00017 0 00000        HTR 0,0,15           270
01472 +000277000000           OCT 000277000000     92
01473 -0 00046 0 00134        MZE 92,0,38          277
01474 +000277000000           OCT 000277000000     113
01475  0 00037 0 00000        HTR 0,0,31           277
01476 +000301000000           OCT 000301000000     67
01477  0 00247 0 00000        HTR 0,0,167          301
01500 +003730000000           OCT 003730000000     115
01501  0 00151 0 00000        HTR 0,0,105          3730
01502 +000303000000           OCT 000303000000     73
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01503  0 00124 0 00000        HTR 0,0,84          303
01504 +000305000000           OCT 000305000000     56
01505 -0 00047 0 00070        MZE 56,0,39         305
01506 +000305000000           OCT 000305000000     60
01507  0 00274 0 00000        HTR 0,0,188         305
01510 +000311000000           OCT 000311000000      9
01511  0 00152 0 00000        HTR 0,0,106         311
01512 +000312000000           OCT 000312000000    113
01513  0 00245 0 00000        HTR 0,0,165         312
01514 +000314000000           OCT 000314000000     90
01515  0 00167 0 00000        HTR 0,0,119         314
01516 +000321000000           OCT 000321000000     90
01517  0 00217 0 00000        HTR 0,0,143         321
01520 +000327000000           OCT 000327000000     86
01521  0 00133 0 00000        HTR 0,0,91          327
01522 +000330000000           OCT 000330000000     90
01523  0 00141 0 00000        HTR 0,0,97          330
01524 +000331000000           OCT 000331000000     58
01525  0 00164 0 00000        HTR 0,0,116         331
01526 +000334000000           OCT 000334000000     56
01527 -0 00050 0 00070        MZE 56,0,40         334
01530 +000334000000           OCT 000334000000     60
01531  0 00274 0 00000        HTR 0,0,188         334
01532 +000336000000           OCT 000336000000     86
01533  0 00213 0 00000        HTR 0,0,139         336
01534 +000340000000           OCT 000340000000     58
01535  0 00206 0 00000        HTR 0,0,134         340
01536 +000341000000           OCT 000341000000     96
01537 -0 00040 0 00140        MZE 96,0,32         341
01540 +000341000000           OCT 000341000000     67
01541 -0 00060 0 00103        MZE 67,0,48         341
01542 +000341000000           OCT 000341000000     98
01543  0 00040 0 00000        HTR 0,0,32          341
01544 +000345000000           OCT 000345000000      5
01545  0 00242 0 00000        HTR 0,0,162         345
01546 +000350000000           OCT 000350000000     58
01547 -0 00113 0 00072        MZE 58,0,75         350
01550 +000350000000           OCT 000350000000     62
01551  0 00125 0 00000        HTR 0,0,85          350
01552 +000352000000           OCT 000352000000    113
01553  0 00041 0 00000        HTR 0,0,33          352
01554 +000354000000           OCT 000354000000     64
01555  0 00235 0 00000        HTR 0,0,157         354
01556 +000356000000           OCT 000356000000     92
01557  0 00143 0 00000        HTR 0,0,99          356
01560 +000357000000           OCT 000357000000     58
01561  0 00165 0 00000        HTR 0,0,117         357
01562 +000363000000           OCT 000363000000     60
01563  0 00274 0 00000        HTR 0,0,188         363
01564 +000366000000           OCT 000366000000     58
01565  0 00207 0 00000        HTR 0,0,135         366
01566 +000375000000           OCT 000375000000     58
01567  0 00114 0 00000        HTR 0,0,76          375
01570 +000377000000           OCT 000377000000     56
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01571 -0 00274 0 00070        MZE 56,0,188          377
01572 +000377000000           OCT 000377000000     115
01573  0 00042 0 00000        HTR 0,0,34            377
01574 +000410000000           OCT 000410000000      58
01575 -0 00115 0 00072        MZE 58,0,77           410
01576 +000410000000           OCT 000410000000      96
01577  0 00153 0 00000        HTR 0,0,107           410
01600 +000417000000           OCT 000417000000      58
01601  0 00210 0 00000        HTR 0,0,136           417
01602 +000424000000           OCT 000424000000      56
01603  0 00274 0 00000        HTR 0,0,188           424
01604 +000425000000           OCT 000425000000      67
01605 -0 00036 0 00103        MZE 67,0,30           425
01606 +000425000000           OCT 000425000000      73
01607 -0 00267 0 00111        MZE 73,0,183          425
01610 +000425000000           OCT 000425000000      98
01611  0 00046 0 00000        HTR 0,0,38            425
01612 +000427000000           OCT 000427000000      96
01613  0 00223 0 00000        HTR 0,0,147           427
01614 +000430000000           OCT 000430000000      58
01615  0 00116 0 00000        HTR 0,0,78            430
01616 +000434000000           OCT 000434000000      62
01617  0 00023 0 00000        HTR 0,0,19            434
01620 +000437000000           OCT 000437000000      84
01621  0 00134 0 00000        HTR 0,0,92            437
01622 +000441000000           OCT 000441000000      98
01623  0 00044 0 00000        HTR 0,0,36            441
01624 +000442000000           OCT 000442000000      60
01625 -0 00274 0 00074        MZE 60,0,188          442
01626 +000442000000           OCT 000442000000      96
01627  0 00047 0 00000        HTR 0,0,39            442
01630 +000443000000           OCT 000443000000     103
01631  0 00243 0 00000        HTR 0,0,163           443
01632 +000446000000           OCT 000446000000      58
01633  0 00117 0 00000        HTR 0,0,79            446
01634 +000454000000           OCT 000454000000      62
01635 -0 00211 0 00076        MZE 62,0,137          454
01636 +000454000000           OCT 000454000000      64
01637  0 00024 0 00000        HTR 0,0,20            454
01640 +000460000000           OCT 000460000000      98
01641  0 00154 0 00000        HTR 0,0,108           460
01642 +000465000000           OCT 000465000000      96
01643  0 00046 0 00000        HTR 0,0,38            465
01644 +000500000000           OCT 000500000000      96
01645  0 00047 0 00000        HTR 0,0,39            500
01646 +000510000000           OCT 000510000000      56
01647 -0 00120 0 00070        MZE 56,0,80           510
01650 +000510000000           OCT 000510000000      73
01651  0 00270 0 00000        HTR 0,0,184           510
01652 +000517000000           OCT 000517000000      62
01653  0 00126 0 00000        HTR 0,0,86            517
01654 +000520000000           OCT 000520000000      56
01655 -0 00121 0 00070        MZE 56,0,81           520
01656 +000520000000           OCT 000520000000     113
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01657  0 00243 0 00000        HTR 0,0,163          520
01660 +000521000000           OCT 000521000000     60
01661  0 00274 0 00000        HTR 0,0,188          521
01662 +000524000000           OCT 000524000000     62
01663  0 00166 0 00000        HTR 0,0,118          524
01664 +000533000000           OCT 000533000000     92
01665  0 00033 0 00000        HTR 0,0,27           533
01666 +000534000000           OCT 000534000000     62
01667  0 00212 0 00000        HTR 0,0,138          534
01670 +000544000000           OCT 000544000000     60
01671  0 00274 0 00000        HTR 0,0,188          544
01672 +000546000000           OCT 000546000000      2
01673  0 00043 0 00000        HTR 0,0,35           546
01674 +000553000000           OCT 000553000000     62
01675  0 00127 0 00000        HTR 0,0,87           553
01676 +000556000000           OCT 000556000000     64
01677  0 00237 0 00000        HTR 0,0,159          556
01700 +000562000000           OCT 000562000000     92
01701 -0 00144 0 00134        MZE 92,0,100         562
01702 +000562000000           OCT 000562000000    113
01703  0 00045 0 00000        HTR 0,0,37           562
01704 +000604000000           OCT 000604000000     92
01705  0 00034 0 00000        HTR 0,0,28           604
01706 +000607000000           OCT 000607000000     60
01707  0 00047 0 00000        HTR 0,0,39           607
01710 +000613000000           OCT 000613000000     56
01711  0 00274 0 00000        HTR 0,0,188          613
01712 +000624000000           OCT 000624000000     98
01713  0 00224 0 00000        HTR 0,0,148          624
01714 +000627000000           OCT 000627000000     60
01715  0 00050 0 00000        HTR 0,0,40           627
01716 +000643000000           OCT 000643000000     64
01717  0 00025 0 00000        HTR 0,0,21           643
01720 +000654000000           OCT 000654000000     56
01721  0 00274 0 00000        HTR 0,0,188          654
01722 +000661000000           OCT 000661000000     75
01723  0 00246 0 00000        HTR 0,0,166          661
01724 +000674000000           OCT 000674000000     60
01725  0 00122 0 00000        HTR 0,0,82           674
01726 +000707000000           OCT 000707000000     64
01727  0 00024 0 00000        HTR 0,0,20           707
01730 +000711000000           OCT 000711000000     62
01731  0 00236 0 00000        HTR 0,0,158          711
01732 +000716000000           OCT 000716000000     62
01733  0 00130 0 00000        HTR 0,0,88           716
01734 +000720000000           OCT 000720000000     60
01735  0 00123 0 00000        HTR 0,0,83           720
01736 +000734000000           OCT 000734000000     45
01737  0 00047 0 00000        HTR 0,0,39           734
01740 +000747000000           OCT 000747000000     56
01741  0 00020 0 00000        HTR 0,0,16           747
01742 +000750000000           OCT 000750000000     56
01743  0 00020 0 00000        HTR 0,0,16           750
01744 +000756000000           OCT 000756000000     64
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01745  0 00026 0 00000        HTR 0,0,22          756
01746 +000762000000           OCT 000762000000     75
01747  0 00251 0 00000        HTR 0,0,169         762
01750 +000765000000           OCT 000765000000     92
01751  0 00145 0 00000        HTR 0,0,101         765
01752 +001000000000           OCT 001000000000     56
01753  0 00274 0 00000        HTR 0,0,188        1000
01754 +001001000000           OCT 001001000000     24
01755  0 00157 0 00000        HTR 0,0,111        1001
01756 +001006000000           OCT 001006000000     45
01757  0 00055 0 00000        HTR 0,0,45         1006
01760 +001022000000           OCT 001022000000     75
01761  0 00246 0 00000        HTR 0,0,166        1022
01762 +001023000000           OCT 001023000000     64
01763  0 00131 0 00000        HTR 0,0,89         1023
01764 +001031000000           OCT 001031000000     24
01765  0 00075 0 00000        HTR 0,0,61         1031
01766 +001041000000           OCT 001041000000     64
01767  0 00027 0 00000        HTR 0,0,23         1041
01770 +001076000000           OCT 001076000000     45
01771  0 00253 0 00000        HTR 0,0,171        1076
01772 +001135000000           OCT 001135000000     62
01773 -0 00057 0 00076        MZE 62,0,47        1135
01774 +001135000000           OCT 001135000000     92
01775  0 00146 0 00000        HTR 0,0,102        1135
01776 +001141000000           OCT 001141000000     45
01777  0 00050 0 00000        HTR 0,0,40         1141
02000 +001160000000           OCT 001160000000     22
02001  0 00277 0 00000        HTR 0,0,191        1160
02002 +001175000000           OCT 001175000000     62
02003  0 00132 0 00000        HTR 0,0,90         1175
02004 +001211000000           OCT 001211000000     75
02005  0 00214 0 00000        HTR 0,0,140        1211
02006 +001221000000           OCT 001221000000     22
02007 -0 00076 0 00026        MZE 22,0,62        1221
02010 +001221000000           OCT 001221000000     75
02011  0 00215 0 00000        HTR 0,0,141        1221
02012 +001231000000           OCT 001231000000     45
02013  0 00063 0 00000        HTR 0,0,51         1231
02014 +001234000000           OCT 001234000000     62
02015  0 00271 0 00000        HTR 0,0,185        1234
02016 +001240000000           OCT 001240000000     75
02017  0 00135 0 00000        HTR 0,0,93         1240
02020 +001261000000           OCT 001261000000     62
02021  0 00272 0 00000        HTR 0,0,186        1261
02022 +001274000000           OCT 001274000000     22
02023  0 00071 0 00000        HTR 0,0,57         1274
02024 +001307000000           OCT 001307000000     22
02025  0 00252 0 00000        HTR 0,0,170        1307
02026 +001320000000           OCT 001320000000     56
02027  0 00274 0 00000        HTR 0,0,188        1320
02030 +001341000000           OCT 001341000000     92
02031  0 00220 0 00000        HTR 0,0,144        1341
02032 +001345000000           OCT 001345000000     22
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02033  0 00072 0 00000        HTR 0,0,58          1345
02034 +001347000000           OCT 001347000000     92
02035  0 00221 0 00000        HTR 0,0,145         1347
02036 +001377000000           OCT 001377000000     22
02037  0 00073 0 00000        HTR 0,0,59          1377
02040 +001444000000           OCT 001444000000     22
02041  0 00074 0 00000        HTR 0,0,60          1444
02042 +001531000000           OCT 001531000000     56
02043  0 00274 0 00000        HTR 0,0,188         1531
02044 +001634000000           OCT 001634000000     75
02045  0 00251 0 00000        HTR 0,0,169         1634
02046 +001767000000           OCT 001767000000     56
02047  0 00274 0 00000        HTR 0,0,188         1767
02050 +001777000000           OCT 001777000000     75
02051  0 00251 0 00000        HTR 0,0,169         1777
02052 +002230000000           OCT 002230000000     75
02053  0 00273 0 00000        HTR 0,0,187         2230
02054 +002155000000           OCT 002155000000     56
02055  0 00021 0 00000        HTR 0,0,17          2155
02056 +002163000000           OCT 002163000000     56
02057  0 00022 0 00000        HTR 0,0,18          2163
02060 +002655000000           OCT 002655000000     75
02061  0 00031 0 00000        HTR 0,0,25          2655
02062 +003001000000           OCT 003001000000     88
02063  0 00240 0 00000        HTR 0,0,160         3001
02064 +003064000000           OCT 003064000000     65
02065  0 00250 0 00000        HTR 0,0,168         3064
02066 +003143000000           OCT 003143000000     65
02067  0 00060 0 00000        HTR 0,0,48          3143
02070 +003156000000           OCT 003156000000     65
02071  0 00030 0 00000        HTR 0,0,24          3156
02072 +003253000000           OCT 003253000000     88
02073  0 00241 0 00000        HTR 0,0,161         3253
02074 +003540000000           OCT 003540000000     88
02075  0 00136 0 00000        HTR 0,0,94          3540
02076 +004006000000           OCT 004006000000     51
02077  0 00053 0 00000        HTR 0,0,43          4006
02100 +004007000000           OCT 004007000000     51
02101  0 00053 0 00000        HTR 0,0,43          4007
02102 +004026000000           OCT 004026000000     51
02103  0 00103 0 00000        HTR 0,0,67          4026
02104 +004031000000           OCT 004031000000     75
02105  0 00251 0 00000        HTR 0,0,169         4031
02106 +004035000000           OCT 004035000000     51
02107  0 00200 0 00000        HTR 0,0,128         4035
02110 +004040000000           OCT 004040000000     51
02111  0 00007 0 00000        HTR 0,0,7           4040
02112 +004054000000           OCT 004054000000     51
02113  0 00104 0 00000        HTR 0,0,68          4054
02114 +004124000000           OCT 004124000000     51
02115  0 00256 0 00000        HTR 0,0,174         4124
02116 +004155000000           OCT 004155000000     34
02117  0 00105 0 00000        HTR 0,0,69          4155
02120 +004157000000           OCT 004157000000     51
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02121  0 00257 0 00000        HTR 0,0,175          4157
02122 +004160000000           OCT 004160000000      34
02123  0 00010 0 00000        HTR 0,0,8            4160
02124 +004161000000           OCT 004161000000      34
02125  0 00201 0 00000        HTR 0,0,129          4161
02126 +004303000000           OCT 004303000000      75
02127  0 00251 0 00000        HTR 0,0,169          4303
02130 +004307000000           OCT 004307000000      51
02131  0 00064 0 00000        HTR 0,0,52           4307
02132 +004417000000           OCT 004417000000      88
02133  0 00171 0 00000        HTR 0,0,121          4417
02134 +004405000000           OCT 004405000000      34
02135  0 00260 0 00000        HTR 0,0,176          4405
02136 +004453000000           OCT 004453000000      88
02137  0 00137 0 00000        HTR 0,0,95           4453
02140 +004533000000           OCT 004533000000      51
02141  0 00261 0 00000        HTR 0,0,177          4533
02142 +004570000000           OCT 004570000000      34
02143  0 00061 0 00000        HTR 0,0,49           4570
02144 +004623000000           OCT 004623000000      51
02145  0 00254 0 00000        HTR 0,0,172          4623
02146 +004666000000           OCT 004666000000      51
02147  0 00050 0 00000        HTR 0,0,40           4666
02150 +005037000000           OCT 005037000000      34
02151  0 00011 0 00000        HTR 0,0,9            5037
02152 +005232000000           OCT 005232000000      34
02153  0 00255 0 00000        HTR 0,0,173          5232
02154 +005273000000           OCT 005273000000      34
02155  0 00275 0 00000        HTR 0,0,189          5273
02156 +005560000000           OCT 005560000000      34
02157  0 00051 0 00000        HTR 0,0,41           5560
02160 +005721000000           OCT 005721000000      27
02161  0 00262 0 00000        HTR 0,0,178          5721
02162 +005742000000           OCT 005742000000      27
02163  0 00231 0 00000        HTR 0,0,153          5742
02164 +005763000000           OCT 005763000000      27
02165  0 00231 0 00000        HTR 0,0,153          5763
02166 +005764000000           OCT 005764000000      27
02167  0 00231 0 00000        HTR 0,0,153          5764
02170 +005773000000           OCT 005773000000      51
02171  0 00232 0 00000        HTR 0,0,154          5773
02172 +006004000000           OCT 006004000000      32
02173  0 00225 0 00000        HTR 0,0,149          6004
02174 +006044000000           OCT 006044000000      27
02175  0 00012 0 00000        HTR 0,0,10           6044
02176 +006063000000           OCT 006063000000      32
02177  0 00275 0 00000        HTR 0,0,189          6063
02200 +006065000000           OCT 006065000000      27
02201  0 00013 0 00000        HTR 0,0,11           6065
02202 +006234000000           OCT 006234000000      51
02203  0 00014 0 00000        HTR 0,0,12           6234
02204 +006253000000           OCT 006253000000      32
02205  0 00263 0 00000        HTR 0,0,179          6253
02206 +006256000000           OCT 006256000000      32
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02207  0 00263 0 00000        HTR 0,0,179          6256
02210 +006353000000           OCT 006353000000       51
02211  0 00233 0 00000        HTR 0,0,155          6353
02212 +006357000000           OCT 006357000000       29
02213  0 00050 0 00000        HTR 0,0,40           6357
02214 +006373000000           OCT 006373000000       27
02215  0 00227 0 00000        HTR 0,0,151          6373
02216 +006376000000           OCT 006376000000       27
02217  0 00230 0 00000        HTR 0,0,152          6376
02220 +006432000000           OCT 006432000000       27
02221  0 00015 0 00000        HTR 0,0,13           6432
02222 +006475000000           OCT 006475000000       32
02223  0 00275 0 00000        HTR 0,0,189          6475
02224 +006534000000           OCT 006534000000       27
02225  0 00012 0 00000        HTR 0,0,10           6534
02226 +006635000000           OCT 006635000000       27
02227  0 00264 0 00000        HTR 0,0,180          6635
02230 +006710000000           OCT 006710000000       27
02231  0 00226 0 00000        HTR 0,0,150          6710
02232 +006736000000           OCT 006736000000       41
02233  0 00161 0 00000        HTR 0,0,113          6736
02234 +006737000000           OCT 006737000000       41
02235  0 00161 0 00000        HTR 0,0,113          6737
02236 +006744000000           OCT 006744000000       41
02237  0 00106 0 00000        HTR 0,0,70           6744
02240 +006762000000           OCT 006762000000       43
02241  0 00050 0 00000        HTR 0,0,40           6762
02242 +006765000000           OCT 006765000000       37
02243  0 00054 0 00000        HTR 0,0,44           6765
02244 +006767000000           OCT 006767000000       39
02245  0 00107 0 00000        HTR 0,0,71           6767
02246 +007023000000           OCT 007023000000       27
02247  0 00265 0 00000        HTR 0,0,181          7023
02250 +007027000000           OCT 007027000000       37
02251  0 00050 0 00000        HTR 0,0,40           7027
02252 +007045000000           OCT 007045000000       43
02253  0 00016 0 00000        HTR 0,0,14           7045
02254 +007052000000           OCT 007052000000       37
02255  0 00202 0 00000        HTR 0,0,130          7052
02256 +007053000000           OCT 007053000000       37
02257  0 00172 0 00000        HTR 0,0,122          7053
02260 +007056000000           OCT 007056000000       37
02261  0 00202 0 00000        HTR 0,0,130          7056
02262 +007057000000           OCT 007057000000       37
02263  0 00172 0 00000        HTR 0,0,122          7057
02264 +007070000000           OCT 007070000000       37
02265  0 00110 0 00000        HTR 0,0,72           7070
02266 +007073000000           OCT 007073000000       39
02267  0 00266 0 00000        HTR 0,0,182          7073
02270 +007075000000           OCT 007075000000       27
02271  0 00175 0 00000        HTR 0,0,125          7075
02272 +007076000000           OCT 007076000000       27
02273  0 00175 0 00000        HTR 0,0,125          7076
02274 +007100000000           OCT 007100000000       55
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02275  0 00035 0 00000          HTR 0,0,29              7100
02276 +007103000000             OCT 007103000000         27
02277  0 00203 0 00000          HTR 0,0,131             7103
02300 +007110000000             OCT 007110000000         43
02301  0 00234 0 00000          HTR 0,0,156             7110
02302 +007112000000             OCT 007112000000         27
02303  0 00162 0 00000          HTR 0,0,114             7112
02304 +007123000000             OCT 007123000000         27
02305  0 00111 0 00000          HTR 0,0,73              7123
02306 +007135000000             OCT 007135000000         27
02307  0 00204 0 00000          HTR 0,0,132             7135
02310 +007143000000             OCT 007143000000         55
02311  0 00274 0 00000          HTR 0,0,188             7143
02312 +007250000000             OCT 007250000000         27
02313  0 00173 0 00000          HTR 0,0,123             7250
02314 +007303000000             OCT 007303000000         41
02315  0 00016 0 00000          HTR 0,0,14              7303
02316 +007320000000             OCT 007320000000         27  DO NEST
02317  0 00005 0 00000          HTR 0,0,5               7320   DO NESTING
02320 +007454000000             OCT 007454000000        75
02321  0 00032 0 00000          HTR 0,0,26             7454
02322 +007555000000             OCT 007555000000         21
02323  0 00177 0 00000          HTR 0,0,127             7555
02324 +007563000000             OCT 007563000000         21
02325  0 00176 0 00000          HTR 0,0,126             7563
02326 +007620000000             OCT 007620000000         21
02327  0 00276 0 00000          HTR 0,0,190             7620
02330 +007627000000             OCT 007627000000         21
02331  0 00100 0 00000          HTR 0,0,64              7627
02332 +007632000000             OCT 007632000000        36
02333  0 00011 0 00000          HTR 0,0,9                7632
02334 +007720000000             OCT 007720000000         21
02335  0 00077 0 00000          HTR 0,0,63              7720
02336 +007751000000             OCT 007751000000         21
02337 -0 00300 0 00026          MZE 22,0,192            7751
02340 +007751000000             OCT 007751000000         36
02341  0 00062 0 00000          HTR 0,0,50              7751
02342 +007760000000             OCT 007760000000         30
02343  0 00052 0 00000          HTR 0,0,42              7760
02344 +016004000000             OCT 016004000000        75
02345  0 00032 0 00000          HTR 0,0,26             16004
02346  0 01042 0 00000 ERLIST HTR 0,0,ERLIST-1-LOCREC     DEC HAS NUMBER OF ENTRIES SO FAR
                 03534          ORG83534
03534 -0 53400 4 00313 ENDPCH LXD DRUM,4
03535  0 76200 0 00304          RDR 4
03536  0 46000 0 00313          LDA DRUM
03537  0 02000 0 00000          TRA 0
03540  606060606060     MACEN  BCD 7
03541  606060606060
03542  606060606060
03543  606060606060
03544  606060606060
03545  606060606060
03546  606060606060
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GAV

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03547  475125626260          BCD  PRESS START IF YOU WISH TO RE-RUN PROBLEM
03550  626321516360
03551  312660704664
03552  606631623060
03553  634660512540
03554  516445604751
03555  462243254460
03556  606060606060
03557  606060606060
03560  606060606060
03561  606060606060          BCD
03562  606060606060
03563  606060606060
03564  606060606060
03565  606060606060
03566  606060606060
03567  606060606060
03570  606060606060
03571  606060606060
03572  606060606060
03573  465160422570          BCD  OR KEY IN 076000 000141
03574  603145600007
03575  060000006000
03576  000001040160
03577  606060606060
03600  606060606060
03601  606060606060
03602  606060606060
03603  606060606060
03604  606060606060
03605  606060606060          BCD
03606  606060606060
03607  606060606060
03610  606060606060
03611  606060606060
03612  606060606060
03613  606060606060
03614  606060606060
03615  606060606060
03616  606060606060
03617  214524604751          BCD  AND PRESS START IF YOU WISH TO CONTINUE BATCH COMPILING
03620  256262606263
03621  215163603126
03622  607046646066
03623  316230606346
03624  602346456331
03625  456425602221
03626  632330602346
03627  444731433145
03630  276060606060
03631  0 00000 0 00000 XZY
A                00000         END
```

```
1            ORG 3                    FORCE NEW RECORD
1                        00003          ORG 3                 FORCE NEW RECORD
      00003   0 01303 0 01330          HTR X-1,0,LOCREC      CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00003          TXH 3                 STOP NOT IN THIS LIST
      01304   0 50000 0 01235          CLA ERWORD
      01305   0 77100 0 00022          ARS 18
      01306   0 07400 4 00730          TSX OCTBCD,4
      01307   0 60200 0 01315          SLW NOLIST
      01310   0 07400 4 00740          TSX PRINT,4
      01311   0 01331 0 01313          HTR PR,0,PR+14
      01312   0 02000 0 00221          TRA DIGRTN
      01313   606060606060     PR      BCD 2
      01314   606060606060
 A    01315   0 00000 0 00000 NOLIST HTR
      01316   606330316260             BCD   THIS ERROR IS NOT LISTED IN THE DIAGNOSTIC PROGRAM ERROR LI
      01317   255151465160
      01320   316260454663
      01321   604331626325
      01322   246031456063
      01323   302560243121
      01324   274546626331
      01325   236047514627
      01326   512144602551
      01327   514651604331
      01330   626333606060             BCD 1ST.
      01331   0 00000 0 00000 X
 A                        00000        END
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1            ORG 4                  FORCE NEW RECORD
1                        00004         ORG 4                  FORCE NEW RECORD
      00004   0 01303 0 03533         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
TD    01303   3 00000 0 00004         TXH 4                  1 DOUBLE PRIME
      01304  -0 53400 1 00030         LXD 24,1               IN DEC OF 24,1 NUMBER OF ENTRIES
      01305   2 00001 1 01307         TIX A,1,1              MADE BY NON-ARITHMETIC DIAGNOSTIC
      01306  -0 53400 1 01232         LXD ZERO,1
      01307  -0 63400 1 01334 A       SXD NXTER,1            SET END OF ERROR LIST TEST
      01310  -0 53400 1 01232         LXD ZERO,1
      01311   0 76600 0 00361 AB      WPR                    SPACE BETWEEN ERROR COMMENTS
      01312  -0 53400 2 01232         LXD ZERO,2
      01313   0 50000 1 77777         CLA LIST,1
      01314  -0 32000 0 01230         ANA DECMSK
      01315   0 40200 0 01234         SUB PREFX1             GET UNCOMPLIMENTED LOCATION
      01316  -0 32000 0 01230         ANA DECMSK
      01317   0 34000 2 03532 AE      CAS ER1PRM,2           2 WORD ENTRIES IN THIS LIST
      01320   0 02000 0 01322         TRA AC
      01321   0 02000 0 01325         TRA BHAV
      01322   1 00002 2 01323 AC      TXI AD,2,2
      01323  -3 00076 2 01317 AD      TXL AE,2,62            62 STOPS IN LIST SO FAR
      01324   0 02000 0 01330         TRA NO                 CANNOT IDENTIFY
      01325   0 50000 2 03533 BHAV    CLA ER1PRM+1,2
      01326   0 62100 0 01327         STA BA
A     01327   0 02000 0 00000 BA      TRA
      01330   0 76400 0 00201 NO      BST 1                  SPACE BACK TO PRINT RECORD ZERO
      01331   0 76400 0 00201         BST 1
      01332   0 60100 0 01235         STO ERWORD             AND SAVE OCTAL LOCATION
      01333   0 02000 0 00137         TRA LXDA
      01334  -3 00000 1 01311 NXTER   TXL AB,1,0             NUMBER OF ERROR ENTRIES MINUS 1
      01335   0 76600 0 00361         WPR                    FINISHED WITH ERROR LIST, SPACE PRINTER
      01336   0 50000 0 00316         CLA HTR4
      01337   0 60100 0 00271         STO DONE+3
      01340   0 02000 0 00272         TRA SPEND
      01341   0 50000 1 77776 TEIFNO  CLA LIST-1,1           BETA, WHICH IS DUPLICATED IN SOURCE
      01342  -0 32000 0 01227         ANA ADDMSK             PROGRAM, IS IN ADDRESS OF LIST
      01343   0 07400 4 00676         TSX BINDEC,4
      01344   0 60200 0 01355         SLW TBETA
      01345   0 07400 4 00740         TSX PRINT,4
      01346   0 01365 0 01350         HTR PRTEIF,0,PRTEIF+13
      01347   1 00002 1 01334         TXI NXTER,1,2          2WORD ENTRIES IN ERROR LIST
      01350   606060606060     PRTEIF BCD 2
      01351   606060606060
      01352   633025602646            BCD 3THE FORMULA NUMBER
      01353   514464432160
      01354   456444222551
A     01355   0 00000 0 00000 TBETA   HTR
      01356   603162602464            BCD 7 IS DUPLICATED IN THE SOURCE PROGRAM
      01357   474331232163
      01360   252460314560
      01361   633025606246
      01362   645123256047
      01363   514627512144
      01364   606060606060
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01365  0 50000 0 01541 MINB1   CLA ADTMI          SELECT ADDRESS OF PARTICULAR TIFGO ENTRY
01366  0 73400 4 00000         PAX 0,4            FOR PRINT ROUTINE
01367  0 62100 0 01504         STA WHICHA
01370 -0 50000 0 01445         CAL N1             AND PICK UP BCD FOR COMMENT
01371  1 00042 4 01451         TXI BETAPR,4,34    ADD LENGTH OF COMMENT TO ADDRESS
01372  0 50000 0 01541 MINB2   CLA ADTMI
01373  0 73400 4 00000         PAX 0,4
01374  0 62100 0 01504         STA WHICHA
01375 -0 50000 0 01446         CAL N2
01376  1 00042 4 01451         TXI BETAPR,4,34
01377  0 50000 0 01541 MINB3   CLA ADTMI
01400  0 73400 4 00000         PAX 0,4
01401  0 62100 0 01504         STA WHICHA
01402 -0 50000 0 01447         CAL N3
01403  1 00042 4 01451         TXI BETAPR,4,34
01404  0 50000 0 01542 TSXTFO  CLA ADTZR
01405  0 73400 4 00000         PAX 0,4
01406  0 62100 0 01504         STA WHICHA
01407 -0 50000 0 01444         CAL N
01410  1 00042 4 01451         TXI BETAPR,4,34
01411  0 50000 0 01543 BTIFG1  CLA ADT1
01412  0 73400 4 00000         PAX 0,4
01413  0 62100 0 01504         STA WHICHA
01414 -0 50000 0 01443         CAL SOMN
01415  1 00042 4 01451         TXI BETAPR,4,34
01416  0 50000 0 01544 BTIFG2  CLA ADT2
01417  0 02000 0 01412         TRA BTIFG1+1
01420  0 50000 0 01545 B1TIF3  CLA ADT3
01421  0 02000 0 01366         TRA MINB1+1
01422  0 50000 0 01545 B2TIF3  CLA ADT3
01423  0 02000 0 01373         TRA MINB2+1
01424  0 50000 0 01546 B1TIF4  CLA ADT4
01425  0 02000 0 01366         TRA MINB1+1
01426  0 50000 0 01546 B2TIF4  CLA ADT4
01427  0 02000 0 01373         TRA MINB2+1
01430  0 50000 0 01547 B1TIF5  CLA ADT5
01431  0 02000 0 01366         TRA MINB1+1
01432  0 50000 0 01547 B2TIF5  CLA ADT5
01433  0 02000 0 01373         TRA MINB2+1
01434  0 50000 0 01550 TIF6B   CLA ADT6
01435  0 02000 0 01405         TRA TSXTFO+1
01436  0 50000 0 01551 DONOBT  CLA ADDO             SAME PROCESS AS FOR TIFGO ENTRIES
01437  0 73400 4 00000         PAX 0,4
01440  0 62100 0 01504         STA WHICHA
01441 -0 50000 0 01450         CAL B
01442  1 00016 4 01451         TXI BETAPR,4,14
01443  624644256045     SOMN   BCD 1SOME N
01444  456060606060     N      BCD 1N
01445  450160606060     N1     BCD 1N1
01446  450260606060     N2     BCD 1N2
01447  450360606060     N3     BCD 1N3
01450  226060606060     B      BCD 1B
01451 -0 63400 4 01504 BETAPR  SXD WHICHA,4       SOME TIFGO, OR DO, STATEMENT REFERS TO
01452  0 60200 0 01526         SLW BETAWD         A NONEXISTANT BETA
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01453  0 56000 0 01526          LDQ BETAWD              MOVE WORD INTO COMMENT
01454 -0 50000 0 01525          CAL BETAWD-1
01455  0 77100 0 00022          ARS 18
01456 -0 76300 0 00022          LGL 18
01457  0 60200 0 01525          SLW BETAWD-1
01460 -0 76300 0 00022          LGL 18
01461  0 56000 0 00717          LDQ BLANKS
01462 -0 76300 0 00022          LGL 18
01463  0 60200 0 01526          SLW BETAWD
01464  0 50000 1 77777          CLA LIST,1
01465  0 07400 4 00613          TSX EXBETA,4
01466  0 07400 4 00602          TSX LAJUST,4
01467  0 60200 0 01513          SLW FORMNB
01470  0 56000 0 01513          LDQ FORMNB              MOVE EXTERNAL FORMULA NUMBER
01471 -0 50000 0 01512          CAL FORMNB-1            INTO COMMENT
01472  0 77100 0 00006          ARS 6
01473 -0 76300 0 00006          LGL 6
01474  0 60200 0 01512          SLW FORMNB-1
01475 -0 76300 0 00036          LGL 30
01476  0 56000 0 00717          LDQ BLANKS
01477 -0 76300 0 00006          LGL 6
01500  0 60200 0 01513          SLW FORMNB
01501  0 07400 4 00740          TSX PRINT,4
01502  0 01541 0 01506          HTR NOBETA,0,NOBETA+27
01503  0 07400 4 00740          TSX PRINT,4
01504  0 00000 0 00000 WHICHA
01505  1 00001 1 01334          TXI NXTER,1,1           1 WORD ENTRY IN ERROR LIST
01506  606060606060     NOBETA BCD 2
01507  606060606060
01510  626321632544             BCD 3STATEMENT NUMBER
01511  254563604564
01512  442225516060
A 01513  0 00000 0 00000 FORMNB HTR
01514  512526255162             BCD  REFERS TO A NON-EXISTENT FORMULA NUMBER CORRESPONDING TO
01515  606346602160
01516  454645402567
01517  316263254563
01520  602646514464
01521  432160456444
01522  222551602346
01523  515125624746
01524  452431452760
01525  634660606060
01526  606060606060     BETAWD BCD 6
01527  606060606060
01530  606060606060
01531  606060606060
01532  606060606060
01533  606060606060
01534  314560633025             BCD 5IN THE TYPE OF STATEMENT
01535  606370472560
01536  462660626321
01537  632544254563
01540  606060606060
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01541  0 00000 0 01552 ADTMI   HTR TISMIN
01542  0 00000 0 01614 ADTZR   HTR TISZRO
01543  0 00000 0 01656 ADT1    HTR TIS1
01544  0 00000 0 01720 ADT2    HTR TIS2
01545  0 00000 0 01762 ADT3    HTR TIS3
01546  0 00000 0 02024 ADT4    HTR TIS4
01547  0 00000 0 02066 ADT5    HTR TIS5
01550  0 00000 0 02130 ADT6    HTR TIS6
01551  0 00000 0 02172 ADDO    HTR DOS
01552  606060606060     TISMIN BCD 4
01553  606060606060
01554  606060606060
01555  606060606060
01556  602160603126            BCD   A  IF ( E ) N1, N2, N3
01557  607460256034
01560  604501736045
01561  027360450360
01562  606060606060
01563  606060606060
01564  606060606060
01565  606060606060
01566  606060606060
01567  606060606060
01570  606060606060            BCD
01571  606060606060
01572  606060606060
01573  606060606060
01574  606060606060
01575  606060606060
01576  606060606060
01577  606060606060
01600  606060606060
01601  606060606060
01602  606060606060            BCD
01603  606060606060
01604  606060606060
01605  606060606060
01606  606060606060
01607  606060606060
01610  606060606060
01611  606060606060
01612  606060606060
01613  606060606060
01614  606060606060     TISZRO BCD 4
01615  606060606060
01616  606060606060
01617  606060606060
01620  602160602746            BCD   A  GO TO N
01621  606346604560
01622  606060606060
01623  606060606060
01624  606060606060
01625  606060606060
01626  606060606060
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01627  606060606060
01630  606060606060
01631  606060606060
01632  606060606060          BCD
01633  606060606060
01634  606060606060
01635  606060606060
01636  606060606060
01637  606060606060
01640  606060606060
01641  606060606060
01642  606060606060
01643  606060606060
01644  606060606060          BCD
01645  606060606060
01646  606060606060
01647  606060606060
01650  606060606060
01651  606060606060
01652  606060606060
01653  606060606060
01654  606060606060
01655  606060606060
01656  606060606060    TIS1  BCD 4
01657  606060606060
01660  606060606060
01661  606060606060
01662  602160602746          BCD   A  GO TO L ( N1, N2, NM )
01663  606346604360
01664  746045017360
01665  450273604544
01666  603460606060
01667  606060606060
01670  606060606060
01671  606060606060
01672  606060606060
01673  606060606060
01674  606060606060          BCD
01675  606060606060
01676  606060606060
01677  606060606060
01700  606060606060
01701  606060606060
01702  606060606060
01703  606060606060
01704  606060606060
01705  606060606060
01706  606060606060          BCD
01707  606060606060
01710  606060606060
01711  606060606060
01712  606060606060
01713  606060606060
01714  606060606060
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01715  606060606060
01716  606060606060
01717  606060606060
01720  606060606060     TIS2   BCD 4
01721  606060606060
01722  606060606060
01723  606060606060
01724  602160602746            BCD   A  GO TO ( N1, N2, NM ) J
01725  606346607460
01726  450173604502
01727  736045446034
01730  604160606060
01731  606060606060
01732  606060606060
01733  606060606060
01734  606060606060
01735  606060606060
01736  606060606060            BCD
01737  606060606060
01740  606060606060
01741  606060606060
01742  606060606060
01743  606060606060
01744  606060606060
01745  606060606060
01746  606060606060
01747  606060606060
01750  606060606060            BCD
01751  606060606060
01752  606060606060
01753  606060606060
01754  606060606060
01755  606060606060
01756  606060606060
01757  606060606060
01760  606060606060
01761  606060606060
01762  606060606060     TIS3   BCD 4
01763  606060606060
01764  606060606060
01765  606060606060
01766  602160603126            BCD   A  IF ( SENSE SWITCH K ) N1, N2
01767  607460622545
01770  622560626631
01771  632330604260
01772  346045017360
01773  450260606060
01774  606060606060
01775  606060606060
01776  606060606060
01777  606060606060
02000  606060606060            BCD 9
02001  606060606060
02002  606060606060
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02003  606060606060
02004  606060606060
02005  606060606060
02006  606060606060
02007  606060606060
02010  606060606060
02011  465160606060          BCD 1OR
02012  602160603126          BCD   A  IF ( SENSE LIGHT K ) N1, N2
02013  607460622545
02014  622560433127
02015  306360426034
02016  604501736045
02017  026060606060
02020  606060606060
02021  606060606060
02022  606060606060
02023  606060606060
02024  606060606060    TIS4  BCD 4
02025  606060606060
02026  606060606060
02027  606060606060
02030  602160603126          BCD   A  IF DIVIDE CHECK N1, N2
02031  602431653124
02032  256023302523
02033  426045017360
02034  450260606060
02035  606060606060
02036  606060606060
02037  606060606060
02040  606060606060
02041  606060606060
02042  606060606060          BCD
02043  606060606060
02044  606060606060
02045  606060606060
02046  606060606060
02047  606060606060
02050  606060606060
02051  606060606060
02052  606060606060
02053  606060606060
02054  606060606060          BCD
02055  606060606060
02056  606060606060
02057  606060606060
02060  606060606060
02061  606060606060
02062  606060606060
02063  606060606060
02064  606060606060
02065  606060606060
02066  606060606060    TIS5  BCD 4
02067  606060606060
02070  606060606060
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02071  606060606060
02072  602160603126          BCD   A  IF ACCUMULATOR OVERFLOW N1, N2
02073  602123236444
02074  644321634651
02075  604665255126
02076  434666604501
02077  736045026060
02100  606060606060
02101  606060606060
02102  606060606060
02103  606060606060
02104  606060606060          BCD 9
02105  606060606060
02106  606060606060
02107  606060606060
02110  606060606060
02111  606060606060
02112  606060606060
02113  606060606060
02114  606060606060
02115  465160606060          BCD 10R
02116  602160603126          BCD   A  IF QUOTIENT OVERFLOW N1, N2
02117  605064466331
02120  254563604665
02121  255126434666
02122  604501736045
02123  026060606060
02124  606060606060
02125  606060606060
02126  606060606060
02127  606060606060
02130  606060606060    TIS6  BCD 4
02131  606060606060
02132  606060606060
02133  606060606060
02134  602160602162          BCD   A  ASSIGN K TO N
02135  623127456042
02136  606346604560
02137  606060606060
02140  606060606060
02141  606060606060
02142  606060606060
02143  606060606060
02144  606060606060
02145  606060606060
02146  606060606060          BCD
02147  606060606060
02150  606060606060
02151  606060606060
02152  606060606060
02153  606060606060
02154  606060606060
02155  606060606060
02156  606060606060
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02157  606060606060
02160  606060606060            BCD
02161  606060606060
02162  606060606060
02163  606060606060
02164  606060606060
02165  606060606060
02166  606060606060
02167  606060606060
02170  606060606060
02171  606060606060
02172  606060606060     DOS    BCD 4
02173  606060606060
02174  606060606060
02175  606060606060
02176  602160602446            BCD   A  DO B I = N1, N2, N3
02177  602260316013
02200  604501736045
02201  027360450360
02202  606060606060
02203  606060606060
02204  606060606060
02205  606060606060
02206  606060606060
02207  606060606060
02210 -0 53400 4 02256 TSXH    LXD XTABLE,4          FIND THE KIND OF TIFGO ENTRY WHICH
02211  0 50000 1 77777         CLA LIST,1            IS TRYING TO TURN CONTROL OVER TO A
02212  0 76700 0 00022         ALS 18                NON-EXECUTABLE STATEMENT
02213 -0 32000 0 01230         ANA DECMSK
02214  0 40200 0 01234         SUB PREFX1
02215 -0 32000 0 01230         ANA DECMSK
02216  0 34000 4 02256 TSHCAS  CAS XTABLE,4
02217  0 02000 0 02221         TRA TSXH1
02220  0 02000 0 02223         TRA HVNOX
02221  2 00002 4 02216 TSXH1   TIX TSHCAS,4,2
02222  0 02000 0 01330         TRA NO                CANNOT IDENTIFY, PRINT OCTAL LOCATION
02223  0 50000 4 02257 HVNOX   CLA XTABLE+1,4
02224  0 62100 0 02225         STA TSHTRA
A 02225  0 02000 0 00000 TSHTRA TRA
02226 +000316000000            OCT 000316000000
02227  0 00000 0 02257         HTR SAVEB1
02230 +000327000000            OCT 000327000000
02231  0 00000 0 02261         HTR SAVEB2
02232 +000337000000            OCT 000337000000
02233  0 00000 0 02262         HTR SAVEB3
02234 +000352000000            OCT 000352000000
02235  0 00000 0 02263         HTR TIFOB
02236 +000374000000            OCT 000374000000
02237  0 00000 0 02265         HTR TRADX1
02240 +000421000000            OCT 000421000000
02241  0 00000 0 02267         HTR TRADX2
02242 +000443000000            OCT 000443000000
02243  0 00000 0 02271         HTR TIF3B1
02244 +000453000000            OCT 000453000000
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02245  0 00000 0 02273          HTR TIF3B2
02246 +000467000000             OCT 000467000000
02247  0 00000 0 02274          HTR TIF4B1
02250 +000477000000             OCT 000477000000
02251  0 00000 0 02276          HTR TIF4B2
02252 +000513000000             OCT 000513000000
02253  0 00000 0 02277          HTR TIF5B1
02254 +000523000000             OCT 000523000000
02255  0 00000 0 02300          HTR TIF5B2
02256  0 00030 0 00000 XTABLE   HTR 0,0,24
02257  0 50000 0 01541 SAVEB1   CLA ADTMI
02260  0 02000 0 02301          TRA NOXBTA
02261  0 02000 0 02257 SAVEB2   TRA SAVEB1
02262  0 02000 0 02257 SAVEB3   TRA SAVEB1
02263  0 50000 0 01542 TIFOB    CLA ADTZR
02264  0 02000 0 02301          TRA NOXBTA
02265  0 50000 0 01543 TRADX1   CLA ADT1
02266  0 02000 0 02301          TRA NOXBTA
02267  0 50000 0 01544 TRADX2   CLA ADT2
02270  0 02000 0 02301          TRA NOXBTA
02271  0 50000 0 01545 TIF3B1   CLA ADT3
02272  0 02000 0 02301          TRA NOXBTA
02273  0 02000 0 02271 TIF3B2   TRA TIF3B1
02274  0 50000 0 01546 TIF4B1   CLA ADT4
02275  0 02000 0 02301          TRA NOXBTA
02276  0 02000 0 02274 TIF4B2   TRA TIF4B1
02277  0 02000 0 02300 TIF5B1   TRA TIF5B2
02300  0 50000 0 01547 TIF5B2   CLA ADT5
02301  0 62100 0 02343 NOXBTA   STA ADDTD          A TIFGO STATEMENT HAS ATTEMPTED TO
02302  0 40000 0 02401          ADD DEC34          TURN OVER CONTROL OF THE PROGRAM TO A
02303  0 76700 0 00022          ALS 18             NON EXECUTABLE STATEMENT
02304  0 62200 0 02343          STD ADDTD
02305  0 50000 1 77776          CLA LIST-1,1       GET EXTERNAL NUMBER OF TIFGO ENTRY
02306  0 07400 4 00613          TSX EXBETA,4
02307  0 07400 4 00602          TSX LAJUST,4
02310  0 60200 0 01257          SLW ERAS
02311 -0 50000 0 02364          CAL TIFOR
02312  0 77100 0 00014          ARS 12
02313  0 56000 0 01257          LDQ ERAS
02314 -0 76300 0 00014          LGL 12
02315  0 60200 0 02364          SLW TIFOR
02316 -0 76300 0 00030          LGL 24
02317  0 56000 0 00717          LDQ BLANKS
02320 -0 76300 0 00014          LGL 12
02321  0 60200 0 02365          SLW TIFOR+1
02322  0 50000 1 77776          CLA LIST-1,1       GET EXTERNAL NUMBER OF STATEMENT
02323  0 77100 0 00022          ARS 18             WHICH IS NOT EXECUTABLE
02324  0 07400 4 00613          TSX EXBETA,4
02325  0 07400 4 00602          TSX LAJUST,4
02326  0 60200 0 01257          SLW ERAS
02327 -0 50000 0 02351          CAL NONB-1
02330  0 56000 0 01257          LDQ ERAS
02331  0 77100 0 00006          ARS 6
02332 -0 76300 0 00006          LGL 6
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     02333  0 60200 0 02351          SLW NONB-1
     02334 -0 76300 0 00036          LGL 30
     02335  0 56000 0 00717          LDQ BLANKS
     02336 -0 76300 0 00006          LGL 6
     02337  0 60200 0 02352          SLW NONB
     02340  0 07400 4 00740          TSX PRINT,4
     02341  0 02401 0 02345          HTR BTNONX,0,BTNONX+28
     02342  0 07400 4 00740          TSX PRINT,4
A    02343  0 00000 0 00000 ADDTD    HTR
     02344  1 00002 1 01334          TXI NXTER,1,2          2WORD ENTRY IN ERROR LIST
     02345  606060606060     BTNONX BCD 2
     02346  606060606060
     02347  626321632544            BCD 2STATEMENT NU
     02350  254563604564
     02351  442225516060            BCD 1MBER
A    02352  0 00000 0 00000 NONB    HTR
     02353  316260454663            BCD 9IS NOT EXECUTABLE.  IT IS REFERRED TO BY STATEMENT NUM
     02354  602567252364
     02355  632122432533
     02356  606031636031
     02357  626051252625
     02360  515125246063
     02361  466022706062
     02362  632163254425
     02363  456360456444
     02364  222551606060     TIFOR  BCD 7BER
     02365  606060606060
     02366  606060606060
     02367  606060606060
     02370  606060606060
     02371  606060606060
     02372  606060606060
     02373  663031233060            BCD 6WHICH IS OF THE FOLLOWING TYPE
     02374  316260462660
     02375  633025602646
     02376  434346663145
     02377  276063704725
     02400  606060606060
     02401  0 00000 0 00042 DEC34   HTR 34
     02402  0 50000 1 77776 DOBTNX CLA LIST-1,1          BETA IS NOT AN EXECUTABLE STATEMENT
     02403  0 60100 0 00527         STO ALFBET            IN ALPHA DO BETA
     02404  0 50000 1 77775         CLA LIST-2,1
     02405  0 60100 0 00530         STO SYM
     02406  0 07400 4 00740         TSX PRINT,4
     02407  0 02426 0 02412         HTR DOBTX,0,DOBTX+12
     02410  0 07400 4 00505         TSX FX4PR,4           PRINT DO STATEMENT
     02411  1 00003 1 01334         TXI NXTER,1,3         3 WORD ENTRY IN ERROR LIST
     02412  606060606060     DOBTX  BCD 2
     02413  606060606060
     02414  633025605121            BCD  THE RANGE OF THIS DO ENDS WITH A NON-EXECUTABLE STATEMENT
     02415  452725604626
     02416  606330316260
     02417  244660254524
     02420  626066316330
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02421  602160454645
02422  402567252364
02423  632122432560
02424  626321632544
02425  254563606060
02426  0 50000 1 77776 CONBET CLA LIST-1,1          IN ALPHA DO BETA, BETA IS A CONDITIONAL
02427  0 60100 0 00527        STO ALFBET            TRANSFER, THAT IS, A TIFGO ENTRY
02430  0 50000 1 77775        CLA LIST-2,1
02431  0 60100 0 00530        STO SYM
02432  0 07400 4 00740        TSX PRINT,4
02433  0 02453 0 02436        HTR CONBT,0,CONBT+13
02434  0 07400 4 00505        TSX FX4PR,4           PRINT DO STATEMENT
02435  1 00003 1 01334        TXI NXTER,1,3         3 WORD ENTRY IN ERROR LIST
02436  606060606060    CONBT  BCD 2
02437  606060606060
02440  633025605121           BCD  THE RANGE OF THIS DO ENDS WITH A CONDITIONAL TRANSFER STATEM
02441  452725604626
02442  606330316260
02443  244660254524
02444  626066316330
02445  602160234645
02446  243163314645
02447  214360635121
02450  456226255160
02451  626321632544
02452  254563606060           BCD 1ENT
02453  0 50000 1 77776 DOALNX CLA LIST-1,1          ALPHA PLUS 1, IN ALPHA DO BETA,
02454  0 60100 0 00527        STO ALFBET            IS NOT EXECUTABLE
02455  0 50000 1 77775        CLA LIST-2,1
02456  0 60100 0 00530        STO SYM
02457  0 07400 4 00740        TSX PRINT,4
02460  0 02502 0 02463        HTR DOALX,0,DOALX+15
02461  0 07400 4 00505        TSX FX4PR,4           PRINT DO STATEMENT
02462  1 00003 1 01334        TXI NXTER,1,3         3 WORD ENTRIES IN ERROR LIST
02463  606060606060    DOALX  BCD 2
02464  606060606060
02465  633025606263           BCD  THE STATEMENT IMMEDIATELY FOLLOWING THIS DO IS NOT AN EXECUT
02466  216325442545
02467  636031444425
02470  243121632543
02471  706026464343
02472  466631452760
02473  633031626024
02474  466031626045
02475  466360214560
02476  256725236463
02477  212243256062           BCD 3ABLE STATEMENT
02500  632163254425
02501  456360606060
02502  0 50000 1 77777 CHBTSX CLA LIST,1            THE SYMBOL, OR A VARIABLE IN A DO STATEMENT
02503  0 76700 0 00022        ALS 18                DOES NOT BEGIN WITH I J K ETC
02504 -0 32000 0 01230        ANA DECMSK
02505  0 40200 0 01234        SUB PREFX1            CONVERT TSX TO NUMBER OF STOP WHERE THIS
02506 -0 32000 0 01230        ANA DECMSK
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02507  0 53400 4 01232          LXA ZERO,4              WAS PICKED UP
02510  0 34000 4 02621 CHBCAS   CAS BLIST-1,4           DETERMINE WHETHER SYMBOL, N1, N2 OR N3
02511  0 02000 0 02513          TRA CHBTXI
02512  0 02000 0 02516          TRA HVCHB
02513  1 00002 4 02514 CHBTXI   TXI CHBTXL,4,2
02514 -3 00006 4 02510 CHBTXL   TXL CHBCAS,4,6
02515  0 02000 0 01330          TRA NO                  CANNOT IDENTIFY, PRINT ERROR RECORD ZERO
02516 -0 50000 4 02622 HVCHB    CAL BLIST,4             BCD FOR N1,N2 OR N3, BUT INDEXING
02517  0 10000 0 02623          TZE CHBDO               SYMBOL IS ZERO, WILL BE PROCESS BY ITSELF
02520  0 56000 4 02622          LDQ BLIST,4
02521 -0 50000 0 02602          CAL THE                 MOVE PARAMETER INTO COMMENT
02522  0 77100 0 00014          ARS 12
02523 -0 76300 0 00014          LGL 12
02524  0 60200 0 02602          SLW THE
02525 -0 76300 0 00006          LGL 6
02526  0 56000 0 02603          LDQ THE+1
02527 -0 77300 0 00006          RQL 6                   SHIFT FIRST BLANK OUT OF MQ
02530 -0 76300 0 00036          LGL 30
02531  0 60200 0 02603          SLW THE+1
02532  0 50000 1 77775          CLA LIST-2,1            ARRANGE TO PRINT DO STATEMENT
02533  0 60100 0 00527          STO ALFBET
02534  0 50000 1 77774          CLA LIST-3,1
02535  0 60100 0 00530          STO SYM
02536 -0 50000 1 77776          CAL LIST-1,1            REMOVE ZEROS FROM VARIABLE NAME AND
02537  0 07400 4 00543          TSX ZEROUT,4            ADJUST TO RIGHT
02540  0 07400 4 00565          TSX RAJUST,4
02541  0 60200 0 01257          SLW ERAS
02542  0 56000 0 01257          LDQ ERAS
02543 -0 50000 0 02606          CAL DOPRAM              PUT HALF OF WORD IN COMMENT
02544  0 77100 0 00014          ARS 12
02545 -0 76300 0 00014          LGL 12
02546  0 60200 0 02606          SLW DOPRAM
02547 -0 76300 0 00030          LGL 24
02550  0 56000 0 02607          LDQ DOPRAM+1            PUT IN OTHER HALF
02551 -0 77300 0 00030          RQL 24
02552 -0 76300 0 00014          LGL 12
02553  0 60200 0 02607          SLW DOPRAM+1
02554  0 07400 4 00740          TSX PRINT,4
02555  0 02600 0 02562          HTR VRBL,0,VRBL+14
02556  0 07400 4 00505          TSX FX4PR,4             PRINT DO STATEMENT
02557  0 07400 4 00740          TSX PRINT,4
02560  0 02613 0 02600          HTR VRPR,0,VRPR+11
02561  1 00004 1 01334          TXI NXTER,1,4           4 WORD ENTRIES IN ERROR LIST
02562  606060606060     VRBL   BCD 2
02563  606060606060
02564  214560314563             BCD  AN INTEGER VARIABLE MUST BEGIN WITH I J K L M OR N.  IN THE
02565  252725516065
02566  215131212243
02567  256044646263
02570  602225273145
02571  606631633060
02572  316041604260
02573  436044604651
02574  604533606031
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02575  456063302560
02576  244660626321            BCD 2DO STATEMENT
02577  632544254563
02600  606060606060     VRPR   BCD 2
02601  606060606060
02602  633025606060     THE    BCD 1THE
02603  606031452425            BCD 3  INDEXING PARAMET
02604  673145276047
02605  215121442563
02606  255173606060     DOPRAM BCD 1ER,
02607  606060607360            BCD 4     , IS INCORRECT.
02610  316260314523
02611  465151252363
02612  336060606060
02613 +000716000000            OCT 000716000000
02614  035124606060            BCD 13RD                IJKN3 IN NON-ARITH DIAG
02615 +000703000000            OCT 000703000000
02616  024524606060            BCD 12ND                IJKN2
02617 +000670000000            OCT 000670000000
02620  016263606060            BCD 11ST                IJKN1
02621 +000656000000            OCT 000656000000        IJKSYM
02622  0 00000 0 00000 BLIST   HTR 0                   ZERO INDICATES TO PROGRAM THIS IS SYMBOL
02623  0 50000 1 77775 CHBDO   CLA LIST-2,1             ARRANGE TO PRINT DO STATEMENT
02624  0 60100 0 00527         STO ALFBET
02625  0 50000 1 77774         CLA LIST-3,1
02626  0 60100 0 00530         STO SYM
02627  0 07400 4 00740         TSX PRINT,4
02630  0 02656 0 02633         HTR CHDOPR,0,CHDOPR+19
02631  0 07400 4 00505         TSX FX4PR,4
02632  1 00004 1 01334         TXI NXTER,1,4           4 WORD ENTRIES IN ERROR LIST
02633  606060606060     CHDOPR BCD 2
02634  606060606060
02635  214560314563            BCD  AN INTEGER VARIABLE MUST BEGIN WITH I J K L M OR N.  THE IND
02636  252725516065
02637  215131212243
02640  256044646263
02641  602225273145
02642  606631633060
02643  316041604260
02644  436044604651
02645  604533606063
02646  302560314524
02647  256760627044            BCD 7EX SYMBOL IS INCORRECT IN THE STATEMENT
02650  224643603162
02651  603145234651
02652  512523636031
02653  456063302560
02654  626321632544
02655  254563606060
02656 -0 53400 2 01232 CHATSX LXD ZERO,2               AN ILLEGAL CHARACTER HAS BEEN FOUND IN
02657  0 50000 1 77777         CLA LIST,1              SOME NAME
02660  0 76700 0 00022         ALS 18                  UNCOMPLIMENTED LOCATION WILL SHOW
02661 -0 32000 0 01230         ANA DECMSK              KIND OF STATEMENT USING THIS NAME
02662  0 40200 0 01234         SUB PREFX1
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02663 -0 32000 0 01230          ANA DECMSK
02664  0 34000 2 02704 CB       CAS CHA2WD,2          IS THIS FROM ONE OF THE SIZ, COMMON
02665  0 02000 0 02667          TRA TXIC              FUNCTION ETC., STATEMENTS
02666  0 02000 0 02717          TRA PR2WD
02667  1 00002 2 02670 TXIC     TXI CA,2,2
02670 -3 00006 2 02664 CA       TXL CB,2,6
02671  0 34000 2 02716 CC       CAS CHA3WD,2          OR DOES THE NAME APPEAR IN A DO STATEMENT
02672  0 02000 0 02674          TRA CTIX
02673  0 02000 0 03020          TRA PR3WD
02674  2 00002 2 02671 CTIX     TIX CC,2,2
02675  0 02000 0 01330          TRA NO                PRINT UNIDENTIFYABLE STOP
02676 +000131000000             OCT 000131000000
02677  0 00000 0 03000          HTR FRSB              TSXA IN NON ARITH DIAG
02700 +000143000000             OCT 000143000000
02701  0 00000 0 02770          HTR SZ                TSXB
02702 +000163000000             OCT 000163000000
02703  0 00000 0 03010          HTR SBAR              TSXC
02704 +000175000000     CHA2WD  OCT 000175000000
02705  0 00000 0 02760          HTR CMON              TSXD
02706 +000653000000             OCT 000653000000
02707  0 00000 0 00000          HTR 0                 PUNSYN
02710 +000665000000             OCT 000665000000
02711  600162636031             BCD 1 1ST I           PUNN1
02712 +000700000000             OCT 000700000000
02713  600245246031             BCD 1 2ND I           PUNN2
02714 +000713000000             OCT 000713000000
02715  600351246031             BCD 1 3RD I           PUNN3
02716  0 00000 0 00000 CHA3WD
02717  0 50000 2 02705 PR2WD    CLA CHA2WD+1,2        PRINT IDENTIFICATION OF STATEMENT
02720  0 62100 0 02722          STA CHACLA            IN WHICH NAME WAS FOUND
02721 -0 53400 2 01232          LXD ZERO,2            TRANSFER 8 WORDS ABOUT STATEMENT
02722  0 50000 2 00000 CHACLA   CLA 0,2               INTO COMMENT
02723  0 60100 2 02750          STO DA,2
02724  1 77777 2 02725          TXI CHATXH,2,-1
02725  3 77770 2 02722 CHATXH   TXH CHACLA,2,-8
02726 -0 50000 1 77776          CAL LIST-1,1
02727  0 07400 4 00543          TSX ZEROUT,4          UNPACK NAME AND MOVE TO RIGHT
02730  0 07400 4 00565          TSX RAJUST,4
02731  0 60200 0 02741          SLW D
02732  0 07400 4 00740          TSX PRINT,4
02733  0 02760 0 02735          HTR PRCHA,0,PRCHA+19
02734  1 00002 1 01334          TXI NXTER,1,2         2 WORD ENTRY IN ERROR LIST
02735  606060606060     PRCHA   BCD 2
02736  606060606060
02737  633025606270             BCD 2THE SYMBOL,
02740  442246437360
A 02741  0 00000 0 00000 D       HTR
02742  736023464563             BCD 6, CONTAINS AN ILLEGAL CHARACTER.  IT
02743  213145626021
02744  456031434325
02745  272143602330
02746  215121236325
02747  513360603163
02750  606060606060     DA      BCD 8
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02751  606060606060
02752  606060606060
02753  606060606060
02754  606060606060
02755  606060606060
02756  606060606060
02757  606060606060
02760  602147472521     CMON    BCD 8 APPEARS IN A COMMON STATEMENT.
02761  516260314560
02762  216023464444
02763  464560626321
02764  632544254563
02765  336060606060
02766  606060606060
02767  606060606060
02770  602147472521     SZ      BCD 8 APPEARS IN A DIMENSION STATEMENT.
02771  516260314560
02772  216024314425
02773  456231464560
02774  626321632544
02775  254563336060
02776  606060606060
02777  606060606060
03000  602147472521     FRSB    BCD 8 APPEARS AS THE NAME OF A FORTRAN FUNCTION.
03001  516260216260
03002  633025604521
03003  442560462660
03004  216026465163
03005  512145602664
03006  452363314645
03007  336060606060
03010  602147472521     SBAR    BCD 8 APPEARS AS AN ARGUMENT OF A SUBROUTINE.
03011  516260216260
03012  214560215127
03013  644425456360
03014  462660216062
03015  642251466463
03016  314525336060
03017  606060606060
03020  0 50000 2 02717 PR3WD  CLA CHA3WD+1,2        1ST,2ND,OR 3RD PARAMETER
03021  0 10000 0 03060        TZE SYMDO              ZERO IF SYMBOL REFERED TO
03022  0 60100 0 03047        STO PAR
03023 -0 50000 1 77776        CAL LIST-1,1           UNPACK NAME AND MOVE TO RIGHT
03024  0 07400 4 00543        TSX ZEROUT,4
03025  0 07400 4 00565        TSX RAJUST,4
03026  0 60200 0 03053        SLW WRPAR
03027  0 07400 4 00740        TSX PRINT,4
03030  0 03060 0 03037        HTR PARAPR,0,PARAPR+17
03031  0 50000 1 77775        CLA LIST-2,1           PRINT ALPHA TO BETA STATEMENT AND
03032  0 60100 0 00527        STO ALFBET             SYMBOL
03033  0 50000 1 77774        CLA LIST-3,1
03034  0 60100 0 00530        STO SYM
03035  0 07400 4 00505        TSX FX4PR,4
03036  1 00004 1 01334        TXI NXTER,1,4          4 WORD ENTRIES IN ERROR LIST
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  03037  606060606060     PARAPR BCD 2
  03040  606060606060
  03041  633025512560            BCD 6THERE IS AN ILLEGAL CHARACTER IN THE
  03042  316260214560
  03043  314343252721
  03044  436023302151
  03045  212363255160
  03046  314560633025
A 03047  0 00000 0 00000 PAR     HTR
  03050  452425673145            BCD 3NDEXING PARAMETER
  03051  276047215121
  03052  442563255160
A 03053  0 00000 0 00000 WRPAR   HTR
  03054  736046266063            BCD 4, OF THE DO STATEMENT
  03055  302560244660
  03056  626321632544
  03057  254563606060
  03060  0 07400 4 00740 SYMDO   TSX PRINT,4
  03061  0 03106 0 03070         HTR SYMDPR,0,SYMDPR+14
  03062  0 50000 1 77775         CLA LIST-2,1
  03063  0 60100 0 00527         STO ALFBET            PRINT ALPHA DO BETA FOR SYMBOL
  03064  0 50000 1 77774         CLA LIST-3,1          WITH ILLEGAL CHARACTER
  03065  0 60100 0 00530         STO SYM
  03066  0 07400 4 00505         TSX FX4PR,4
  03067  1 00004 1 01334         TXI NXTER,1,4         4 WORD ENTRIES IN ERROR LIST
  03070  606060606060     SYMDPR BCD 2
  03071  606060606060
  03072  633025512560            BCD  THERE IS AN ILLEGAL CHARACTER IN THE INDEXING SYMBOL OF THE
  03073  316260214560
  03074  314343252721
  03075  436023302151
  03076  212363255160
  03077  314560633025
  03100  603145242567
  03101  314527606270
  03102  442246436046
  03103  266063302560
  03104  244660626321            BCD 2DO STATEMENT
  03105  632544254563
  03106  0 50000 1 77777 NOTRA   CLA LIST,1            ALPHA+1,INTERNAL FORMULA NUMBER,
  03107 -0 32000 0 01227         ANA ADDMSK            IN ADDRESS OF LIST. THIS IS NUMBER OF AN
  03110  0 07400 4 00613         TSX EXBETA,4          EXECUTABLE STATEMENT WHICH FOLLOWS A
  03111  0 07400 4 00602         TSX LAJUST,4          TIFGO ENTRY OR A STOP, BUT WHICH IS NEVER
  03112  0 60200 0 03137         SLW EXTN1             TRANSFERED TO IN THE FLOW OF THE PROBLEM
  03113  0 07400 4 00740         TSX PRINT,4
  03114  0 03140 0 03116         HTR PRNOTR,0,PRNOTR+18
  03115  1 00001 1 01334         TXI NXTER,1,1         1 WORD ENTRY IN ERROR LIST
  03116  606060606060     PRNOTR BCD 2
  03117  606060606060
  03120  216047215163            BCD  A PART OF THE PROGRAM CANNOT BE REACHED.  IT IS LOCATED AT 0
  03121  604626606330
  03122  256047514627
  03123  512144602321
  03124  454546636022
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        03125  256051252123
        03126  302524336060
        03127  316360316260
        03130  434623216325
        03131  246021636046
        03132  516041646263            BCD 5R JUST BELOW STATEMENT NUMBER
        03133  602225434666
        03134  606263216325
        03135  442545636045
        03136  644422255160
A       03137  0 00000 0 00000 EXTN1  HTR
        03140  0 50000 1 77777 FRETIF CLA LIST,1            INTERNAL FORMULA NUMBER
        03141  0 07400 4 00613        TSX EXBETA,4          IN ADDRESS OF LIST. SECTION 4 WILL STOP
        03142  0 07400 4 00602        TSX LAJUST,4          WHEN THERE ARE MORE BRANCHES THAN
        03143  0 60200 0 03165        SLW FRALFA            NECESSARY FOR A TIFGO ENTRY.
        03144  0 07400 4 00740        TSX PRINT,4
        03145  0 03166 0 03147        HTR PRFREQ,0,PRFREQ+15
        03146  1 00001 1 01334        TXI NXTER,1,1         1 WORD ENTRY IN ERROR LIST
        03147  606060606060    PRFREQ BCD 2
        03150  606060606060
        03151  216026512550           BCD  A FREQUENCY STATEMENT CONTAINS TOO MANY BRANCHES FOR THE FOR
        03152  642545237060
        03153  626321632544
        03154  254563602346
        03155  456321314562
        03156  606346466044
        03157  214570602251
        03160  214523302562
        03161  602646516063
        03162  302560264651
        03163  446443216045           BCD 2MULA NUMBER
        03164  644422255160
A       03165  0 00000 0 00000 FRALFA HTR
        03166 -0 50000 1 77776 NOTEQV CAL LIST-1,1          THIS IS STILL IN BCD FORM, BUT MAY BE
        03167  0 07400 4 00543        TSX ZEROUT,4          FOLLOWED BY 1 BLANK AND ZEROS. THIS NAME
        03170  0 60200 0 03221        SLW EQWD              HAS BEEN ASSIGNED INCONSISTANT VALUES IN
        03171  0 56000 0 03221        LDQ EQWD              EQUIVALENCE STATEMENTS
        03172 -0 50000 0 03220        CAL EQWD-1
        03173  0 77100 0 00014        ARS 12                MOVE WORD INTO REST OF COMMENT
        03174 -0 76300 0 00014        LGL 12
        03175  0 60200 0 03220        SLW EQWD-1
        03176 -0 76300 0 00030        LGL 24
        03177  0 56000 0 00717        LDQ BLANKS
        03200 -0 76300 0 00014        LGL 12
        03201  0 60200 0 03221        SLW EQWD
        03202  0 07400 4 00740        TSX PRINT,4
        03203  0 03222 0 03205        HTR PREQ,0,PREQ+13
        03204  1 00002 1 01334        TXI NXTER,1,2         2 WORD ENTRIES IN ERROR LIST
        03205  606060606060    PREQ   BCD 2
        03206  606060606060
        03207  214560314523           BCD  AN INCONSISTENT EQUIVALENCE STATEMENT HAS BEEN MADE ABOUT
        03210  464562316263
        03211  254563602550
        03212  643165214325
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03213  452325606263
03214  216325442545
03215  636030216260
03216  222525456044
03217  212425602122
03220  466463606060
A 03221  0 00000 0 00000 EQWD   HTR
03222  0 07400 4 00740 BADWC  TSX PRINT,4
03223  0 01244 0 01237        HTR MACHIN,0,MACHIN+5
03224  0 50000 1 77776        CLA LIST-1,1
03225  0 07400 4 00730        TSX OCTBCD,4
03226  0 60200 0 01257        SLW ERAS
03227  0 56000 0 01257        LDQ ERAS
03230 -0 50000 0 03314        CAL BDWD
03231  0 77100 0 00030        ARS 24
03232 -0 76300 0 00030        LGL 24
03233  0 60200 0 03314        SLW BDWD
03234 -0 76300 0 00014        LGL 12
03235  0 56000 0 00717        LDQ BLANKS
03236 -0 76300 0 00030        LGL 24
03237  0 60200 0 03315        SLW BDWD+1
03240  0 07400 4 00740        TSX PRINT,4
03241  0 03410 0 03300        HTR PRBDWC,0,PRBDWC+72
03242  0 02000 0 03275        TRA ENDMAC
03243  0 07400 4 00740 NOIDEN TSX PRINT,4
03244  0 01244 0 01237        HTR MACHIN,0,MACHIN+5
03245  0 50000 1 77776        CLA LIST-1,1
03246  0 07400 4 00730        TSX OCTBCD,4
03247  0 60200 0 01257        SLW ERAS
03250  0 56000 0 01257        LDQ ERAS
03251 -0 50000 0 03423        CAL IDENWD
03252  0 77100 0 00022        ARS 18
03253 -0 76300 0 00022        LGL 18
03254  0 60200 0 03423        SLW IDENWD
03255 -0 76300 0 00022        LGL 18
03256  0 56000 0 03424        LDQ IDENWD+1
03257 -0 77300 0 00022        RQL 18
03260 -0 76300 0 00022        LGL 18
03261  0 60200 0 03424        SLW IDENWD+1
03262  0 07400 4 00740        TSX PRINT,4
03263  0 03431 0 03410        HTR PRNOI,0,PRNOI+17
03264  0 07400 4 00740        TSX PRINT,4
03265  0 03410 0 03350        HTR MACHER,0,MACHER+32
03266  0 02000 0 03275        TRA ENDMAC
03267  0 07400 4 00740 WHATIF TSX PRINT,4
03270  0 01244 0 01237        HTR MACHIN,0,MACHIN+5
03271  0 07400 4 00740        TSX PRINT,4
03272  0 03446 0 03431        HTR NOTIF,0,NOTIF+13
03273  0 07400 4 00740        TSX PRINT,4
03274  0 03364 0 03350        HTR MACHER,0,MACHER+12
03275  0 50000 0 00316 ENDMAC CLA HTR4              SET RETURN SO PROBLEM CAN BE
03276  0 60100 0 00266        STO DONE              RE-RUN FOR MACHINE ERROR
03277  0 02000 0 00230        TRA RESTRT
03300  606060606060    PRBDWC BCD 2
```

```
03301  606060606060
03302  255151465160          BCD  ERROR IN READING RECORD FROM TAPE 2.  RECORD IDENTIFICATION
03303  314560512521
03304  243145276051
03305  252346512460
03306  265146446063
03307  •214725600233
03310  606051252346
03311  512460312425
03312  456331263123
03313  216331464560
03314  316260606060    BDWD   BCD  IS
03315  606060606060
03316  606060606060
03317  606060606060
03320  606060606060
03321  606060606060
03322  606060606060
03323  606060606060
03324  606060606060
03325  606060606060
03326  664651246023          BCD  WORD COUNT DOES NOT AGREE WITH COUNT IN RECORD.
03327  466445636024
03330  462562604546
03331  636021275125
03332  256066316330
03333  602346644563
03334  603145605125
03335  234651243360
03336  606060606060
03337  606060606060
03340  606060606060          BCD 8
03341  606060606060
03342  606060606060
03343  606060606060
03344  606060606060
03345  606060606060
03346  606060606060
03347  606060606060
03350  606060606060    MACHER BCD 2
03351  606060606060
03352  475146222122          BCD  PROBABLY MACHINE ERROR WHEN TABLE WAS COMPILED BY 1 PRIME.
03353  437060442123
03354  303145256025
03355  515146516066
03356  302545606321
03357  224325606621
03360  626023464447
03361  314325246022
03362  706001604751
03363  314425336060
03364  606060606060          BCD
03365  606060606060
03366  606060606060
```

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03367  606060606060
03370  606060606060
03371  606060606060
03372  606060606060
03373  606060606060
03374  606060606060
03375  606060606060
03376  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
03377  636325444763
03400  626030216525
03401  602225254560
03402  442124256063
03403  466051252124
03404  606330316260
03405  512523465124
03406  602346515125
03407  236343703360
03410  606060606060    PRNOI  BCD 2
03411  606060606060
03412  512523465124           BCD 9RECORD FROM TAPE 2 CANNOT BE IDENTIFIED.  THIS RECORD
03413  602651464460
03414  632147256002
03415  602321454546
03416  636022256031
03417  242545633126
03420  312524336060
03421  633031626051
03422  252346512460
03423  302162606060    IDENWD BCD 1HAS
03424  606060603145           BCD 5    IN ADDRESS OF FIRST WORD.
03425  602124245125
03426  626260462660
03427  263151626360
03430  664651243360
03431  606060606060    NOTIF  BCD 2
03432  606060606060
03433  254563517060           BCD  ENTRY IN TIFGO, RECORD 6, FILE 5, TAPE 2, CANNOT BE IDENTIFI
03434  314560633126
03435  274673605125
03436  234651246006
03437  736026314325
03440  600573606321
03441  472560027360
03442  232145454663
03443  602225603124
03444  254563312631
03445  252433606060           BCD 1ED.
03446 +000301000000           OCT 000301000000
03447  0 00000 0 03267        HTR WHATIF
03450 +001125000000           OCT 001125000000
03451  0 00000 0 02502        HTR CHBTSX
03452 +000650000000           OCT 000650000000
03453  0 00000 0 02453        HTR DOALNX
03454 +000641000000           OCT 000641000000
```

```
03455  0 00000 0 02402          HTR DOBTNX
03456 +000727000000             OCT 000727000000
03457  0 00000 0 02426          HTR CONBET
03460 +000623000000             OCT 000623000000
03461  0 00000 0 01436          HTR DONOBT
03462 +001062000000             OCT 001062000000
03463  0 00000 0 02210          HTR TSXH
03464 +000534000000             OCT 000534000000
03465  0 00000 0 01434          HTR TIF6B
03466 +000521000000             OCT 000521000000
03467  0 00000 0 01432          HTR B2TIF5
03470 +000511000000             OCT 000511000000
03471  0 00000 0 01430          HTR B1TIF5
03472 +000475000000             OCT 000475000000
03473  0 00000 0 01426          HTR B2TIF4
03474 +000465000000             OCT 000465000000
03475  0 00000 0 01424          HTR B1TIF4
03476 +000451000000             OCT 000451000000
03477  0 00000 0 01422          HTR B2TIF3
03500 +000441000000             OCT 000441000000
03501  0 00000 0 01420          HTR B1TIF3
03502 +000417000000             OCT 000417000000
03503  0 00000 0 01416          HTR BTIFG2
03504 +000372000000             OCT 000372000000
03505  0 00000 0 01411          HTR BTIFG1
03506 +000350000000             OCT 000350000000
03507  0 00000 0 01404          HTR TSXTFO
03510 +000335000000             OCT 000335000000
03511  0 00000 0 01377          HTR MINB3
03512 +000325000000             OCT 000325000000
03513  0 00000 0 01372          HTR MINB2
03514 +000314000000             OCT 000314000000
03515  0 00000 0 01365          HTR MINB1
03516 +000775000000             OCT 000775000000
03517  0 00000 0 03166          HTR NOTEQV
03520 +000762000000             OCT 000762000000
03521  0 00000 0 03140          HTR FRETIF
03522 +000070000000             OCT 000070000000
03523  0 00000 0 03222          HTR BADWC
03524 +000110000000             OCT 000110000000
03525  0 00000 0 03243          HTR NOIDEN
03526 +000576000000             OCT 000576000000
03527  0 00000 0 03106          HTR NOTRA
03530 +000212000000             OCT 000212000000
03531  0 00000 0 01341          HTR TEIFNO          IE.,TSXE FROM NON-ARITH DIAP
03532 +001110000000     ER1PRM  OCT 001110000000
03533  0 00000 0 02656          HTR CHATSX
03534  0 00000 0 00000 X
A                 00000          END
```

```
1            ORG 5                    FORCE NEW RECORD
1                        00005          ORG 5                  FORCE NEW RECORD
      000Q5   0 01303 0 01421           HTR X-1,0,LOCREC       CARD FOR DE
                        01303           ORG LOCREC
 TD   01303   3 00000 0 00005           TXH 5.                 7320  FT  27
                        07302 ERNBR     SYN 3778               OCTAL 7302
      01304   0 07400 4 00740           TSX PRINT,4
      01305   0 01252 0 01244           HTR SOURCE,0,SOURCE+6
      01306  -0 53400 1 07302           LXD ERNBR,1
      01307   2 00002 1 01310           TIX DONX1,1,2
      01310  -0 63400 1 01336 DONX1     SXD DOTST,1
      01311  -0 53400 1 01232           LXD ZERO,1
      01312   0 50000 1 77777 NXTDO     CLA LIST,1
      01313   0 10000 0 01343           TZE ONEDO
      01314   0 50000 0 01421           CLA MORDOS             DO NOT PRINT COMMENT FOR SUCCEEDING
      01315  -0 10000 0 01322           TNZ DO1                ERRORS
      01316   0 07400 4 00740           TSX PRINT,4
      01317   0 01372 0 01355           HTR NONEST,0,NONEST+13
      01320  -0 63400 4 01421           SXD MORDOS,4
      01321   0 76600 0 00361           WPR
      01322   0 50000 1 77777 DO1       CLA LIST,1
      01323   0 60100 0 00527           STO ALFBET
      01324   0 50000 1 77776           CLA LIST-1,1
      01325   0 60100 0 00530           STO SYM
      01326   0 07400 4 00505           TSX FX4PR,4            PRINT 1ST DO
      01327   0 50000 1 77775           CLA LIST-2,1           AND 2ND
      01330   0 60100 0 00527           STO ALFBET
      01331   0 50000 1 77774           CLA LIST-3,1
      01332   0 60100 0 00530           STO SYM
      01333   0 07400 4 00505           TSX FX4PR,4
      01334   0 76600 0 00361           WPR
      01335   1 00004 1 01336           TXI DOTST,1,4
      01336  -3 00000 1 01312 DOTST     TXL NXTDO,1,0
      01337   0 76600 0 00361           WPR
      01340   0 07400 4 00740           TSX PRINT,4
      01341   0 01403 0 01372           HTR ENDNST,0,ENDNST+9
      01342   0 02000 0 00272           TRA SPEND
      01343   0 60000 0 01421 ONEDO     STZ MORDOS
      01344   0 76600 0 00361           WPR
      01345   0 07400 4 00740           TSX PRINT,4
      01346   0 01421 0 01403           HTR DOPR,0,DOPR+14
      01347   0 50000 1 77776           CLA LIST-1,1
      01350   0 60100 0 00527           STO ALFBET
      01351   0 50000 1 77775           CLA LIST-2,1
      01352   0 60100 0 00530           STO SYM
      01353   0 07400 4 00505           TSX FX4PR,4
      01354   1 00003 1 01336           TXI DOTST,1,3
      01355   606060606060     NONEST BCD 2
      01356   606060606060
      01357   633025602446             BCD  THE DO STATEMENTS IN THE FOLLOWING LIST ARE NOT CORRECTLY NE
      01360   606263216325
      01361   442545636260
      01362   314560633025
      01363   602646434346
```

```
01364  663145276043
01365  316263602151
01366  256045466360
01367  234651512523
01370  634370604525
01371  626325246060          BCD 1STED
01372  606060606060   ENDNST BCD 2
01373  606060606060
01374  234651512523          BCD 7CORRECT THE DO NESTING BEFORE REASSEMBLY.
01375  636063302560
01376  244660452562
01377  633145276022
01400  252646512560
01401  512521626225
01402  442243703360
01403  606060606060   DOPR   BCD 2
01404  606060606060
01405  633025606263          BCD  THE STATEMENT NUMBER ENDING A DO IS ABOVE IT IN THE SOURCE P
01406  216325442545
01407  636045644422
01410  255160254524
01411  314527602160
01412  244660316260
01413  212246652560
01414  316360314560
01415  633025606246
01416  645123256047
01417  514627512144          BCD 2ROGRAM.
01420  336060606060
01421  0 00000 0 00000 MORDOS HTR 0
01422  0 00000 0 00000 X
A                00000        END
```

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```
1            ORG 6                    FORCE NEW RECORD
1                          00006        ORG 6                    FORCE NEW RECORD
     00006   0 01303 0 01436            HTR X-1,0,LOCREC         CARD FOR DE
                            01303        ORG LOCREC
TD   01303   3 00000 0 00006            TXH 6                     106  FT  53
     01304   0 07400 4 00740            TSX PRINT,4
     01305   0 01252 0 01244            HTR SOURCE,0,SOURCE+6
     01306   0 76200 0 00304 RDDR       RDR 4                    NOR BUFFER NOW ON DRUM 4.
     01307   0 46000 0 01350            LDA A
     01310   0 53400 1 01351            LXA L(15),1
     01311   0 70000 1 01276 COPYW      CPY ERAS+15,1            COPY FIRST WORD OF 4 WORD ENTRY.
     01312   0 70000 1 01277            CPY ERAS+16,1            IGNORE NEXT THREE.
     01313   0 70000 1 01277            CPY ERAS+16,1
     01314   0 70000 1 01277            CPY ERAS+16,1
     01315   2 00001 1 01311            TIX COPYW,1,1
     01316   0 53400 1 01351            LXA L(15),1
     01317   0 50000 1 01276 NEXT       CLA ERAS+15,1            IF NOT LOCATION SYMBOL OF CIT,
     01320  -0 10000 0 01331            TNZ PROCES               WORD WILL BE ZERO.
     01321   2 00001 1 01317            TIX NEXT,1,1
     01322   0 50000 0 01351            CLA L(15)
     01323   0 76700 0 00002            ALS 2
     01324   0 40000 0 01350            ADD A
     01325   0 62100 0 01350            STA A
     01326   0 40200 0 01352            SUB BUFSIZ
     01327  -0 10000 0 01306            TNZ RDDR
     01330   0 50000 0 01232            CLA ZERO
     01331   0 77100 0 00022 PROCES     ARS 18                   IN THE DECREMENT THERE IS THE
     01332   0 07400 4 00613            TSX EXBETA,4             ALPHA OF SOME STATEMENT NUMBER.
     01333   0 60200 0 01257            SLW ERAS
     01334  -0 50000 0 01373            CAL PR1
     01335   0 77100 0 00030            ARS 24
     01336   0 56000 0 01257            LDQ ERAS
     01337  -0 76300 0 00030            LGL 24
     01340   0 60200 0 01373            SLW PR1
     01341  -0 76300 0 00014            LGL 12
     01342   0 56000 0 00717            LDQ BLANKS
     01343  -0 76300 0 00030            LGL 24
     01344   0 60200 0 01374            SLW PR1+1
     01345   0 07400 4 00740            TSX PRINT,4
     01346   0 01437 0 01353            HTR PR,0,PR+52
     01347   0 02000 0 00272            TRA SPEND
     01350   0 00000 0 00200 A          HTR8200                  STARTING DRUM ADDRESS
     01351   0 00000 0 00017 L(15)      HTR 15
     01352   0 00000 0 07700 BUFSIZ     HTR 4032                 SIZE OF NOR BUFFER + INITIAL ADDRESS.
     01353   606060606060     PR       BCD 2
     01354   606060606060
     01355   633025606225              BCD  THE SET OF DO FORMULAS WHICH BEGINS OR TERMINATES IN THE VIC
     01356   636046266024
     01357   466026465144
     01360   644321626066
     01361   303123306022
     01362   252731456260
     01363   465160632551
     01364   443145216325
```

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01365  626031456063
01366  302560653123
01367  314531637060          BCD 4INITY OF STATEMENT NUMBE
01370  462660626321
01371  632544254563
01372  604564442225
01373  516060606060    PR1   BCD 6R
01374  606060606060
01375  606060606060
01376  606060606060
01377  606060606060
01400  606060606060
01401  302162602731          BCD  HAS GIVEN RISE TO TOO MANY INSTRUCTIONS.  REWRITE PROGRAM AN
01402  652545605131
01403  622560634660
01404  634646604421
01405  457060314562
01406  635164236331
01407  464562336060
01410  512566513163
01411  256047514627
01412  512144602145
01413  246062314447          BCD  D SIMPLIFY DO NESTING
01414  433126706024
01415  466045256263
01416  314527606060
01417  606060606060
01420  606060606060
01421  606060606060
01422  606060606060
01423  606060606060
01424  606060606060
01425  465160512524          BCD  OR REDUCE THE NUMBER OF SUBSCRIPT COMBINATIONS.
01426  642325606330
01427  256045644422
01430  255160462660
01431  626422622351
01432  314763602346
01433  442231452163
01434  314645623360
01435  606060606060
01436  606060606060
01437  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 7                    FORCE NEW RECORD
1                        00007          ORG 7                  FORCE NEW RECORD
       00007  0 01303 0 01404          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00007          TXH 7                  4040  FT  51
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 76200 0 00304          RDR 4                  TAGTAG TABLE ON DRUM 4.
       01307  0 46000 0 01332          LDA A
       01310  0 70000 0 01257          CPY ERAS               COPY FIRST WORD OF 4 WORD ENTRY.
       01311  0 50000 0 01257          CLA ERAS
       01312  0 77100 0 00022          ARS 18
       01313  0 07400 4 00613          TSX EXBETA,4
       01314  0 60200 0 01257          SLW ERAS
       01315 -0 50000 0 01346          CAL PR1
       01316  0 77100 0 00014          ARS 12
       01317  0 56000 0 01257          LDQ ERAS
       01320 -0 76300 0 00014          LGL 12
       01321  0 60200 0 01346          SLW PR1
       01322 -0 76300 0 00030          LGL 24
       01323  0 56000 0 01347          LDQ PR2
       01324 -0 77300 0 00030          RQL 24
       01325 -0 76300 0 00014          LGL 12
       01326  0 60200 0 01347          SLW PR2
       01327  0 07400 4 00740          TSX PRINT,4
       01330  0 01405 0 01333          HTR PR,0,PR+42
       01331  0 02000 0 00272          TRA SPEND
       01332  0 00000 0 01076 A        HTR81076
       01333  606060606060     PR      BCD 2
       01334  606060606060
       01335  632127632127             BCD 9TAGTAG TABLE SIZE HAS BEEN EXCEEDED.  DO STATEMENT NUM
       01336  606321224325
       01337  606231712560
       01340  302162602225
       01341  254560256723
       01342  252524252433
       01343  606024466062
       01344  632163254425
       01345  456360456444
       01346  222551600102     PR1     BCD 1BER 12
       01347  030405546031     PR2     BCD 1345* I
       01350  626046452560             BCD 9S ONE OF A NEST OF DO STATEMENTS
       01351  462660216045
       01352  256263604626
       01353  602446606263
       01354  216325442545
       01355  636260606060
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  663031233060             BCD  WHICH CONTAINS, OR HAS GIVEN RISE TO, TOO MANY SUBSCRIPT COM
       01362  234645632131
       01363  456273604651
       01364  603021626027
```

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01365  316525456051
01366  316225606346
01367  736063464660
01370  442145706062
01371  642262235131
01372  476360234644
01373  223145216331          BCD  BINATIONS.  REWRITE SOURCE PROGRAM.
01374  464562336060
01375  512566513163
01376  256062466451
01377  232560475146
01400  275121443360
01401  606060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  0 00000 0 00000 X
A                     00000        END
```

```
1            ORG 8                    FORCE NEW RECORD
1                        00010          ORG 8                    FORCE NEW RECORD
       00010  0 01303 0 01332          HTR X-1,0,LOCREC         CARD FOR DE
                        01303          ORG LOCREC
TD     01303  3 00000 0 00010          TXH 8                    4160  FT  34
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01333 0 01311          HTR PR,0,PR+18
       01310  0 02000 0 00272          TRA SPEND
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  475146275121            BCD  PROGRAM HAS MORE THAN 50 DO STATEMENTS IN A NEST.  REWRITE P
       01314  446030216260
       01315  444651256063
       01316  302145600500
       01317  602446606263
       01320  216325442545
       01321  636260314560
       01322  216045256263
       01323  336060512566
       01324  513163256047
       01325  514627512144            BCD 6ROGRAM WITH SIMPLER DO STRUCTURE.
       01326  606631633060
       01327  623144474325
       01330  516024466062
       01331  635164236364
       01332  512533606060
       01333  0 00000 0 00000 X'
A                        00000         END
```

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1            ORG 9                          FORCE NEW RECORD
1                          00011              ORG 9                  FORCE NEW RECORD
        00011  0 01303 0 01612                HTR X-1,0,LOCREC       CARD FOR DE
                           01303              ORG LOCREC
 TD     01303  3 00000 0 00011                TXH 9                  5037  FT  34
                                                9                   7632  FT  36
        01304  0 07400 4 00740                TSX PRINT,4
        01305  0 01252 0 01244                HTR SOURCE,0,SOURCE+6
        01306 -0 53400 1 77777                LXD877777,1
        01307 -3 00001 1 01515                TXL DRMTAG,1,1
        01310 -3 00002 1 01370                TXL CHGTAG,1,2
        01311 -3 00003 1 01520                TXL NAMKEY,1,3
        01312 -3 00004 1 01522                TXL TRASTO,1,4
        01313  0 07400 4 00740                TSX PRINT,4
        01314  0 01370 0 01316                HTR PR,0,PR+42
        01315  0 02000 0 00272                TRA SPEND
        01316  606060606060     PR            BCD 2
        01317  606060606060
        01320  636267234644                   BCD  TSXCOM TABLE EXCEEDS BUFFER SIZE.  THERE ARE TOO MANY RELATI
        01321  606321224325
        01322  602567232525
        01323  246260226426
        01324  262551606231
        01325  712533606063
        01326  302551256021
        01327  512560634646
        01330  604421457060
        01331  512543216331
        01332  652560234645                   BCD  VE CONSTANT DEFINITIONS.
        01333  626321456360
        01334  242526314531
        01335  633146456233
        01336  606060606060
        01337  606060606060
        01340  606060606060
        01341  606060606060
        01342  606060606060
        01343  606060606060
        01344  633025606321                   BCD  THE TABLE IS CUMULATIVE OVER THE ENTIRE PROBLEM.  REWRITE SO
        01345  224325603162
        01346  602364446443
        01347  216331652560
        01350  466525516063
        01351  302560254563
        01352  315125604751
        01353  462243254433
        01354  606051256651
        01355  316325606246
        01356  645123256047                   BCD  URCE PROGRAM.
        01357  514627512144
        01360  336060606060
        01361  606060606060
        01362  606060606060
        01363  606060606060
```

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01364  606060606060
01365  606060606060
01366  606060606060
01367  606060606060
01370  0 07400 4 00740 CHGTAG TSX PRINT,4
01371  0 01515 0 01373        HTR PR1,0,PR1+82
01372  0 02000 0 00272        TRA SPEND
01373  606060606060    PR1    BCD 2
01374  606060606060
01375  233027632127           BCD  CHGTAG TABLE EXCEEDS BUFFER SIZE.  AN ENTRY IS MADE IN THIS
01376  606321224325
01377  602567232525
01400  246260226426
01401  262551606231
01402  712533606021
01403  456025456351
01404  706031626044
01405  212425603145
01406  606330316260
01407  632122432560           BCD  TABLE WHEN THERE ARE AT LEAST TWO
01410  663025456063
01411  302551256021
01412  512560216360
01413  432521626360
01414  636646606060
01415  606060606060
01416  606060606060
01417  606060606060
01420  606060606060
01421  626422622351           BCD  SUBSCRIPT COMBINATIONS WITH THE SAME SYMBOLS, COEFFICIENTS,
01422  314763602346
01423  442231452163
01424  314645626066
01425  316330606330
01426  256062214425
01427  606270442246
01430  436273602346
01431  252626312331
01432  254563627360
01433  214524604325           BCD  AND LEADING DIMENSIONS
01434  212431452760
01435  243144254562
01436  314645626060
01437  606060606060
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  663163303145           BCD  WITHIN THE SAME NEST WHICH HAS AT LEAST ONE, BUT NOT ALL, CO
01446  606330256062
01447  214425604525
01450  626360663031
01451  233060302162
```

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01452  602163604325
01453  216263604645
01454  257360226463
01455  604546636021
01456  434373602346
01457  456351464343          BCD  NTROLLING DOS IN COMMON.
01460  314527602446
01461  626031456023
01462  464444464533
01463  606060606060
01464  606060606060
01465  606060606060
01466  606060606060
01467  606060606060
01470  606060606060
01471  633025606321          BCD  THE TABLE IS CUMULATIVE OVER ALL NESTS IN THE PROBLEM.  REWR
01472  224325603162
01473  602364446443
01474  216331652560
01475  466525516021
01476  434360452562
01477  636260314560
01500  633025604751
01501  462243254433
01502  606051256651
01503  316325606246          BCD  ITE SOURCE PROGRAM.
01504  645123256047
01505  514627512144
01506  336060606060
01507  606060606060
01510  606060606060
01511  606060606060
01512  606060606060
01513  606060606060
01514  606060606060
01515  0 50000 0 01611 DRMTAG CLA DRTG
01516  0 60100 0 01527        STO PR3
01517  0 02000 0 01522        TRA TRASTO
01520  0 50000 0 01612 NAMKEY CLA NMKY
01521  0 60100 0 01527        STO PR3
01522  0 07400 4 00740 TRASTO TSX PRINT,4
01523  0 01611 0 01525        HTR PR2,0,PR2+52
01524  0 02000 0 00272        TRA SPEND
01525  606060606060    PR2    BCD 2
01526  606060606060
01527  635121626346    PR3    BCD  TRASTO TABLE EXCEEDS BUFFER SIZE.  THE SUBSCRIPT COMBINATION
01530  606321224325
01531  602567232525
01532  246260226426
01533  262551606231
01534  712533606063
01535  302560626422
01536  622351314763
01537  602346442231
```

```
01540  452163314645
01541  626021452460          BCD  S AND FLOW STRUCTURE IS TOO COMPLEX
01542  264346666062
01543  635164236364
01544  512560316260
01545  634646602346          .
01546  444743256760
01547  606060606060
01550  606060606060
01551  606060606060
01552  606060606060
01553  663163303145          BCD  WITHIN DO NESTS.  THIS TABLE IS CUMULATIVE OVER ALL NESTS.
01554  602446604525
01555  626362336060
01556  633031626063
01557  212243256031
01560  626023644464
01561  432163316525
01562  604665255160
01563  214343604525
01564  626362336060
01565  512566513163          BCD  REWRITE SOURCE PROGRAM AND
01566  256062466451
01567  232560475146
01570  275121446021
01571  452460606060
01572  606060606060
01573  606060606060
01574  606060606060
01575  606060606060
01576  606060606060
01577  623144474331          BCD  SIMPLIFY SUBSCRIPT COMBINATIONS OR DO NEST STRUCTURE.
01600  267060626422
01601  622351314763
01602  602346442231
01603  452163314645
01604  626046516024
01605  466045256263
01606  606263516423
01607  636451253360
01610  606060606060
01611  245144632127    DRTG   BCD 1DRMTAG
01612  452144422570    NMKY   BCD 1NAMKEY
01613  0 00000 0 00000 X
A                     00000        END
```

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```
1            ORG 10                    FORCE NEW RECORD
1                        00012           ORG 10                  FORCE NEW RECORD
        00012  0 01303 0 01343           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00012           TXH 10                  6044  FT  27
                                              10                  6534  FT  27
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01252 0 01244           HTR SOURCE,0,SOURCE+6
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01344 0 01311           HTR PR,0,PR+27
        01310  0 02000 0 00272           TRA SPEND
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  635121456226              BCD  TRANSFER ADDRESS LEVEL IS GREATER THAN 20.  REPROGRAM TO ELI
        01314  255160212424
        01315  512562626043
        01316  256525436031
        01317  626027512521
        01320  632551606330
        01321  214560020033
        01322  606051254751
        01323  462751214460
        01324  634660254331
        01325  443145216325              BCD  MINATE TRANSFERS TO DOS
        01326  606351214562
        01327  262551626063
        01330  466024466260
        01331  606060606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  663163306043              BCD 5WITH LEVELS GREATER THAN 20.
        01340  256525436260
        01341  275125216325
        01342  516063302145
        01343  600200336060
        01344  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 11                  FORCE NEW RECORD
1                          00013        ORG 11                  FORCE NEW RECORD
       00013  0 01303 0 01345           HTR X-1,0,LOCREC        CARD FOR DE
                           01303        ORG LOCREC
 TD    01303  3 00000 0 00013           TXH 11                  6065  FT  27
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01252 0 01244           HTR SOURCE,0,SOURCE+6
       01306  0 50000 0 06300           CLA 3264                6300 OCTAL
       01307  0 77100 0 00022           ARS 18
       01310  0 07400 4 00613           TSX EXBETA,4
       01311  0 60200 0 01257           SLW ERAS
       01312  0 56000 0 01257           LDQ ERAS
       01313 -0 50000 0 01332           CAL PR1
       01314  0 77100 0 00006           ARS 6
       01315 -0 76300 0 00006           LGL 6
       01316  0 60200 0 01332           SLW PR1
       01317 -0 76300 0 00036           LGL 30
       01320  0 56000 0 00717           LDQ BLANKS
       01321 -0 76300 0 00006           LGL 6
       01322  0 60200 0 01333           SLW PR2
       01323  0 07400 4 00740           TSX PRINT,4
       01324  0 01346 0 01326           HTR PR,0,PR+16
       01325  0 02000 0 00272           TRA SPEND
       01326  606060606060     PR       BCD 2
       01327  606060606060
       01330  626321632544              BCD 2STATEMENT NU
       01331  254563604564
       01332  442225516060     PR1      BCD 1MBER
       01333  606060606060     PR2      BCD 1
       01334  635121456226              BCD  TRANSFERS INTO THE RANGE OF A DO FROM OUTSIDE ITS RANGE.
       01335  255162603145
       01336  634660633025
       01337  605121452725
       01340  604626602160
       01341  244660265146
       01342  446046646362
       01343  312425603163
       01344  626051214527
       01345  253360606060
       01346  0 00000 0 00000 X
 A                         00000        END
```

```
1            ORG 12                  FORCE NEW RECORD
1                          00014       ORG 12                  FORCE NEW RECORD
       00014  0 01303 0 01373          HTR X-1,0,LOCREC        CARD FOR DE
                           01303       ORG LOCREC
 TD    01303  3 00000 0 00014          TXH 12                  6234  FT  51
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 50000 0 05244          CLA 2724                VCTR - OCTAL 5244
       01307  0 77100 0 00022          ARS 18
       01310  0 07400 4 00613          TSX EXBETA,4
       01311  0 60200 0 01334          SLW BETA
       01312  0 56000 0 01334          LDQ BETA
       01313 -0 50000 0 00717          CAL BLANKS
       01314 -0 76300 0 00036          LGL 30
       01315  0 60200 0 01334          SLW BETA
       01316  0 56000 0 01335          LDQ BETA+1
       01317 -0 76300 0 00036          LGL 30
       01320  0 60200 0 01335          SLW BETA+1
       01321  0 07400 4 00740          TSX PRINT,4
       01322  0 01374 0 01324          HTR PR,0,PR+40
       01323  0 02000 0 00272          TRA SPEND
       01324  606060606060     PR      BCD 2
       01325  606060606060
       01326  634646604421             BCD 6TOO MANY DOS END AT STATEMENT NUMBER
       01327  457060244662
       01330  602545246021
       01331  636062632163
       01332  254425456360
       01333  456444222551
       01334  600102030405       BETA BCD 1 12345
       01335  336060633060             BCD  .  TH IS CONDITION, IN CONJUNCTION WITH SUBSCRIPT CONFIGURAT
       01336  316260234645
       01337  243163314645
       01340  736031456023
       01341  464541644523
       01342  633146456066
       01343  316330606264
       01344  226223513147
       01345  636023464526
       01346  312764512163
       01347  314645627360             BCD 3IONS,
       01350  606060606060
       01351  606060606060
       01352  302162605125             BCD  HAS RESULTED IN TOO MANY INSTRUCTIONS.  REWRITE PROGRAM AND
       01353  626443632524
       01354  603145606346
       01355  466044214570
       01356  603145626351
       01357  642363314645
       01360  623360605125
       01361  665131632560
       01362  475146275121
       01363  446021452460
       01364  622547215121             BCD 8SEPARATE DO ENDS BY USING CONTINUE STATEMENTS.
```

```
01365  632560244660
01366  254524626022
01367  706064623145
01370  276023464563
01371  314564256062
01372  632163254425
01373  456362336060
01374  0 00000 0 00000 X
A                00000        END
```

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```
1            ORG 13                    FORCE NEW RECORD
1                        00015           ORG 13                  FORCE NEW RECORD
       00015  0 01303 0 01334            HTR X-1,0,LOCREC        CARD FOR DE
                        01303            ORG LOCREC
 TD    01303  3 00000 0 00015            TXH 13                  6432  FT  27
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01335 0 01311            HTR PR,0,PR+20
       01310  0 02000 0 00272            TRA SPEND
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  633025606521               BCD  THE VARIABLE PARAMETER OF A DO IS REDEFINED BY THE INDEX SYM
       01314  513121224325
       01315  604721512144
       01316  256325516046
       01317  266021602446
       01320  603162605125
       01321  242526314525
       01322  246022706063
       01323  302560314524
       01324  256760627044
       01325  224643604626               BCD 8BOL OF A DO STATEMENT WITHIN THE DO.
       01326  602160244660
       01327  626321632544
       01330  254563606631
       01331  633031456063
       01332  302560244633
       01333  606060606060
       01334  606060606060
       01335  0 00000 0 00000 X
 A                      00000            END
```

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```
1            ORG 14                  FORCE NEW RECORD
1                        00016         ORG 14                 FORCE NEW RECORD
       00016  0 01303 0 01355          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00016          TXH 14                 7303  FT  41
                                           14                 7045  FT  43
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01356 0 01311          HTR PR,0,PR+37
       01310  0 02000 0 00272          TRA SPEND
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  214560314563             BCD  AN INTERMEDIATE CORE TABLE IS FULL.  REWRITE SOURCE PROGRAM
       01314  255144252431
       01315  216325602346
       01316  512560632122
       01317  432560316260
       01320  266443433360
       01321  605125665131
       01322  632560624664
       01323  512325604751
       01324  462751214460
       01325  214524604446             BCD  AND MODIFY THE NUMBER OF PURE RELATIVE CONSTANT
       01326  243126706063
       01327  302560456444
       01330  222551604626
       01331  604764512560
       01332  512543216331
       01333  652560234645
       01334  626321456360
       01335  606060606060
       01336  606060606060
       01337  626422622351             BCD  SUBSCRIPT COMBINATIONS, IE., SUBSCRIPTS, NO SYMBOL OF WHICH
       01340  314763602346
       01341  442231452163
       01342  314645627360
       01343  312533736062
       01344  642262235131
       01345  476362736045
       01346  466062704422
       01347  464360462660
       01350  663031233060
       01351  316260644524             BCD 5IS UNDER CONTROL OF A DO.
       01352  255160234645
       01353  635146436046
       01354  266021602446
       01355  336060606060
       01356  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 15                  FORCE NEW RECORD
1                        00017         ORG 15                 FORCE NEW RECORD
      00017   0 01303 0 01432         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD   01303   3 00000 0 00017         TXH 15                  270  FT  56
      01304   0 07400 4 00740         TSX PRINT,4
      01305   0 01252 0 01244         HTR SOURCE,0,SOURCE+6
      01306   0 07400 4 00740         TSX PRINT,4
      01307   0 01433 0 01311         HTR PR,0,PR+82
      01310   0 02000 0 00272         TRA SPEND
      01311   606060606060     PR     BCD 2
      01312   606060606060
      01313   233027632127            BCD  CHGTAG TABLE EXCEEDS BUFFER SIZE.  AN ENTRY IS MADE IN THIS
      01314   606321224325
      01315   602567232525
      01316   246260226426
      01317   262551606231
      01320   712533606021
      01321   456025456351
      01322   706031626044
      01323   212425603145
      01324   606330316260
      01325   632122432560            BCD  TABLE WHEN THERE ARE AT LEAST TWO
      01326   663025456063
      01327   302551256021
      01330   512560216360
      01331   432521626360
      01332   636646606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   626422622351            BCD  SUBSCRIPT COMBINATIONS WITH THE SAME SYMBOLS, COEFFICIENTS,
      01340   314763602346
      01341   442231452163
      01342   314645626066
      01343   316330606330
      01344   256062214425
      01345   606270442246
      01346   436273602346
      01347   252626312331
      01350   254563627360
      01351   214524604325            BCD  AND LEADING DIMENSIONS
      01352   212431452760
      01353   243144254562
      01354   314645626060
      01355   606060606060
      01356   606060606060
      01357   606060606060
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   663163303145            BCD  WITHIN THE SAME NEST WHICH HAS AT LEAST ONE, BUT NOT ALL, CO
      01364   606330256062
```

```
01365  214425604525
01366  626360663031
01367  233060302162
01370  602163604325
01371  216263604645
01372  257360226463
01373  604546636021
01374  434373602346
01375  456351464343          BCD  NTROLLING DOS IN COMMON.
01376  314527602446
01377  626031456023
01400  464444464533
01401  606060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  633025606321          BCD  THE TABLE IS CUMULATIVE OVER ALL NESTS IN THE PROBLEM.  REWR
01410  224325603162
01411  602364446443
01412  216331652560
01413  466525516021
01414  434360452562
01415  636260314560
01416  633025604751
01417  462243254433
01420  606051256651
01421  316325606246          BCD  ITE SOURCE PROGRAM.
01422  645123256047
01423  514627512144
01424  336060606060
01425  606060606060
01426  606060606060
01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  0 00000 0 00000 X
A                    00000        END
```

```
1            ORG 16                    FORCE NEW RECORD
1                        00020           ORG 16                  FORCE NEW RECORD
        60020  0 01303 0 01333           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00020           TXH 16                   750  FT  56
                                             16                   747  FT  56
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01252 0 01244           HTR SOURCE,0,SOURCE+6
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01334 0 01311           HTR PR,0,PR+19
        01310  0 02000 0 00272           TRA SPEND
        01311  606060606060      PR      BCD 2
        01312  606060606060
        01313  216026465163              BCD  A FORTRAN FUNCTION HAS BEEN DEFINED AT A POINT IN THE SOURCE
        01314  512145602664
        01315. 452363314645
        01316  603021626022
        01317  252545602425
        01320  263145252460
        01321  216360216047
        01322  463145636031
        01323  456063302560
        01324  624664512325
        01325  604751462751              BCD 7 PROGRAM OTHER THAN AT ITS BEGINNING.
        01326  214460466330
        01327  255160633021
        01330  456021636031
        01331  636260222527
        01332  314545314527
        01333  336060606060
        01334  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 17                    FORCE NEW RECORD
1                        00021           ORG 17                  FORCE NEW RECORD
       00021  0 01303 0 01325            HTR X-1,0,LOCREC        CARD FOR DE
                        01303            ORG LOCREC
 TD    01303  3 00000 0 00021            TXH 17                  2155  FT  56
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01326 0 01311            HTR PR,0,PR+13
       01310  0 02000 0 00272            TRA SPEND
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  216044644363               BCD  A MULTIVARIATE OPEN SUBROUTINE HAS ONLY ONE ARGUMENT SPECIFI
       01314  316521513121
       01315  632560464725
       01316  456062642251
       01317  466463314525
       01320  603021626046
       01321  454370604645
       01322  256021512764
       01323  442545636062
       01324  472523312631
       01325  252433606060               BCD 1ED.
       01326  0 00000 0 00000 X
 A                      00000            END
```

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```
1            ORG 18                    FORCE NEW RECORD
1                        00022           ORG 18                  FORCE NEW RECORD
       00022  0 01303 0 01327           HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00022           TXH 18                  2163  FT  56
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01252 0 01244           HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01330 0 01311           HTR PR,0,PR+15
       01310  0 02000 0 00272           TRA SPEND
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  444651256021              BCD  MORE ARGUMENTS HAVE BEEN SUPPLIED THAN ARE REQUIRED BY AN OP
       01314  512764442545
       01315  636260302165
       01316  256022252545
       01317  606264474743
       01320  312524606330
       01321  214560215125
       01322  605125506431
       01323  512524602270
       01324  602145604647
       01325  254560626422              BCD 3EN SUBROUTINE.
       01326  514664633145
       01327  253360606060
       01330  0 00000 0 00000 X
 A                      00000           END
```

```
1            ORG 19                    FORCE NEW RECORD
1                        00023           ORG 19                  FORCE NEW RECORD
       00023  0 01303 0 01351            HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD    01303  3 00000 0 00023            TXH 19                   434  FT  62
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01352 0 01311            HTR PR,0,PR+33
       01310  0 02000 0 00272            TRA SPEND
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  264346666046               BCD  FLOW OF PROGRAM IS TOO COMPLEX.  NEXT ENTRY CANNOT BE MADE I
       01314  266047514627
       01315  512144603162
       01316  606346466023
       01317  464447432567
       01320  336060452567
       01321  636025456351
       01322  706023214545
       01323  466360222560
       01324  442124256031
       01325  456043316263               BCD  N LIST OF BASIC BLOCKS.
       01326  604626602221
       01327  623123602243
       01330  462342623360
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  512566513163               BCD  REWRITE PROGRAM WITH FEWER TRANSFER ADDRESSES, OR DO IN TWO
       01340  256047514627
       01341  512144606631
       01342  633060262566
       01343  255160635121
       01344  456226255160
       01345  212424512562
       01346  622562736046
       01347  516024466031
       01350  456063664660
       01351  472151636233               BCD 1PARTS.
       01352  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 20                  FORCE NEW RECORD
1                        00024         ORG 20                 FORCE NEW RECORD
       00024  0 01303 0 01330         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00024         TXH 20                  454  FT  64
                                          20                  707  FT  64
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01252 0 01244         HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01331 0 01311         HTR PR,0,PR+16
       01310  0 02000 0 00272         TRA SPEND
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  216047215163            BCD  A PART OF THE SOURCE PROGRAM HAS NO POSSIBLE PATH OF FLOW TO
       01314  604626606330
       01315  256062466451
       01316  232560475146
       01317  275121446030
       01320  216260454660
       01321  474662623122
       01322  432560472163
       01323  306046266026
       01324  434666606346
       01325  603163336060            BCD 4 IT.  CHECK PROGRAM.
       01326  233025234260
       01327  475146275121
       01330  443360606060
       01331  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 21                    FORCE NEW RECORD
1                          00025         ORG 21                  FORCE NEW RECORD
       00025  0 01303 0 01331            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00025            TXH 21                   643  FT  64
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01332 0 01311            HTR PR,0,PR+17
       01310  0 02000 0 00272            TRA SPEND
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  444651256063               BCD  MORE THAN 25 DISTINCT SYMBOLS USED IN ASSIGNED GO TO STATEME
       01314  302145600205
       01315  602431626331
       01316  452363606270
       01317  442246436260
       01320  646225246031
       01321  456021626231
       01322  274525246027
       01323  466063466062
       01324  632163254425
       01325  456362336060               BCD 5NTS.  SIMPLIFY SOURCE PROGRAM.
       01326  623144474331
       01327  267060624664
       01330  512325604751
       01331  462751214433
       01332  0 00000 0 00000 X
 A                         00000         END
```

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```
1            ORG 22                  FORCE NEW RECORD
1                        00026         ORG 22                  FORCE NEW RECORD
       00026  0 01303 0 01334         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00026         TXH 22                   756  FT  64
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01252 0 01244         HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01335 0 01311         HTR PR,0,PR+20
       01310  0 02000 0 00272         TRA SPEND
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  263167244662            BCD  FIXDOS TABLE IS FULL.  THERE ARE TOO MANY TRANSFERS TO DO ST
       01314  606321224325
       01315  603162602664
       01316  434333606063
       01317  302551256021
       01320  512560634646
       01321  604421457060
       01322  635121456226
       01323  255162606346
       01324  602446606263
       01325  216325442545            BCD 8ATEMENTS.  REWRITE SOURCE PROGRAM.
       01326  636233606051
       01327  256651316325
       01330  606246645123
       01331  256047514627
       01332  512144336060
       01333  606060606060
       01334  606060606060
       01335  0 00000 0 00000 X
 A                       00000         END
```

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```
1            ORG 23                  FORCE NEW RECORD
1                        00027         ORG 23                  FORCE NEW RECORD
        00027  0 01303 0 01342         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD     01303  3 00000 0 00027         TXH 23                  1041  FT  64
        01304  0 07400 4 00740         TSX PRINT,4
        01305  0 01252 0 01244         HTR SOURCE,0,SOURCE+6
        01306  0 07400 4 00740         TSX PRINT,4
        01307  0 01343 0 01311         HTR PR,0,PR+26
        01310  0 02000 0 00272         TRA SPEND
        01311  606060606060     PR     BCD 2
        01312  606060606060
        01313  622563606321            BCD  SET TABLE IS FULL.  THERE ARE TOO MANY ASSIGN OR SENSE LIGHT
        01314  224325603162
        01315  602664434333
        01316  606063302551
        01317  256021512560
        01320  634646604421
        01321  457060216262
        01322  312745604651
        01323  606225456225
        01324  604331273063
        01325  606263216325            BCD   STATEMENTS, OR TOO MANY TRANSFERS TO DOS.
        01326  442545636273
        01327  604651606346
        01330  466044214570
        01331  606351214562
        01332  262551626063
        01333  466024466233
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  512566513163            BCD 4REWRITE SOURCE PROGRAM.
        01340  256062466451
        01341  232560475146
        01342  275121443360
        01343  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 24                    FORCE NEW RECORD
1                        00030           ORG 24                  FORCE NEW RECORD
      00030  0 01303 0 01346             HTR X-1,0,LOCREC        CARD FOR DE
                       01303             ORG LOCREC
TD    01303  3 00000 0 00030             TXH 24                  3156  FT  64
      01304  0 07400 4 00740             TSX PRINT,4
      01305  0 01252 0 01244             HTR SOURCE,0,SOURCE+6
      01306  0 07400 4 00740             TSX PRINT,4
      01307  0 01347 0 01311             HTR PR,0,PR+30
      01310  0 02000 0 00272             TRA SPEND
      01311  606060606060     'PR        BCD 2
      01312  606060606060
      01313  264346666046                BCD  FLOW OF PROGRAM IS TOO COMPLEX.  TRA TABLE HAS TOO MANY ENTR
      01314  266047514627
      01315  512144603162
      01316  606346466023
      01317  464447432567
      01320  336060635121
      01321  606321224325
      01322  603021626063
      01323  464660442145
      01324  706025456351
      01325  312562336060                BCD  IES.  REWRITE PROGRAM WITH
      01326  512566513163
      01327  256047514627
      01330  512144606631
      01331  633060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  262566255160                BCD 8FEWER TRANSFER ADDRESSES, OR DO IN TWO PARTS.
      01340  635121456226
      01341  255160212424
      01342  512562622562
      01343  736046516024
      01344  466031456063
      01345  664660472151
      01346  636233606060
      01347  0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 25                  FORCE NEW RECORD
1                        00031        .ORG 25                 FORCE NEW RECORD
       00031  0 01303 0 01333         HTR X-1,0,LOCREC        CARD FOR DE
                         01303        ORG LOCREC
 TD    01303  3 00000 0 00031         TXH 25                  2655  FT  75
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01252 0 01244         HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01334 0 01311         HTR PR,0,PR+19
       01310  0 02000 0 00272         TRA SPEND
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  623171256046            BCD  SIZE OF REGION TABLE EXCEEDS 50 ENTRIES.  PROBABLY TOO MANY
       01314  266051252731
       01315  464560632122
       01316  432560256723
       01317  252524626005
       01320  006025456351
       01321  312562336060
       01322  475146222122
       01323  437060634646
       01324  604421457060
       01325  622547215121            BCD 7SEPARATE DO NESTS.  REPROGRAM PROBLEM.
       01326  632560244660
       01327  452562636233
       01330  606051254751
       01331  462751214460
       01332  475146224325
       01333  443360606060
       01334  0 00000 0 00000 X
A                        00000        END
```

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```
1            ORG 26                    FORCE NEW RECORD
1                        00032           ORG 26                  FORCE NEW RECORD
      00032   0 01303 0 01334            HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD   01303   3 00000 0 00032            TXH 26                 16004  FT  75
                                             26                  7447  FT  75
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01252 0 01244            HTR SOURCE,0,SOURCE+6
      01306   0 07400 4 00740            TSX PRINT,4
      01307   0 01335 0 01311            HTR PR,0,PR+20
      01310   0 02000 0 00272            TRA SPEND
      01311   606060606060      PR       BCD 2
      01312   606060606060
      01313   622523633146               BCD  SECTION 5 TABLES EXCEED DRUM SIZE.  PROBLEM IS TOO LONG, OR
      01314   456005606321
      01315   224325626025
      01316   672325252460
      01317   245164446062
      01320   317125336060
      01321   475146224325
      01322   446031626063
      01323   464660434645
      01324   277360465160
      01325   302162606346               BCD 8HAS TOO MANY TRANSFERS.  REPROGRAM PROBLEM.
      01326   466044214570
      01327   606351214562
      01330   262551623360
      01331   605125475146
      01332   275121446047
      01333   514622432544
      01334   336060606060
      01335   0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 27                  FORCE NEW RECORD
1                        00033         ORG 27                  FORCE NEW RECORD
       00033  0 01303 0 01334          HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00033          TXH 27                   533  FT  92
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01335 0 01311          HTR PR,0,PR+20
       01310  0 02000 0 00272          TRA SPEND
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  633025512560             BCD  THERE HAVE BEEN NO REFERENCES MADE IN THE PROGRAM TO A VARIA
       01314  302165256022
       01315  252545604546
       01316  605125262551
       01317  254523256260
       01320  442124256031
       01321  456063302560
       01322  475146275121
       01323  446063466021
       01324  606521513121
       01325  224325606630             BCD 8BLE WHICH WAS LISTED AS A SUBROUTINE ARGUMENT.
       01326  312330606621
       01327  626043316263
       01330  252460216260
       01331  216062642251
       01332  466463314525
       01333  602151276444
       01334  254563336060
       01335  0 00000 0 00000 X
 A                       00000         END
```

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```
1            ORG 28                    FORCE NEW RECORD
1                          00034         ORG 28                  FORCE NEW RECORD
       00034  0 01303 0 01333            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00034            TXH 28                   604  FT  92
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01334 0 01311            HTR PR,0,PR+19
       01310  0 02000 0 00272            TRA SPEND
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  633025512560               BCD  THERE HAVE BEEN OVER 1,000 REFERENCES TO SUBROUTINE ARGUMENT
       01314  302165256022
       01315  252545604665
       01316  255160017300
       01317  000060512526
       01320  255125452325
       01321  626063466062
       01322  642251466463
       01323  314525602151
       01324  276444254563
       01325  626031456063               BCD 7S IN THE PROGRAM.  MODIFY SOURCE PROGRAM.
       01326  302560475146
       01327  275121443360
       01330  604446243126
       01331  706062466451
       01332  232560475146
       01333  275121443360
       01334  0 00000 0 00000 X
 A                         00000         END
```

```
1            ORG 29                  FORCE NEW RECORD
1                        00035         ORG 29                  FORCE NEW RECORD
       00035  0 01303 0 01364         HTR X-1,0,LOCREC        CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00035         TXH 29                  7100  FT  56
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01365 0 01307         HTR PR,0,PR+46
       01306  0 02000 0 00272         TRA SPEND
       01307  606060606060     PR     BCD 2
       01310  606060606060
       01311  464725456062            BCD  OPEN SUBROUTINE NOT IN DICTIONARY USED BY SECTION 3.  THIS I
       01312  642251466463
       01313  314525604546
       01314  636031456024
       01315  312363314645
       01316  215170606462
       01317  252460227060
       01320  622523633146
       01321  456003336060
       01322  633031626031
       01323  452431232163            BCD  NDICATES THAT THE SYSTEM TAPE
       01324  256260633021
       01325  636063302560
       01326  627062632544
       01327  606321472560
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  662162603144            BCD  WAS IMPROPERLY EDITED WHEN ADDITION WAS MADE TO DICTIONARY O
       01336  475146472551
       01337  437060252431
       01340  632524606630
       01341  254560212424
       01342  316331464560
       01343  662162604421
       01344  242560634660
       01345  243123633146
       01346  452151706046
       01347  266046472545            BCD  F OPEN SUBROUTINES USED BY
       01350  606264225146
       01351  646331452562
       01352  606462252460
       01353  227060606060
       01354  606060606060
       01355  606060606060
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  622523633146            BCD 4SECTION 1 AND SECTION 3.
       01362  456001602145
       01363  246062252363
       01364  314645600333
```

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        01365  0 00000 0 00000 X
A                        00000        END
```

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```
1            ORG 30                  FORCE NEW RECORD
1                        00036         ORG 30                 FORCE NEW RECORD
        00036  0 01303 0 01354         HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD     01303  3 00000 0 00036         TXH 30                  425  FT  67      .
        01304  0 07400 4 00740         TSX PRINT,4
        01305  0 01355 0 01315         HTR PR,0,PR+32
        01306  0 76000 0 00166         SWT 6
        01307  0 02000 0 00221         TRA DIGRTN
        01310  0 50000 0 00312         CLA PRNT4
        01311  0 60100 0 00311         STO PRNT2
        01312  0 50000 0 01232         CLA ZERO
        01313  0 62200 0 00316         STD HTR4
        01314  0 02000 0 00272         TRA SPEND
        01315  606060606060     PR     BCD 2
        01316  606060606060
        01317  624664512325            BCD  SOURCE PROGRAM CONTAINS AN ILLEGAL PATH OF FLOW, OR A MACHIN
        01320  604751462751
        01321  214460234645
        01322  632131456260
        01323  214560314343
        01324  252721436047
        01325  216330604626
        01326  602643466673
        01327  604651602160
        01330  442123303145
        01331  256025515146            BCD  E ERROR HAS RESULTED IN AN IMPOSSIBLE
        01332  516030216260
        01333  512562644363
        01334  252460314560
        01335  214560314447
        01336  466262312243
        01337  256060606060
        01340  606060606060
        01341  606060606060
        01342  606060606060
        01343  302143636021            BCD  HALT AFTER A DIVIDE CHECK TEST.  CHECK SOURCE PROGRAM.
        01344  266325516021
        01345  602431653124
        01346  256023302523
        01347  426063256263
        01350  336060233025
        01351  234260624664
        01352  512325604751
        01353  462751214433
        01354  606060606060
        01355  0 00000 0 00000 X
A                        00000         END
```

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```
1            ORG 31                  FORCE NEW RECORD
1                        00037         ORG 31                 FORCE NEW RECORD
       00037  0 01303 0 01400         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00037         TXH 31                  277  FT 113
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01400 0 01315         HTR PR,0,PR+51
       01306  0 76000 0 00166         SWT 6
       01307  0 02000 0 00221         TRA DIGRTN
       01310  0 50000 0 00312         CLA PRNT4
       01311  0 60100 0 00311         STO PRNT2
       01312  0 50000 0 01232         CLA ZERO
       01313  0 62200 0 00316         STD HTR4
       01314  0 02000 0 00272         TRA SPEND
       01315  606060606060     PR     BCD 2
       01316  606060606060
       01317  214560216363            BCD  AN ATTEMPT TO FIND A NAME IN THE INTERNALLY DEFINED VARIABLE
       01320  254447636063
       01321  466026314524
       01322  602160452144
       01323  256031456063
       01324  302560314563
       01325  255145214343
       01326  706024252631
       01327  452524606521
       01330  513121224325
       01331  606321224325            BCD   TABLE HAS FAILED.  IF THE SOURCE PROGRAM BEING
       01332  603021626026
       01333  213143252433
       01334  606031266063
       01335  302560624664
       01336  512325604751
       01337  462751214460
       01340  222531452760
       01341  606060606060
       01342  606060606060
       01343  234644473143            BCD  COMPILED IS EXTREMELY LARGE, THIS STOP MAY INDICATE AN OVERL
       01344  252460316260
       01345  256763512544
       01346  254370604321
       01347  512725736063
       01350  303162606263
       01351  464760442170
       01352  603145243123
       01353  216325602145
       01354  604665255143
       01355  214760462660            BCD  AP OF TABLES IN CORE MEMORY.  NAME IN QUESTION
       01356  632122432562
       01357  603145602346
       01360  512560442544
       01361  465170336060
       01362  452144256031
       01363  456050642562
       01364  633146456060
```

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01365  606060606060
01366  606060606060
01367  316260626346          BCD  IS STORED IN LEFT MOST 20 BITS OF LOCATION 157.
01370  512524603145
01371  604325266360
01372  444662636002
01373  006022316362
01374  604626604346
01375  232163314645
01376  600105073360
01377  606060606060
01400  606060606060
01401  0 00000 0 00000 X
A                     00000        END
```

1.53

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1     .       ORG 32                    FORCE NEW RECORD
1                          00040          ORG 32                  FORCE NEW RECORD
      00040   0 01303 0 01404             HTR X-1,0,LOCREC        CARD FOR DE
                           01303          ORG LOCREC
 TD   01303   3 00000 0 00040             TXH 32                   341  FT  96
                                              32                   341  FT  98
      01304   0 07400 4 00740             TSX PRINT,4
      01305   0 01405 0 01315             HTR PR,0,PR+56
      01306   0 76000 0 00166             SWT 6
      01307   0 02000 0 00221             TRA DIGRTN
      01310   0 50000 0 00312             CLA PRNT4
      01311   0 60100 0 00311             STO PRNT2
      01312   0 50000 0 01232             CLA ZERO
      01313   0 62200 0 00316             STD HTR4
      01314   0 02000 0 00272             TRA SPEND
      01315   606060606060      PR       BCD 2
      01316   606060606060
      01317   214560216363               BCD  AN ATTEMPT HAS BEEN MADE TO ASSIGN TWO OR MORE STORAGE LOCAT
      01320   254447636030
      01321   216260222525
      01322   456044212425
      01323   606346602162
      01324   623127456063
      01325   664660465160
      01326   444651256062
      01327   634651212725
      01330   604346232163
      01331   314645626063               BCD  IONS TO THE SAME VARIABLE NAME.  FAILURE OF
      01332   466063302560
      01333   622144256065
      01334   215131212243
      01335   256045214425
      01336   336060262131
      01337   436451256046
      01340   266060606060
      01341   606060606060
      01342   606060606060
      01343   622523633146               BCD  SECTION 1 PRIME OR SECTION 5 PRIME IN THE PREPARATION OF THE
      01344   456001604751
      01345   314425604651
      01346   606225236331
      01347   464560056047
      01350   513144256031
      01351   456063302560
      01352   475125472151
      01353   216331464560
      01354   462660633025
      01355   606321224325               BCD   TABLES OF EQUIVALENCE CLASSES HAS OCCURRED,
      01356   626046266025
      01357   506431652143
      01360   254523256023
      01361   432162622562
      01362   603021626046
      01363   232364515125
```

```
01364  247360606060
01365  606060606060
01366  606060606060
01367  465160633025          BCD  OR THERE IS AN INCONSISTANCY IN COMMON, EQUIV, AND DIM SENTE
01370  512560316260
01371  214560314523
01372  464562316263
01373  214523706031
01374  456023464444
01375  464573602550
01376  643165736021
01377  452460243144
01400  606225456325
01401  452325626031          BCD 4NCES IN SOURCE LANGUAGE.
01402  456062466451
01403  232560432145
01404  276421272533
01405  0 00000 0 00000 X
A                   00000    END
```

1550

```
1            ORG 33                  FORCE NEW RECORD
1                        00041         ORG 33                 FORCE NEW RECORD
      00041   0 01303 0 01403         HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303   3 00000 0 00041         TXH 33                  352  FT 113
      01304   0 76200 0 00304         RDR 4
      01305   0 46000 0 01325         LDA A
      01306   0 70000 0 01257         CPY ERAS
      01307  -0 50000 0 01257         CAL ERAS
      01310   0 77100 0 00022         ARS 18
      01311   0 56000 0 00717         LDQ BLANKS
      01312  -0 76300 0 00022         LGL 18
      01313   0 60200 0 01403         SLW OP
      01314   0 07400 4 00740         TSX PRINT,4
      01315   0 01404 0 01326         HTR PR,0,PR+46
      01316   0 76000 0 00166         SWT 6
      01317   0 02000 0 00221         TRA DIGRTN
      01320   0 50000 0 00312         CLA PRNT4
      01321   0 60100 0 00311         STO PRNT2
      01322   0 50000 0 01232         CLA ZERO
      01323   0 62200 0 00316         STD HTR4
      01324   0 02000 0 00272         TRA SPEND
      01325   0 00000 0 00726 A       HTR8726
      01326   606060606060     PR    BCD 2
      01327   606060606060
      01330   214560216363           BCD  AN ATTEMPT TO FIND AN OPERATION ABBREVIATION IN THE TABLE OF
      01331   254447636063
      01332   466026314524
      01333   602145604647
      01334   255121633146
      01335   456021222251
      01336   256531216331
      01337   464560314560
      01340   633025606321
      01341   224325604626
      01342   606230215125           BCD   SHARE OPERATIONS HAS FAILED.  IF THE SOURCE
      01343   604647255121
      01344   633146456260
      01345   302162602621
      01346   314325243360
      01347   603126606330
      01350   256062466451
      01351   232560606060
      01352   606060606060
      01353   606060606060
      01354   475146275121           BCD  PROGRAM BEING COMPILED IS EXTREMELY LARGE THIS MAY INDICATE
      01355   446022253145
      01356   276023464447
      01357   314325246031
      01360   626025676351
      01361   254425437060
      01362   432151272560
      01363   633031626044
      01364   217060314524
```

```
01365  312321632560
01366  214560466525          BCD  AN OVERLAP OF TABLES IN CORE MEMORY.
01367  514321476046
01370  266063212243
01371  256260314560
01372  234651256044
01373  254446517033
01374  606060606060
01375  606060606060
01376  606060606060
01377  606060606060
01400  633025604647          BCD 3THE OPERATION IS
01401  255121633146
01402  456031626060
01403  606060606060     OP   BCD 1
01404  0 00000 0 00000 X
A                     00000  END .
```

157.

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1            ORG 34                    FORCE NEW RECORD
1                          00042         ORG 34                 FORCE NEW RECORD
      00042   0 01303 0 01410            HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD   01303   3 00000 0 00042            TXH 34                  377  FT 115
      01304   0 76200 0 00304            RDR 4
      01305   0 46000 0 01322            LDA A
      01306   0 70000 0 01401            CPY ERWRD
      01307  -0 50000 0 00717            CAL BLANKS
      01310   0 56000 0 01401            LDQ ERWRD
      01311  -0 76300 0 00036            LGL 30
      01312   0 60200 0 01401            SLW ERWRD
      01313  -0 76300 0 00006            LGL 6
      01314   0 56000 0 00717            LDQ BLANKS
      01315  -0 76300 0 00036            LGL 30
      01316   0 60200 0 01402            SLW ERWRD+1
      01317   0 07400 4 00740            TSX PRINT,4
      01320   0 01411 0 01323            HTR PR,0,PR+54
      01321   0 02000 0 00272            TRA SPEND
      01322   0 00000 0 01376 A          HTR81376
      01323   606060606060     PR       BCD 2
      01324   606060606060
      01325   255151465160               BCD  ERROR IN CARD SEQUENCE OF LIBRARY PROGRAM ON SYSTEM TAPE 1.
      01326   314560232151
      01327   246062255064
      01330   254523256046
      01331   266043312251
      01332   215170604751
      01333   462751214460
      01334   464560627062
      01335   632544606321
      01336   472560013360
      01337   602321512460               BCD   CARD READ SHOULD BE
      01340   512521246062
      01341   304664432460
      01342   222560606060
      01343   606060606060
      01344   606060606060
      01345   606060606060
      01346   606060606060
      01347   606060606060
      01350   606060606060
      01351   216023464563               BCD  A CONTINUATION OF LIBRARY PROGRAM REQUESTED, BUT PROGRAM CAR
      01352   314564216331
      01353   464560462660
      01354   433122512151
      01355   706047514627
      01356   512144605125
      01357   506425626325
      01360   247360226463
      01361   604751462751
      01362   214460232151
      01363   246030216260               BCD  D HAS BEEN FOUND INSTEAD.
      01364   222525456026
```

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01365  466445246031
01366  456263252124
01367  336060606060
01370  606060606060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  076043252663            BCD 47 LEFT ROW OF CARD READS
01376  605146666046
01377  266023215124
01400  605125212462
01401  606060606060     ERWRD  BCD 2
01402  606060606060
01403  263145246025            BCD 6FIND ERROR AND REWRITE LIBRARY.
01404  515146516021
01405  452460512566
01406  513163256043
01407  312251215170
01410  336060606060
01411  0 00000 0 00000 X
A                     00000    END
```

1059

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1            ORG 35                  FORCE NEW RECORD
1                        00043         ORG 35                  FORCE NEW RECORD
       00043  0 01303 0 01352         HTR X-1,0,LOCREC        CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00043         TXH 35                   543  FT  115
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01353 0 01307         HTR PR,0,PR+36
       01306  0 02000 0 00221         TRA DIGRTN
       01307  606060606060     PR     BCD 2
       01310  606060606060
       01311  632147256023            BCD  TAPE CHECK IN READING RECORD FROM THE SYSTEM TAPE 1.  FIVE A
       01312  302523426031
       01313  456051252124
       01314  314527605125
       01315  234651246026
       01316  514644606330
       01317  256062706263
       01320  254460632147
       01321  256001336060
       01322  263165256021
       01323  636325444763            BCD  TTEMPTS HAVE BEEN MADE TO READ THIS
       01324  626030216525
       01325  602225254560
       01326  442124256063
       01327  466051252124
       01330  606330316260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  512523465124            BCD  RECORD CORRECTLY.  MAY BE NECESSARY TO REWRITE LIBRARY FILE
       01336  602346515125
       01337  236343703360
       01340  604421706022
       01341  256045252325
       01342  626221517060
       01343  634660512566
       01344  513163256043
       01345  312251215170
       01346  602631432560
       01347  604645606330            BCD 4 ON THE SYSTEM TAPE.
       01350  256062706263
       01351  254460632147
       01352  253360606060
       01353  0 00000 0 00000 X
A                        00000         END
```

106C

```
1            ORG 36                    FORCE NEW RECORD
1                        00044           ORG 36                  FORCE NEW RECORD
      00044   0 01303 0 01354            HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD   01303   3 00000 0 00044            TXH 36                   441  FT  98
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01355 0 01315            HTR PR,0,PR+32
      01306   0 76000 0 00166            SWT 6
      01307   0 02000 0 00221            TRA DIGRTN
      01310   0 50000 0 00312            CLA PRNT4
      01311   0 60100 0 00311            STO PRNT2
      01312   0 50000 0 01232            CLA ZERO
      01313   0 62200 0 00316            STD HTR4
      01314   0 02000 0 00272            TRA SPEND
      01315   606060606060     PR       BCD 2
      01316   606060606060
      01317   216062642251               BCD  A SUBROUTINE CALL NAME OR A LIBRARY FUNCTION HAS BEEN USED A
      01320   466463314525
      01321   602321434360
      01322   452144256046
      01323   516021604331
      01324   225121517060
      01325   266445236331
      01326   464560302162
      01327   602225254560
      01330   646225246021
      01331   626021606521               BCD  S A VARIABLE NAME, OR THERE HAS BEEN A MACHINE
      01332   513121224325
      01333   604521442573
      01334   604651606330
      01335   255125603021
      01336   626022252545
      01337   602160442123
      01340   303145256060
      01341   606060606060
      01342   606060606060
      01343   255151465160               BCD  ERROR IN COMPILING THE NAME.  CHECK SOURCE PROGRAM.
      01344   314560234644
      01345   473143314527
      01346   606330256045
      01347   214425336060
      01350   233025234260
      01351   624664512325
      01352   604751462751
      01353   214433606060
      01354   606060606060
      01355   0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 37                  FORCE NEW RECORD
1                          00045       ORG 37                FORCE NEW RECORD
      00045   0 01303 0 01374          HTR X-1,0,LOCREC      CARD FOR DE
                           01303       ORG LOCREC
 TD   01303   3 00000 0 00045          TXH 37                 562  FT 113
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01375 0 01315          HTR PR,0,PR+48
      01306   0 76000 0 00166          SWT 6
      01307   0 02000 0 00221          TRA DIGRTN
      01310   0 50000 0 00312          CLA PRNT4
      01311   0 60100 0 00311          STO PRNT2
      01312   0 50000 0 01232          CLA ZERO
      01313   0 62200 0 00316          STD HTR4
      01314   0 02000 0 00272          TRA SPEND
      01315   606060606060     PR      BCD 2
      01316   606060606060
      01317   633025602162             BCD  THE ASSIGNMENT OF INSTRUCTION STORAGE LOCATIONS DOES NOT CHE
      01320   623127454425
      01321   456360462660
      01322   314562635164
      01323   236331464560
      01324   626346512127
      01325   256043462321
      01326   633146456260
      01327   244625626045
      01330   466360233025
      01331   234260663163             BCD  CK WITH THAT GIVEN IN A PREVIOUS RECORD.
      01332   306063302163
      01333   602731652545
      01334   603145602160
      01335   475125653146
      01336   646260512523
      01337   465124336060
      01340   606060606060
      01341   606060606060
      01342   606060606060
      01343   312660633025             BCD  IF THE SOURCE PROGRAM BEING COMPILED IS EXTREMELY LARGE, THI
      01344   606246645123
      01345   256047514627
      01346   512144602225
      01347   314527602346
      01350   444731432524
      01351   603162602567
      01352   635125442543
      01353   706043215127
      01354   257360633031
      01355   626062634647             BCD  S STOP MAY INDICATE
      01356   604421706031
      01357   452431232163
      01360   256060606060
      01361   606060606060
      01362   606060606060
      01363   606060606060
      01364   606060606060
```

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01365  606060606060
01366  606060606060
01367  214560466525          BCD 6AN OVERLAP OF TABLES IN MEMORY.
01370  514321476046
01371  266063212243
01372  256260314560
01373  442544465170
01374  336060606060
01375  0 00000 0 00000 X
A                00000       END
```

```
1            ORG 38                    FORCE NEW RECORD
1                        00046           ORG 38                  FORCE NEW RECORD
                                             END OF FILE*************************************************
      00046   0 01303 0 01732            HTR X-1,0,LOCREC        CARD FOR DE
                        01303            ORG LOCREC
 TD   01303   3 00000 0 00046            TXH 38                   425  FT  98
                                              38                  107  FT  92
                                              38                  277  FT  92
                                              38                  260  FT  96
                                              38                  465  FT  96
                                              38                  260  FT  98
                                              38                  247  FT 101
                                              38                  245  FT 105
                                              38                  241  FT 115
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306  -0 53400 3 01232            LXD ZERO,3
      01307   0 50000 1 01453 D          CLA A,1
      01310   0 40200 0 01235            SUB ERWORD
      01311   0 10000 0 01427            TZE B
      01312   1 77763 1 01313            TXI C,1,-13
      01313   3 77630 1 01307 C          TXH D,1,-13*8
      01314   0 07400 4 00740            TSX PRINT,4
      01315   0 01427 0 01317            HTR ER,0,ER+72
      01316   0 00000 0 01452            HTR E
      01317   606060606060       ER      BCD 2
      01320   606060606060
      01321   434623216331               BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
      01322   464560462660
      01323   255151465173
      01324   606630312330
      01325   603021626022
      01326   252545604751
      01327   314563252473
      01330   603021626023
      01331   216462252460
      01332   243121274546
      01333   626331236051               BCD  STIC RECORD NUMBER 38
      01334   252346512460
      01335   456444222551
      01336   600310606060
      01337   606060606060
      01340   606060606060
      01341   606060606060
      01342   606060606060
      01343   606060606060
      01344   606060606060
      01345   634660222560               BCD  TO BE READ IN.  THIS RECORD COMPARES THE LOCATION TO A LIST
      01346   512521246031
      01347   453360606330
      01350   316260512523
      01351   465124602346
      01352   444721512562
      01353   606330256043
```

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01354  462321633146
01355  456063466021
01356  604331626360
01357  462660076047          BCD  OF 7 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH
01360  466262312243
01361  256024516444
01362  605125212460
01363  262131436451
01364  256273602264
01365  636063302560
01366  622521512330
01367  606060606060
01370  606060606060
01371  302162602621          BCD  HAS FAILED.  THE ERRORS ARE LISTED IN 1453, 1453 PLUS 13, ET
01372  314325243360
01373  606330256025
01374  515146516260
01375  215125604331
01376  626325246031
01377  456001040503
01400  736001040503
01401  604743646260
01402  010373602563
01403  233360604751          BCD  C.  PRESS START IF YOU WISH TO
01404  256262606263
01405  215163603126
01406  607046646066
01407  316230606346
01410  606060606060
01411  606060606060
01412  606060606060
01413  606060606060
01414  606060606060
01415  512562634651          BCD  RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.
01416  256044212330
01417  314525606346
01420  606263216325
01421  603145606630
01422  312330602551
01423  514651604623
01424  236451512524
01425  336060606060
01426  606060606060
01427  0 50000 1 01454 B      CLA A1SIX,1
01430  0 60100 2 01631        STO PR1SIX,2
01431  1 77777 2 01432        TXI F,2,-1
01432 -3 77772 2 01434 F      TXL G,2,-6
01433  1 77777 1 01427        TXI B,1,-1
01434  0 50000 1 01455 G      CLA A1SIX+1,1
01435  0 60100 0 01652        STO PR2
01436  0 50000 1 01456        CLA A1SIX+2,1
01437  0 60100 0 01660        STO PR3
01440  0 50000 1 01457        CLA A1SIX+3,1
01441  0 60100 0 01665        STO PR4TWO
```

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01442  0 50000 1 01460          CLA A1SIX+4,1
01443  0 60100 0 01666          STO PR4TWO+1
01444  0 50000 1 01461          CLA A1SIX+5,1
01445  0 60100 0 01700          STO PR5TWO
01446  0 50000 1 01462          CLA A1SIX+6,1
01447  0 60100 0 01701          STO PR5TWO+1
01450  0 07400 4 00740          TSX PRINT,4
01451  0 01733 0 01623          HTR PR,0,PR+72
01452  0 02000 0 00221 E        TRA DIGRTN
01453 +000425000000     A       OCT 000425000000      SECTION VI RECORD L62
01454  452760635121     A1SIX   BCD 6NG TRANSFER VECTOR TABLE
01455  456226255160
01456  652523634651
01457  606321224325
01460  606060606060
01461  606060606060
01462  516444600333     A2      BCD 1RUM 3.
01463  600401013360     A3      BCD 1 411.
01464  316260314560     A4TWO   BCD 2IS IN 413.
01465  040103336060
01466  314560060205     A5TWO   BCD 2IN 625.   CO
01467  336060602346
01470 +000260000000             OCT 000260000000      SECTION VI RECORD L 61 OR 62
01471  452760255064             BCD 6NG EQUIT TABLE
01472  316360632122
01473  432560606060
01474  606060606060
01475  606060606060
01476  606060606060
01477  516444600133             BCD 1RUM 1.
01500  600204013360             BCD 1 241.
01501  316260314560             BCD 2IS IN 361.
01502  030601336060
01503  314560030602             BCD 2IN 362.   CO
01504  336060602346
01505 +000465000000             OCT 000465000000      SECTION VI RECORD L61
01506  452760623171             BCD 6NG SIZE TABLE
01507  256063212243
01510  256060606060
01511  606060606060
01512  606060606060
01513  606060606060
01514  516444600233             BCD 1RUM 2.
01515  600405003360             BCD 1 450.
01516  316260314560             BCD 2IS IN 453.
01517  040503336060
01520  314560030602             BCD 2IN 362.   CO
01521  336060602346
01522 +000247000000             OCT 000247000000      SECTION VI - RECORD L 64
01523  452760264651             BCD 6NG FORSUB TABLE
01524  626422606321
01525  224325606060
01526  606060606060
01527  606060606060
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01530  606060606060
01531  516444600333          BCD 1RUM 3.
01532  600203033360          BCD 1 233.
01533  316260314560          BCD 2IS IN 235.
01534  020305336060
01535  314560030702          BCD 2IN 372.   CO
01536  336060602346
01537 +000245000000          OCT 000245000000      SECTION VI - RECORD L66
01540  452760264651          BCD 6NG FORSUB TABLE
01541  626422606321
01542  224325606060
01543  606060606060
01544  606060606060
01545  606060606060
01546  516444600333          BCD 1RUM 3.
01547  600203013360          BCD 1 231.
01550  316260314560          BCD 2IS IN 233.
01551  020303336060
01552  314560050506          BCD 2IN 556.   CO
01553  336060602346
01554 +000241000000          OCT 000241000000      SECTION VI - RECORD L 73
01555  452760635121          BCD 6NG TRANSFER VECTOR TABLE
01556  456226255160
01557  652523634651
01560  606321224325
01561  606060606060
01562  606060606060
01563  516444600333          BCD 1RUM 3.
01564  600202053360          BCD 1 225.
01565  316260314560          BCD 2IS IN 227.
01566  020207336060
01567  314560010005          BCD 2IN 1054.  CO
01570  043360602346
01571 +000277000000          OCT 000277000000      SECTION PRE 6
01572  452760623171          BCD 6NG SIZE TABLE
01573  256063212243
01574  256060606060
01575  606060606060
01576  606060606060
01577  606060606060
01600  516444600233          BCD 1RUM 2.
01601  600206023360          BCD 1 262.
01602  316260314560          BCD 2IS IN 265.
01603  020605336060
01604  314560010305          BCD 2IN 1351.  CO
01605  013360602346
01606 +000107000000          OCT 000107000000      SECTION PRE 6
01607  452760635121          BCD 6NG TRANSFER VECTOR TABLE
01610  456226255160
01611  652523634651
01612  606321224325
01613  606060606060
01614  606060606060
01615  516444600333          BCD 1RUM 3.
```

```
01616  600703336060          BCD 1 73.
01617  316260314560          BCD 2IS IN 75.
01620  070533606060
01621  314560010306          BCD 2IN 1366.  CO
01622  063360602346
01623  606060606060    PR    BCD 2
01624  606060606060
01625  233025234260          BCD 4CHECK SUM ERROR IN READI
01626  626444602551
01627  514651603145
01630  605125212431
01631  452760635121    PR1SIX BCD 6NG TRANSFER VECTOR TABLE
01632  456226255160
01633  652523634651
01634  606321224325
01635  606060606060
01636  606060606060
01637  606060606060          BCD
01640  606060606060
01641  606060606060
01642  606060606060
01643  606060606060
01644  606060606060
01645  606060606060
01646  606060606060
01647  606060606060
01650  606060606060
01651  265146446024          BCD 1FROM D
01652  516444600333    PR2   BCD 1RUM 3.
01653  606023464770          BCD 5  COPY LOOP BEGINS AT LOCATION
01654  604346464760
01655  222527314562
01656  602163604346
01657  232163314645
01660  600401013360    PR3   BCD 1 411.
01661  606062632151          BCD 4  STARTING DRUM ADDRESS
01662  633145276024
01663  516444602124
01664  245125626260
01665  316260314560    PR4TWO BCD 8IS IN 413.
01666  040103336060
01667  606060606060
01670  606060606060
01671  606060606060
01672  606060606060
01673  606060606060
01674  606060606060
01675  245164446023          BCD 3DRUM CHECK SUM IS
01676  302523426062
01677  644460316260
01700  314560060205    PR5TWO BCD 3IN 625.   COMPUTED
01701  336060602346
01702  444764632524
01703  602330252342          BCD   CHECK SUM IS NOT STORED, THEREFORE IT IS NOT AVAILABLE.
```

```
01704  606264446031
01705  626045466360
01706  626346512524
01707  736063302551
01710  252646512560
01711  316360316260
01712  454663602165
01713  213143212243
01714  253360606060
01715  606060606060          BCD 4
01716  606060606060
01717  606060606060
01720  606060606060
01721  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.
01722  636325444763
01723  626030216525
01724  602225254560
01725  442124256063
01726  466051252124
01727  606330316260
01730  632122432560
01731  234651512523
01732  634370336060
01733  0 00000 0 00000 X
A                     00000        END
```

```
1            ORG 39                    FORCE NEW RECORD
1                          00047         ORG 39                  FORCE NEW RECORD
        00047  0 01303 0 02017           HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00047           TXH 39                   47  FT  58
                                             39                  734  FT  45
                                             39                  123  FT  47
                                             39                  140  FT  56
                                             39                  305  FT  56
                                             39                   41  FT  60
                                             39                  607  FT  60
                                             39                   70  FT  92
                                             39                  246  FT  92
                                             39                  442  FT  96
                                             39                  500  FT  96
                                             39                  230  FT 101
                                             39                  222  FT 105
                                             39                  222  FT 115
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 50000 0 01235           CLA ERWORD
        01307  0 40000 0 01236           ADD RECORD
        01310  0 60100 0 02020           STO X
        01311 -0 53400 3 01232           LXD ZERO,3
        01312  0 50000 1 01456 D         CLA A,1
        01313  0 40200 0 02020           SUB X
        01314  0 10000 0 01432           TZE B
        01315  1 77765 1 01316           TXI C,1,-11
        01316  3 77546 1 01312 C         TXH D,1,-11*14
        01317  0 07400 4 00740           TSX PRINT,4
        01320  0 01432 0 01322           HTR ER,0,ER+72
        01321  0 00000 0 01455           HTR E
        01322  606060606060      ER      BCD 2
        01323  606060606060
        01324  434623216331              BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
        01325  464560462660
        01326  255151465173
        01327  606630312330
        01330  603021626022
        01331  252545604751
        01332  314563252473
        01333  603021626023
        01334  216462252460
        01335  243121274546
        01336  626331236051              BCD  STIC RECORD NUMBER 39
        01337  252346512460
        01340  456444222551
        01341  600311606060
        01342  606060606060
        01343  606060606060
        01344  606060606060
        01345  606060606060
        01346  606060606060
        01347  606060606060
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01350  634660222560          BCD  TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST O
01351  512521246031
01352  453360633031
01353  626051252346
01354  512460234644
01355  472151256260
01356  633025604346
01357  232163314645
01360  606346602160
01361  433162636046
01362  266001046047          BCD  F 14 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH
01363  466262312243
01364  256024516444
01365  605125212460
01366  262131436451
01367  256273602264
01370  636063302560
01371  622521512330
01372  606060606060
01373  606060606060
01374  302162602621          BCD  HAS FAILED.  THE ERRORS ARE LISTED IN 1456, 1456 PLUS 11, ET
01375  314325243360
01376  606330256025
01377  515146516260
01400  215125604331
01401  626325246031
01402  456001040506
01403  736001040506
01404  604743646260
01405  010173602563
01406  233360604751          BCD  C.  PRESS START IF YOU WISH TO
01407  256262606263
01410  215163603126
01411  607046646066
01412  316230606346
01413  606060606060
01414  606060606060
01415  606060606060
01416  606060606060
01417  606060606060
01420  512562634651          BCD  RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED
01421  256044212330
01422  314525606346
01423  606263216325
01424  603145606630
01425  312330602551
01426  514651604623
01427  236451512524
01430  606060606060
01431  606060606060
01432  0 50000 1 01457 B      CLA A1FOR,1
01433  0 60100 2 01722        STO PR1FOR,2
01434  1 77777 2 01435        TXI F,2,-1
01435 -3 77774 2 01437  F     TXL G,2,-4
```

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01436  1 77777 1 01432          TXI B,1,-1
01437  0 50000 1 01460 G        CLA A1FOR+1,1
01440  0 60100 0 01737          STO PR2
01441  0 50000 1 01461          CLA A1FOR+2,1
01442  0 60100 0 01745          STO PR3
01443  0 50000 1 01462          CLA A1FOR+3,1
01444  0 60100 0 01752          STO PR4TWO
01445  0 50000 1 01463          CLA A1FOR+4,1
01446  0 60100 0 01753          STO PR4TWO+1
01447  0 50000 1 01464          CLA A1FOR+5,1
01450  0 60100 0 01767          STO PR5
01451  0 50000 1 01465          CLA A1FOR+6,1
01452  0 60100 0 01774          STO PR6
01453  0 07400 4 00740          TSX PRINT,4
01454  0 02020 0 01710          HTR PR,0,PR+72
01455  0 02000 0 00221 E        TRA DIGRTN
01456 +000047000072     A       OCT 000047000072       SECTION II - FT 58
01457  606351216263     A1FOR   BCD 4 TRASTO TABLE
01460  466063212243
01461  256060606060
01462  606060606060
01463  516444600333     A2      BCD 1RUM 3.
01464  600306336060     A3      BCD 1 36.
01465  626031456002     A4TWO   BCD 2S IN 2332.
01466  030302336060
01467  466002030405     A5      BCD 10 2345
01470  020304063360     A6      BCD 12346.
01471 +000041000074             OCT 000041000074       SECTION III - FT 60
01472  606362672346             BCD 4 TSXCOM TABLE
01473  446063212243
01474  256060606060
01475  606060606060
01476  516444600333             BCD 1RUM 3.
01477  600300336060             BCD 1 30.
01500  626031456001             BCD 2S IN 1147.
01501  010407336060
01502  466001020206             BCD 10 1226
01503  010202073360             BCD 11227.
01504 +000607000074             OCT 000607000074       SECTION III - FT 60
01505  602631672346             BCD 4 FIXCON TABLE
01506  456063212243
01507  256060606060
01510  606060606060
01511  516444600233             BCD 1RUM 2.
01512  600507073360             BCD 1 577.
01513  626071255146             BCD 2S ZERO.
01514  336060606060
01515  466001020206             BCD 10 1226
01516  010202073360             BCD 11227.
01517 +000123000057             OCT 000123000057       SECTION II - FT 47   BLOCK 5
01520  602631672346             BCD 4 FIXCON TABLE
01521  456063212243
01522  256060606060
01523  606060606060
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01524  516444600233          BCD 1RUM 2.
01525  600701336060          BCD 1 71.
01526  626071255146          BCD 2S ZERO.
01527  336060606060
01530  466001020460          BCD 10 124
01531  010205336060          BCD 1125.
01532 +000734000055          OCT 000734000055      SECTION II - FT 45   BLOCK 4
01533  602631672346          BCD 4 FIXCON TABLE
01534  456063212243
01535  256060606060
01536  606060606060
01537  516444600233          BCD 1RUM 2.
01540  600701003360          BCD 1 710.
01541  626071255146          BCD 2S ZERO.
01542  336060606060
01543  466001000007          BCD 10 1007
01544  010001003360          BCD 11010.
01545 +000070000134          OCT 000070000134      SECTION PRE 6 - FT 92
01546  606351214562          BCD 4 TRANSFER VECTOR TABLE
01547  262551606525
01550  236346516063
01551  212243256060
01552  516444600333          BCD 1RUM 3.
01553  600506336060          BCD 1 56.
01554  626031456006          BCD 2S IN 60.
01555  003360606060
01556  466004050704          BCD 10 4574
01557  040507053360          BCD 14575.
01560 +000246000134          OCT 000246000134      SECTION PRE 6 - FT 92
01561  606231712560          BCD 4 SIZE TABLE
01562  632122432560
01563  606060606060
01564  606060606060
01565  516444600233          BCD 1RUM 2.
01566  600203043360          BCD 1 234.
01567  626031456002          BCD 2S IN 237.
01570  030733606060
01571  466001030500          BCD 10 1350
01572  010305013360          BCD 11351.
01573 +000442000140          OCT 000442000140      SECTION VI - FT 96   L 61
01574  606231712560          BCD 4 SIZE TABLE
01575  632122432560
01576  606060606060
01577  606060606060
01600  516444600233          BCD 1RUM 2.
01601  600403003360          BCD 1 430.
01602  626031456004          BCD 2S IN 433.
01603  030333606060
01604  466003060660          BCD 10 366
01605  030602336060          BCD 1362.
01606 +000500000140          OCT 000500000140      SECTION VI - FT 96   L 62
01607  602550643163          BCD 4 EQUIT TABLE
01610  606321224325
01611  606060606060
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01612  606060606060
01613  516444600133          BCD 1RUM 1.
01614  600406063360          BCD 1 466.
01615  626031456004          BCD 2S IN 471.
01616  070133606060
01617  466003070060          BCD 10 370
01620  030602336060          BCD 1362.
01621 +000230000145          OCT 000230000145      SECTION VI - FT 101   L 64
01622  602646516264          BCD 4 FORSUB TABLE
01623  226063212243
01624  256060606060
01625  606060606060
01626  516444600333          BCD 1RUM 3.
01627  600201053360          BCD 1 215.
01630  626031456002          BCD 2S IN 217.
01631  010733606060
01632  466007000460          BCD 10 704
01633  030702336060          BCD 1372.
01634 +000222000151          OCT 000222000151      SECTION VI - FT 105   L 66
01635  602646516264          BCD 4 FORSUB TABLE
01636  226063212243
01637  256060606060
01640  606060606060
01641  516444600333          BCD 1RUM 3.
01642  600201003360          BCD 1 210.
01643  626031456002          BCD 2S IN 212.
01644  010233606060
01645  466007020360          BCD 10 723
01646  050506336060          BCD 1556.
01647 +000222000163          OCT 000222000163      SECTION VI - FT 115   L 73
01650  606351214562          BCD 4 TRANSFER VECTOR TABLE
01651  262551606525
01652  236346516063
01653  212243256060
01654  516444600333          BCD 1RUM 3.
01655  600201003360          BCD 1 210.
01656  626031456002          BCD 2S IN 212.
01657  010233606060
01660  466003020006          BCD 10 3206
01661  010005043360          BCD 11054.
01662 +000140000070          OCT 000140000070      SECTION III - FT 56
01663  602330276321          BCD 4 CHGTAG TABLE
01664  276063212243
01665  256060606060
01666  606060606060
01667  516444600333          BCD 1RUM 3.
01670  600102073360          BCD 1 127.
01671  626031456002          BCD 2S IN 2170.
01672  010700336060
01673  466005070307          BCD 10 5737
01674  050704003360          BCD 15740.
01675 +000305000070          OCT 000305000070      SECTION III - FT 56
01676  606267246367          BCD 4 SXDTX TABLE
01677  606321224325
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01700  606060606060
01701  606060606060
01702  516444600133          BCD 1RUM 1.
01703  600207043360          BCD 1 274.
01704  626031456002          BCD 2S IN 2213.
01705  020103336060
01706  466005070307          BCD 10 5737
01707  050704003360          BCD 15740.
01710  606060606060    PR    BCD 2
01711  606060606060
01712  233025234260          BCD 8CHECK SUM ERROR IN READING THE WORD COUNT OF THE
01713  626444602551
01714  514651603145
01715  605125212431
01716  452760633025
01717  606646512460
01720  234664456360
01721  462660633025
01722  606351214562    PR1FOR BCD 4 TRANSFER VECTOR TABLE
01723  262551606525
01724  236346516063
01725  212243256060
01726  606060606060          BCD 8
01727  606060606060
01730  606060606060
01731  606060606060
01732  606060606060
01733  606060606060
01734  606060606060
01735  606060606060
01736  265146446024          BCD 1FROM D
01737  516444600333    PR2   BCD 1RUM 3.
01740  606023464770          BCD 5  COPY LOOP BEGINS AT LOCATION
01741  604346464760
01742  222527314562
01743  602163604346
01744  232163314645
01745  600102033360    PR3   BCD 1 123.
01746  606263215163          BCD 4 STARTING DRUM ADDRESS I
01747  314527602451
01750  644460212424
01751  512562626031
01752  626031456001    PR4TWO BCD 8S IN 1234.
01753  020304336060
01754  606060606060
01755  606060606060
01756  606060606060
01757  606060606060
01760  606060606060
01761  606060606060
01762  664651246023          BCD 5WORD COUNT HAS BEEN COPIED INT
01763  466445636030
01764  216260222525
01765  456023464731
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01766  252460314563
01767  006001020304     PR5     BCD 10 1234
01770  602145246031             BCD 4 AND ITS CHECK SUM INTO
01771  636260233025
01772  234260626444
01773  603145634660
01774  010203043360     PR6     BCD  1234.
01775  606060606060
01776  606060606060
01777  606060606060
02000  606060606060
02001  606060606060
02002  606060606060
02003  606060606060
02004  606060606060
02005  606060606060
02006  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ENTRY CORRECTLY.
02007  636325444763
02010  626030216525
02011  602225254560
02012  442124256063
02013  466051252124
02014  606330316260
02015  254563517060
02016  234651512523
02017  634370336060
02020  0 00000 0 00000 X
A                 00000          END
```

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1          ORG 40                    FORCE NEW RECORD
1                        00050         ORG 40                FORCE NEW RECORD
        00050  0 01303 0 01714         HTR X-1,0,LOCREC      CARD FOR DE
                         01303         ORG LOCREC
 TD     01303  3 00000 0 00050         TXH 40                4666  FT  51
                                            40               6357  FT  29
                                            40               7027  FT  36
                                            40               6762  FT  43
                                            40               1141  FT  45
                                            40                216  FT  47
                                            40                161  FT  56
                                            40                334  FT  56
                                            40                107  FT  58
                                            40                627  FT  60
        01304  0 07400 4 00740         TSX PRINT,4
        01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
        01306 -0 53400 1 01232         LXD ZERO,1
        01307  0 50000 1 01452 D       CLA A,1
        01310  0 40200 0 01235         SUB ERWORD
        01311  0 10000 0 01427         TZE B
        01312  1 77767 1 01313         TXI C,1,-9
        01313  3 77646 1 01307 C       TXH D,1,-9*10
        01314  0 07400 4 00740         TSX PRINT,4
        01315  0 01427 0 01317         HTR ER,0,ER+72
        01316  0 00000 0 01451         HTR E
        01317  606060606060     ER     BCD 2
        01320  606060606060
        01321  434623216331            BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
        01322  464560462660
        01323  255151465173
        01324  606630312330
        01325  603021626022
        01326  252545604751
        01327  314563252473
        01330  603021626023
        01331  216462252460
        01332  243121274546
        01333  626331236051            BCD  STIC RECORD NUMBER 40
        01334  252346512460
        01335  456444222551
        01336  600400606060
        01337  606060606060
        01340  606060606060
        01341  606060606060
        01342  606060606060
        01343  606060606060
        01344  606060606060
        01345  634660222560            BCD  TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST O
        01346  512521246031
        01347  453360633031
        01350  626051252346
        01351  512460234644
        01352  472151256260
        01353  633025604346
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01354  232163314645
01355  606346602160
01356  433162636046
01357  266001006047          BCD  F 10 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH
01360  466262312243
01361  256024516444
01362  605125212460
01363  262131436451
01364  256273602264
01365  636063302560
01366  622521512330
01367  606060606060
01370  606060606060
01371  302162602621          BCD  HAS FAILED.  THE ERRORS ARE LISTED IN 1452, 1452 PLUS 9 ETC.
01372  314325243360
01373  606330256025
01374  515146516260
01375  215125604331
01376  626325246031
01377  456001040502
01400  736001040502
01401  604743646260
01402  116025632333
01403  606047512562          BCD    PRESS START IF YOU WISH TO
01404  626062632151
01405  636031266070
01406  466460663162
01407  306063466060
01410  606060606060
01411  606060606060
01412  606060606060
01413  606060606060
01414  606060606060
01415  256263465125          BCD RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.
01416  604421233031
01417  452560634660
01420  626321632560
01421  314560663031
01422  233060255151
01423  465160462323
01424  645151252433
01425  606060606060
01426  606060606060
01427  0 50000 1 01453 B     CLA A1TWO,1
01430  0 60100 0 01615       STO PR1TWO
01431  0 50000 1 01454       CLA A1TWO+1,1
01432  0 60100 0 01616       STO PR1TWO+1
01433  0 50000 1 01455       CLA A2,1
01434  0 60100 0 01621       STO PR2
01435  0 50000 1 01456       CLA A3TWO,1
01436  0 60100 0 01636       STO PR3TWO
01437  0 50000 1 01457       CLA A3TWO+1,1
01440  0 60100 0 01637       STO PR3TWO+1
01441  0 50000 1 01460       CLA A4TWO,1
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```
01442  0 60100 0 01644        STO PR4TWO
01443  0 50000 1 01461        CLA A4TWO+1,1
01444  0 60100 0 01645        STO PR4TWO+1
01445  0 50000 1 01462        CLA A5,1
01446  0 60100 0 01662        STO PR5
01447  0 07400 4 00740        TSX PRINT,4
01450  0 01715 0 01604        HTR PR,0,PR+73
01451  0 02000 0 00221 E      TRA DIGRTN
01452 +004666000000     A     OCT 004666000000      SECTION II - BLOCK 5
01453  602631672346     A1TWO BCD 2 FIXCON TABL
01454  456063212243
01455  023360606060     A2    BCD 12.
01456  633146456004     A3TWO BCD 2TION 4605.
01457  060005336060
01460  603145600502     A4TWO BCD 2 IN 5214.
01461  010433606060
01462  266001606646     A5    BCD 1F 1 WO
01463 +001141000000           OCT 001141000000      SECTION II - BLOCK 4
01464  602631672346           BCD 2 FIXCON TABL
01465  456063212243
01466  023360606060           BCD 12.
01467  633146456001           BCD 2TION 1060.
01470  000600336060
01471  603145600104           BCD 2 IN 1401
01472  000160606060
01473  266001606646           BCD 1F 1 WO
01474 +000627000000           OCT 000627000000      SECTION III - FT60
01475  602631672346           BCD 2 FIXCON TABL
01476  456063212243
01477  023360606060           BCD 12.
01500  633146456006           BCD 2TION 610.
01501  010033606060
01502  603145600101           BCD 2 IN 1143.
01503  040333606060
01504  266001606646           BCD 1F 1 WO
01505 +000161000000           OCT 000161000000      SECTION III - FT56
01506  602330276321           BCD 2 CHGTAG TABL
01507  276063212243
01510  033360606060           BCD 13.
01511  633146456001           BCD 2TION 141.
01512  040133606060
01513  603145600201           BCD 2 IN 2172.
01514  070233606060
01515  266002606646           BCD 1F 2 WO
01516 +007027000000           OCT 007027000000      SECTION II - BLOCK 3
01517  602646516521           BCD 2 FORVAL TABL
01520  436063212243
01521  023360606060           BCD 12.
01522  633146456006           BCD 2TION 6776.
01523  070706336060
01524  603145600607           BCD 2 IN 6706.
01525  000633606060
01526  266002606646           BCD 1F 2 WO
01527 +006762000000           OCT 006762000000      SECTION II - BLOCK 3-C
```

```
01530  606362672346          BCD 2 TSXCOM TABL
01531  446063212243
01532  033360606060          BCD 13.
01533  633146456006          BCD 2TION 6723.
01534  070203336060
01535  603145600607          BCD 2 IN 6716.
01536  010633606060
01537  266002606646          BCD 1F 2 WO
01540 +006357000000          OCT 006357000000      SECTION II - BLOCK2 - STATE B
01541  602646516521          BCD 2 FORVAL TABL
01542  436063212243
01543  023360606060          BCD 12.
01544  633146456006          BCD 2TION 6211.
01545  020101336060
01546  603145600603          BCD 2 IN 6362.
01547  060233606060
01550  266002606646          BCD 1F 2 WO
01551 +000107000000          OCT 000107000000      SECTION III - FT 58
01552  606351216263          BCD 2 TRASTO TABL
01553  466063212243
01554  033360606060          BCD 13.
01555  633146456005          BCD 2TION 56.
01556  063360606060
01557  603145600203          BCD 2 IN 2336.
01560  030633606060
01561  266003606646          BCD 1F 3 WO
01562 +000334000000          OCT 000334000000      SECTION III
01563  606062672463          BCD 2  SXDTX TABL
01564  676063212243
01565  013360606060          BCD 11.
01566  633146456003          BCD 2TION 306.
01567  000633606060
01570  603145600202          BCD 2 IN 2214.
01571  010433606060
01572  266002606646          BCD 1F 2 WO
01573 +000216000000          OCT 000216000000      SECTION II - BLOCK 5
01574  606021246321          BCD 2  ADTAG TABL
01575  276063212243
01576  033360606060          BCD 13.
01577  633146456001          BCD 2TION 150.
01600  050033606060
01601  603145600201          BCD 2 IN 217.
01602  073360606060
01603  266004606646          BCD 1F 4 WO
01604  606060606060    PR    BCD 2
01605  606060606060
01606  233025234260          BCD 7CHECK SUM ERROR IN READING AN ENTRY OF THE
01607  626444602551
01610  514651603145
01611  605125212431
01612  452760214560
01613  254563517060
01614  462660633025
01615  602631672346    PR1TWO BCD 2 FIXCON TABL
```

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01616  456063212243
01617  256026514644          BCD 2E FROM DRUM
01620  602451644460
01621  023360606060   PR2    BCD 92.
01622  606060606060
01623  606060606060
01624  606060606060
01625  606060606060
01626  606060606060
01627  606060606060
01630  606060606060
01631  606060606060
01632  234647706043          BCD 4COPY LOOP BEGINS AT LOCA
01633  464647602225
01634  273145626021           .                    .
01635  636043462321
01636  633146456001   PR3TWO BCD 2TION 1234.
01637  020304336060
01640  626321516331          BCD 4STARTING DRUM ADDRESS IS
01641  452760245164
01642  446021242451
01643  256262603162
01644  603145600102   PR4TWO BCD 2 IN 1234.
01645  030433606060
01646  606060606060          BCD 8
01647  606060606060
01650  606060606060
01651  606060606060
01652  606060606060
01653  606060606060
01654  606060606060
01655  606060606060
01656  633031626063          BCD 4THIS TABLE IS COMPOSED O
01657  212243256031
01660  626023464447
01661  466225246046
01662  266001606646   PR5    BCD 1F 1 WO
01663  512460254563          BCD  RD ENTRIES AND A CHECK SUM FOR EACH ENTRY.
01664  513125626021
01665  452460216023
01666  302523426062
01667  644460264651
01670  602521233060
01671  254563517033
01672  606060606060
01673  606060606060
01674  606060606060
01675  606060606060          BCD 5
01676  606060606060
01677  606060606060
01700  606060606060
01701  606060606060
01702  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THE ENTIRE TABLE CORREC
01703  636325444763
```

```
01704  626030216525
01705  602225254560
01706  442124256063
01707  466051252124
01710  606330256025
01711  456331512560
01712  632122432560
01713  234651512523
01714  634370336060          BCD 1TLY.
01715  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 41                    FORCE NEW RECORD
1                          00051         ORG 41                  FORCE NEW RECORD
        00051  0 01303 0 01443           HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00051           TXH 41                  5560  FT  34
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306 -0 53400 2 00000           LXD 0,2                 IR 2EQUALS 2 FOR STATE B, BCD IS SET UP
        01307  3 00001 2 01322           TXH PRIN,2,1
        01310  0 50000 0 01437           CLA A1
        01311  0 60100 0 01336           STO PR1
        01312  0 50000 0 01440           CLA A2
        01313  0 60100 0 01400           STO PR2
        01314  0 50000 0 01441           CLA A3
        01315  0 60100 0 01403           STO PR3
        01316  0 50000 0 01442           CLA A4
        01317  0 60100 0 01411           STO PR4
        01320  0 50000 0 01443           CLA A5
        01321  0 60100 0 01416           STO PR5
        01322  0 07400 4 00740 PRIN      TSX PRINT,4
        01323  0 01437 0 01325           HTR PR,0,PR+74
        01324  0 02000 0 00221           TRA DIGRTN
        01325  606060606060      PR      BCD 2
        01326  606060606060
        01327  233025234260              BCD 7CHECK SUM ERROR IN READING DRUM 1.  THE ST
        01330  626444602551
        01331  514651603145
        01332  605125212431
        01333  452760245164
        01334  446001336060
        01335  633025606263
        01336  216325602260      PR1     BCD 1ATE B
        01337  234624314527              BCD  CODING USED BY SECTION II, BLOCK 2, HAS BEEN
        01340  606462252460
        01341  227060622523
        01342  633146456031
        01343  317360224346
        01344  234260027360
        01345  302162602225
        01346  254560606060
        01347  606060606060
        01350  606060606060
        01351  606060606060              BCD 2
        01352  606060606060
        01353  512521246031              BCD  READ INTO LOCATIONS 5566 THROUGH 6565.  THE COMPUTED CHECK S
        01354  456346604346
        01355  232163314645
        01356  626005050606
        01357  606330514664
        01360  273060060506
        01361  053360606330
        01362  256023464447
        01363  646325246023
        01364  302523426062
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01365  644473604346            BCD  UM, LOCATION 5561, IS COMPARED TO THE PERMANENT
01366  232163314645
01367  600505060173
01370  603162602346
01371  444721512524
01372  606346606330
01373  256047255144
01374  214525456360
01375  606060606060
01376  606060606060
01377  626321632560            BCD 1STATE
01400  226062644460     PR2    BCD 3B SUM IN LOCATION
01401  314560434623
01402  216331464560
01403  050506023360     PR3    BCD 65562.  COPY LOOP BEGINS AT LOCATION
01404  602346477060
01405  434646476022
01406  252731456260
01407  216360434623
01410  216331464560
01411  050503043360     PR4    BCD 55534.  STARTING DRUM ADDRESS I
01412  606263215163
01413  314527602451
01414  644460212424
01415  512562626031
01416  626001000000     PR5    BCD 5S 1000.
01417  336060606060
01420  606060606060
01421  606060606060
01422  606060606060
01423  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS BLOCK OF PROGRAM C
01424  636325444763
01425  626030216525
01426  602225254560
01427  442124256063
01430  466051252124
01431  606330316260
01432  224346234260
01433  462660475146
01434  275121446023
01435  465151252363            BCD 2ORRECTLY.
01436  437033606060
01437  216325602160     A1     BCD 1ATE A
01440  216062644460     A2     BCD 1A SUM
01441  050506033360     A3     BCD 15563.
01442  050505053360     A4     BCD 15555.
01443  626071255146     A5     BCD 1S ZERO
01444  0 00000 0 00000 X
A                     00000    END
```

```
1            ORG 42                  FORCE NEW RECORD
1                        00052         ORG 42                  FORCE NEW RECORD
       00052  0 01303 0 01471         HTR X-1,0,LOCREC        CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00052         TXH 42                  7760  FT  30
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306 -0 53400 2 00000         LXD 0,2                 IR2 EQUALS 2 FOR STATE B, BCD IS SETUP
       01307  3 00001 2 01322         TXH PRIN,2,1
       01310  0 50000 0 01465         CLA A1
       01311  0 60100 0 01336         STO PR1
       01312  0 50000 0 01466         CLA A2
       01313  0 60100 0 01363         STO PR2
       01314  0 50000 0 01467         CLA A3
       01315  0 60100 0 01424         STO PR3
       01316  0 50000 0 01470         CLA A4
       01317  0 60100 0 01427         STO PR4
       01320  0 50000 0 01471         CLA A5
       01321  0 60100 0 01442         STO PR5
       01322  0 07400 4 00740 PRIN    TSX PRINT,4
       01323  0 01465 0 01325         HTR PR,0,PR+96
       01324  0 02000 0 00221         TRA DIGRTN
       01325  606060606060     PR     BCD 2
       01326  606060606060
       01327  233025234260            BCD 7CHECK SUM ERROR IN READING DRUM 1.  THE ST
       01330  626444602551
       01331  514651603145
       01332  605125212431
       01333  452760245164
       01334  446001336060
       01335  633025606263
       01336  216325602260     PR1    BCD 1ATE B
       01337  234624314527            BCD  CODING USED BY SECTION II, BLOCK 2, HAS JUST
       01340  606462252460
       01341  227060622523
       01342  633146456031
       01343  317360224346
       01344  234260027360
       01345  302162604164
       01346  626360606060
       01347  606060606060
       01350  606060606060
       01351  606060606060            BCD 2
       01352  606060606060
       01353  222525456066            BCD 8BEEN WRITTEN ON THE DRUM, BEGINNING AT LOCATION
       01354  513163632545
       01355  604645606330
       01356  256024516444
       01357  736022252731
       01360  454531452760
       01361  216360434623
       01362  216331464560
       01363  010000003360     PR2    BCD 11000.
       01364  606346606525            BCD   TO VERIFY THAT THIS HAS BEEN DONE CORRECTLY,
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01365  513126706063
01366  302163606330
01367  316260302162
01370  602225254560
01371  244645256023
01372  465151252363
01373  437073606060
01374  606060606060
01375  606060606060
01376  606060606060          BCD 1
01377  316360316260          BCD  IT IS READ BACK INTO 4566 THROUGH 5565.  THE COMPUTED CHECK
01400  512521246022
01401  212342603145
01402  634660040506
01403  066063305146
01404  642730600505
01405  060533606063
01406  302560234644
01407  476463252460
01410  233025234260
01411  626444736043          BCD  SUM, LOCATION 7773, IS COMPARED TO A PERMANENT
01412  462321633146
01413  456007070703
01414  736031626023
01415  464447215125
01416  246063466021
01417  604725514421
01420  452545636060
01421  606060606060
01422  606060606060
01423  626321632560          BCD 1STATE
01424  226062644460    PR3   BCD 3B SUM IN LOCATION
01425  314560434623
01426  216331464560
01427  070706033360    PR4   BCD 17763.
01430  606330256062          BCD   THE SUBROUTINE WHICH WRITES AND READS THE DRUM BEGINS AT 77
01431  642251466463
01432  314525606630
01433  312330606651
01434  316325626021
01435  452460512521
01436  246260633025
01437  602451644460
01440  222527314562
01441  602163600707
01442  030033606060    PR5   BCD 530.
01443  606060606060
01444  606060606060
01445  606060606060
01446  606060606060
01447  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO WRITE AND READ THIS BLOCK OF
01450  636325444763
01451  626030216525
01452  602225254560
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01453  442124256063
01454  466066513163
01455  256021452460
01456  512521246063
01457  303162602243
01460  462342604626
01461  604751462751          BCD 4 PROGRAM CORRECTLY.
01462  214460234651
01463  512523634370
01464  336060606060
01465  216325602160    A1    BCD 1ATE A
01466  712551463360    A2    BCD 1ZERO.
01467  216062644460    A3    BCD 1A SUM
01470  070706043360    A4    BCD 17764.
01471  030233606060    A5    BCD 132.
01472  0 00000 0 00000 X
A                     00000  END
```

```
1            ORG 43                    FORCE NEW RECORD
1                        00053            ORG 43                  FORCE NEW RECORD
     00053   0 01303 0 01423             HTR X-1,0,LOCREC        CARD FOR DE
                         01303            ORG LOCREC
 TD  01303   3 00000 0 00053             TXH 43                  4006  FT  51
                                             43                  4007  FT  51
     01304   0 07400 4 00740             TSX PRINT,4
     01305   0 01244 0 01237             HTR MACHIN,0,MACHIN+5
     01306   0 50000 0 01235             CLA ERWORD              4007 IF ALPHA STATE, BCD NOT SET UP
     01307   0 40200 0 01325             SUB ALPHA               FOR ALPHA
     01310  -0 12000 0 01317             TMI PRIN
     01311   0 50000 0 01322             CLA A1
     01312   0 60100 0 01335             STO PR1
     01313   0 50000 0 01323             CLA A2
     01314   0 60100 0 01336             STO PR2
     01315   0 50000 0 01324             CLA A3
     01316   0 60100 0 01337             STO PR3
     01317   0 07400 4 00740 PRIN        TSX PRINT,4
     01320   0 01424 0 01326             HTR PR,0,PR+62
     01321   0 02000 0 00221             TRA DIGRTN
     01322   446002336060      A1       BCD 1M 2.
     01323   633025602143      A2       BCD 1THE AL
     01324   473021606263      A3       BCD 1PHA ST
     01325  +004007000000      ALPHA    OCT 004007000000
     01326   606060606060      PR       BCD 2
     01327   606060606060
     01330   233025234260               BCD 5CHECK SUM ERROR IN READING DRU
     01331   626444602551
     01332   514651603145
     01333   605125212431
     01334   452760245164
     01335   446001336060      PR1      BCD 1M 1.
     01336   633025606022      PR2      BCD 1THE  B
     01337   256321606263      PR3      BCD  ETA STATE CODING USED BY SECTION II, BLOCK 5, HAS BEEN READ
     01340   216325602346
     01341   243145276064
     01342   622524602270
     01343   606225236331
     01344   464560313173
     01345   602243462342
     01346   600573603021
     01347   626022252545
     01350   605125212460
     01351   606060606060               BCD 3
     01352   606060606060
     01353   606060606060
     01354   314563466006               BCD  INTO 6226 THROUGH 7225, STARTING FROM DRUM ADDRESS 1751.  TH
     01355   020206606330
     01356   514664273060
     01357   070202057360
     01360   626321516331
     01361   452760265146
     01362   446024516444
     01363   602124245125
```

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01364  626260010705
01365  013360606330
01366  256024516444          BCD  E DRUM CHECK SUM IS IN 5202.
01367  602330252342
01370  606264446031
01371  626031456005
01372  020002336060
01373  606060606060
01374  606060606060
01375  606060606060
01376  606060606060
01377  606060606060
01400  633025602346          BCD  THE COMPUTED CHECK SUM IS IN 5203.  FIVE ATTEMPTS HAVE BEEN
01401  444764632524
01402  602330252342
01403  606264446031
01404  626031456005
01405  020003336060
01406  263165256021
01407  636325444763
01410  626030216525
01411  602225254560
01412  442124256063          BCD  MADE TO READ THIS BLOCK OF PROGRAM CORRECTLY
01413  466051252124
01414  606330316260
01415  224346234260
01416  462660475146
01417  275121446023
01420  465151252363
01421  437060606060
01422  606060606060
01423  606060606060
01424  0 00000 0 00000 X
A                00000         END
```

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```
1            ORG 44                    FORCE NEW RECORD
1                        00054            ORG 44                  FORCE NEW RECORD
        00054  0 01303 0 01441            HTR X-1,0,LOCREC        CARD FOR DE
                         01303            ORG LOCREC
 TD     01303  3 00000 0 00054            TXH 44                  6765  FT  36
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01237 0 01237            HTR MACHIN,0,MACHIN
        01306  0 50000 0 06762            CLA 3570                OCTAL 6762 - DEC HAS CONTENTS IR1
        01307  0 77100 0 00022            ARS 18
        01310 -0 32000 0 01227            ANA ADDMSK
        01311  0 60100 0 01257            STO ERAS
        01312  0 50000 0 01415            CLA PR1
        01313  0 40200 0 01257            SUB ERAS
        01314  0 07400 4 00730            TSX OCTBCD,4
        01315  0 60200 0 01415            SLW PR1
        01316 -0 50000 0 01414            CAL PR1-1
        01317  0 56000 0 01415            LDQ PR1
        01320  0 77100 0 00022            ARS 18
        01321 -0 76300 0 00022            LGL 18
        01322  0 60200 0 01414            SLW PR1-1
        01323 -0 76300 0 00022            LGL 18
        01324  0 56000 0 00717            LDQ BLANKS
        01325 -0 76300 0 00022            LGL 18
        01326  0 60200 0 01415            SLW PR1
        01327  0 07400 4 00740            TSX PRINT,4
        01330  0 01442 0 01332            HTR PR,0,PR+72
        01331  0 02000 0 00221            TRA DIGRTN
        01332  606060606060      PR       BCD 2
        01333  606060606060
        01334  233025234260               BCD  CHECK SUM ERROR IN READING NAME TABLE FROM DRUM 3.
        01335  626444602551
        01336  514651603145
        01337  605125212431
        01340  452760452144
        01341  256063212243
        01342  256026514644
        01343  602451644460
        01344  033360606060
        01345  606060606060
        01346  606060606060               BCD
        01347  606060606060
        01350  606060606060
        01351  606060606060
        01352  606060606060
        01353  606060606060
        01354  606060606060
        01355  606060606060
        01356  606060606060
        01357  606060606060
        01360  234647706043               BCD  COPY LOOP BEGINS AT LOCATION 6731.  STARTING DRUM ADDRESS IS
        01361  464647602225
        01362  273145626021
        01363  636043462321
        01364  633146456006
```

```
01365  070301336060
01366  626321516331
01367  452760245164
01370  446021242451
01371  256262603162
01372  603145600607          BCD   IN 6707.
01373  000733606060
01374  606060606060
01375  606060606060
01376  606060606060
01377  606060606060
01400  606060606060
01401  606060606060
01402  606060606060
01403  606060606060
01404  234644476463          BCD 9COMPUTED CHECK SUM IS IN 6771. DRUM CHECK SUM IS IN
01405  252460233025
01406  234260626444
01407  603162603145
01410  600607070133
01411  602451644460
01412  233025234260
01413  626444603162
01414  603145606060
01415 +000000006771    PR1   OCT 000000006771
01416  606060606060          BCD
01417  606060606060
01420  606060606060
01421  606060606060
01422  606060606060
01423  606060606060
01424  606060606060
01425  606060606060
01426  606060606060
01427  606060606060
01430  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.
01431  636325444763
01432  626030216525
01433  602225254560
01434  442124256063
01435  466051252124
01436  606330316260
01437  632122432560
01440  234651512523
01441  634370336060
01442  0 00000 0 00000 X
A                00000         END
```

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1          ORG 45                    FORCE NEW RECORD
1                        00055         ORG 45                  FORCE NEW RECORD
     00055  0 01303 0 01447           HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
TD   01303  3 00000 0 00055           TXH 45                  1006  FT  45
     01304  0 07400 4 00740           TSX PRINT,4
     01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
     01306  0 07400 4 00740           TSX PRINT,4
     01307  0 01450 0 01311           HTR PR,0,PR+95
     01310  0 02000 0 00221           TRA DIGRTN
     01311  606060606060     PR       BCD 2
     01312  606060606060
     01313  233025234260              BCD  CHECK SUM ERROR IN READING TABLE IRV FROM DRUM 3.  EITHER TH
     01314  626444602551
     01315  514651603145
     01316  605125212431
     01317  452760632122
     01320  432560315165
     01321  602651464460
     01322  245164446003
     01323  336060253163
     01324  302551606330
     01325  256066465124              BCD  E WORD COUNT, LOCATION 1007,
     01326  602346644563
     01327  736043462321
     01330  633146456001
     01331  000007736060
     01332  606060606060
     01333  606060606060
     01334  606060606060
     01335  606060606060
     01336  606060606060
     01337  244625626045              BCD  DOES NOT AGREE WITH ITS OWN CHECK SUM, LOCATION 1010, OR THE
     01340  466360212751
     01341  252560663163
     01342  306031636260
     01343  466645602330
     01344  252342606264
     01345  447360434623
     01346  216331464560
     01347  010001007360
     01350  465160633025
     01351  602346444764              BCD   COMPUTED CHECK SUM OF THE TABLE,
     01352  632524602330
     01353  252342606264
     01354  446046266063
     01355  302560632122
     01356  432573606060
     01357  606060606060
     01360  606060606060
     01361  606060606060
     01362  606060606060
     01363  434623216331              BCD  LOCATION 1011, DOES NOT AGREE WITH THE DRUM CHECK SUM.  THE
     01364  464560010001
```

```
01365  017360244625
01366  626045466360
01367  212751252560
01370  663163306063
01371  302560245164
01372  446023302523
01373  426062644433
01374  606063302560
01375  245164446023          BCD  DRUM CHECK SUM HAS BEEN COPIED
01376  302523426062
01377  644460302162
01400  602225254560
01401  234647312524
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  314563466043          BCD  INTO LOCATION  (435 PLUS WORD COUNT).  COPY LOOP BEGINS AT L
01410  462321633146
01411  456060740403
01412  056047436462
01413  606646512460
01414  234664456334
01415  336060234647
01416  706043464647
01417  602225273145
01420  626021636043
01421  462321633146          BCD  OCATION 752.  STARTING DRUM ADDRESS IS 1304.
01422  456007050233
01423  606062632151
01424  633145276024
01425  516444602124
01426  245125626260
01427  316260010300
01430  043360606060
01431  606060606060
01432  606060606060
01433  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THE WORD COUNT AND THE
01434  636325444763
01435  626030216525
01436  602225254560
01437  442124256063
01440  466051252124
01441  606330256066
01442  465124602346
01443  644563602145
01444  246063302560
01445  632122432560          BCD 3TABLE CORRECTLY.
01446  234651512523
01447  634370336060
01450  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 46                    FORCE NEW RECORD
1                          00056         ORG 46                  FORCE NEW RECORD
       00056  0 01303 0 01447            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00056            TXH 46                    72  FT  60
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 76200 0 00304            RDR 4
       01307  0 46000 0 01337            LDA A
       01310  0 70000 0 01257            CPY ERAS                IR1 IN DEC-WILL SHOW WHERE CHECK SUM IS
       01311  0 50000 0 01257            CLA ERAS                UNCOMPLIMENT
       01312 -0 32000 0 01230            ANA DECMSK
       01313  0 40200 0 01234            SUB PREFX1
       01314  0 77100 0 00022            ARS 18
       01315  0 60000 0 01257            STZ ERAS
       01316  0 62100 0 01257            STA ERAS
       01317  0 50000 0 01423            CLA PR1
       01320  0 40200 0 01257            SUB ERAS
       01321  0 07400 4 00730            TSX OCTBCD,4
       01322  0 60200 0 01423            SLW PR1
       01323 -0 50000 0 01422            CAL PR1-1
       01324  0 56000 0 01423            LDQ PR1
       01325  0 77100 0 00014            ARS 12
       01326 -0 76300 0 00014            LGL 12
       01327  0 60200 0 01422            SLW PR1-1
       01330 -0 76300 0 00030            LGL 24
       01331  0 56000 0 00717            LDQ BLANKS
       01332 -0 76300 0 00014            LGL 12
       01333  0 60200 0 01423            SLW PR1
       01334  0 07400 4 00740            TSX PRINT,4
       01335  0 01450 0 01340            HTR PR,0,PR+72
       01336  0 02000 0 00221            TRA DIGRTN
       01337  0 00000 0 01227 A          HTR81227
       01340  606060606060      PR       BCD 2
       01341  606060606060
       01342  233025234260               BCD  CHECK SUM ERROR IN READING TSXCOM TABLE FROM DRUM 3.
       01343  626444602551
       01344  514651603145
       01345  605125212431
       01346  452760636267
       01347  234644606321
       01350  224325602651
       01351  464460245164
       01352  446003336060
       01353  606060606060
       01354  606060606060               BCD
       01355  606060606060
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  606060606060
       01364  606060606060
```

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01365  606060606060
01366  234647706043          BCD  COPY LOOP BEGINS AT LOCATION 42.  STARTING DRUM ADDRESS IS I
01367  464647602225
01370  273145626021
01371  636043462321
01372  633146456004
01373  023360606263
01374  215163314527
01375  602451644460
01376  212424512562
01377  626031626031
01400  456001010500          BCD  N 1150.
01401  336060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  606060606060
01410  606060606060
01411  606060606060
01412  234644476463          BCD 9COMPUTED CHECK SUM IS IN 1226.  DRUM CHECK SUM IS IN
01413  252460233025
01414  234260626444
01415  603162603145
01416  600102020633
01417  606024516444
01420  602330252342
01421  606264446031
01422  626031456060
01423 +000000001230     PR1   OCT 000000001230
01424  606060606060           BCD
01425  606060606060
01426  606060606060
01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  606060606060
01434  606060606060
01435  606060606060
01436  263165256021           BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.
01437  636325444763
01440  626030216525
01441  602225254560
01442  442124256063
01443  466051252124
01444  606330316260
01445  632122432560
01446  234651512523
01447  634370336060
01450  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 47                    FORCE NEW RECORD
1                          00057         ORG 47                  FORCE NEW RECORD
      00057   0 01303 0 01470            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD   01303   3 00000 0 00057            TXH 47                  1135  FT  62
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740            TSX PRINT,4
      01307   0 01471 0 01311            HTR PR,0,PR+112
      01310   0 02000 0 00221            TRA DIGRTN
      01311   606060606060      PR       BCD 2
      01312   606060606060
      01313   233025234260               BCD  CHECK SUM ERROR IN READING DOCARE TABLE FROM DRUM 1.  THIS T
      01314   626444602551
      01315   514651603145
      01316   605125212431
      01317   452760244623
      01320   215125606321
      01321   224325602651
      01322   464460245164
      01323   446001336060
      01324   633031626063
      01325   212243256066               BCD  ABLE WAS WRITTEN AS A 1 WORD ENTRY AND A
      01326   216260665131
      01327   636325456021
      01330   626021600160
      01331   664651246025
      01332   456351706021
      01333   452460216060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   233025234260               BCD  CHECK SUM OF THAT ENTRY BEGINNING AT 2 ON THE DRUM.  THE 1 W
      01340   626444604626
      01341   606330216360
      01342   254563517060
      01343   222527314545
      01344   314527602163
      01345   600260464560
      01346   633025602451
      01347   644433606063
      01350   302560016066
      01351   465124602545               BCD  ORD ENTRIES ARE COPIED BACKWARDS
      01352   635131256260
      01353   215125602346
      01354   473125246022
      01355   212342662151
      01356   246260606060
      01357   606060606060
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   314563466023               BCD  INTO CORES BEGINNING 4216.  THEIR CHECK SUMS ARE COPIED BACK
      01364   465125626022
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01365  252731454531
01366  452760040201
01367  063360606330
01370  253151602330
01371  252342606264
01372  446260215125
01373  602346473125
01374  246022212342
01375  662151246260          BCD  WARDS INTO CORES BEGINNING AT 4363.
01376  314563466023
01377  465125626022
01400  252731454531
01401  452760216360
01402  040306033360
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  216043462731          BCD  A LOGICAL SUM OF EACH OF THE RESULTING TABLES IS DONE.  CHEC
01410  232143606264
01411  446046266025
01412  212330604626
01413  606330256051
01414  256264436331
01415  452760632122
01416  432562603162
01417  602446452533
01420  606023302523
01421  426062644460          BCD  K SUM OF THE ENTRIES IS IN 105.
01422  462660633025
01423  602545635131
01424  256260316260
01425  314560010005
01426  336060606060
01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  233025234260          BCD  CHECK SUM OF THE CHECK SUMS IS IN 106.  THE COPY LOOP BEGINS
01434  626444604626
01435  606330256023
01436  302523426062
01437  644462603162
01440  603145600100
01441  063360606330
01442  256023464770
01443  604346464760
01444  222527314562
01445  602163604346          BCD   AT LOCATION 1102.
01446  232163314645
01447  600101000233
01450  606060606060
01451  606060606060
01452  606060606060
```

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01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01460  636325444763
01461  626030216525
01462  602225254560
01463  442124256063
01464  466051252124
01465  606330316260
01466  512523465124
01467  602346515125
01470  236343703360
01471  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 48                    FORCE NEW RECORD
1                        00060           ORG 48                  FORCE NEW RECORD
       00060  0 01303 0 01724           HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00060           TXH 48                   341  FT  67
                                           48                  3143  FT  64
                                           48                   103  FT  67
                                           48                   160  FT  67
                                           48                   263  FT  67
                                           48                    64  FT  71
                                           48                   256  FT  73
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306 -0 53400 3 01232           LXD ZERO,3
       01307  0 50000 1 01453 C1        CLA A,1
       01310  0 40200 0 01235           SUB ERWORD
       01311  0 10000 0 01427           TZE B
       01312  1 77777 1 01313           TXI C,1,-1
       01313  3 77636 1 01307 C         TXH C1,1,-14*7
       01314  0 07400 4 00740           TSX PRINT,4
       01315  0 01427 0 01317           HTR ER,0,ER+72
       01316  0 00000 0 01452           HTR D
       01317  606060606060     ER       BCD 2
       01320  606060606060
       01321  434623216331              BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
       01322  464560462660
       01323  255151465173
       01324  606630312330
       01325  603021626022
       01326  252545604751
       01327  314563252473
       01330  603021626023
       01331  216462252460
       01332  243121274546
       01333  626331236051              BCD  STIC RECORD NUMBER 48
       01334  252346512460
       01335  456444222551
       01336  600410606060
       01337  606060606060
       01340  606060606060
       01341  606060606060
       01342  606060606060
       01343  606060606060
       01344  606060606060
       01345  634660222560              BCD  TO BE READ IN.  THIS RECORD COMPARES THE LOCATION TO A LIST
       01346  512521246031
       01347  453360606330
       01350  316260512523
       01351  465124602346
       01352  444721512562
       01353  606330256043
       01354  462321633146
       01355  456063466021
       01356  604331626360
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01357  462660076047          BCD  OF 7 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH
01360  466262312243
01361  256024516444
01362  605125212460
01363  262131436451
01364  256273602264
01365  636063302560
01366  622521512330
01367  606060606060
01370  606060606060
01371  302162602621          BCD  HAS FAILED.  THE ERRORS ARE LISTED IN 1471, 1471 PLUS 14, ET
01372  314325243360
01373  606330256025
01374  515146516260
01375  215125604331
01376  626325246031
01377  456001040701
01400  736001040701
01401  604743646260
01402  010473602563
01403  233360604751          BCD  C.  PRESS START IF YOU WISH TO
01404  256262606263
01405  215163603126
01406  607046646066
01407  316230606346
01410  606060606060
01411  606060606060
01412  606060606060
01413  606060606060
01414  606060606060
01415  512562634651          BCD  RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.
01416  256044212330
01417  314525606346
01420  606263216325
01421  603145606630
01422  312330602551
01423  514651604623
01424  236451512524
01425  336060606060
01426  606060606060
01427  0 50000 1 01454 B     CLA A+1,1
01430  0 60100 2 01623       STO PR1,2
01431  1 77777 2 01432       TXI B1,2,-1
01432  1 77777 1 01433 B1    TXI B2,1,-1
01433  3 77771 2 01427 B2    TXH B,2,-7
01434  0 50000 1 01454       CLA A+1,1
01435  0 60100 0 01647       STO PR2TWO
01436  0 50000 1 01455       CLA A+2,1
01437  0 60100 0 01650       STO PR2TWO+1
01440  0 50000 1 01456       CLA A+3,1
01441  0 60100 0 01655       STO PR3TWO
01442  0 50000 1 01457       CLA A+4,1
01443  0 60100 0 01656       STO PR3TWO+1
01444  0 50000 1 01460       CLA A+5,1
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01445  0 60100 0 01673          STO PR4
01446  0 50000 1 01461          CLA A+6,1
01447  0 60100 0 01700          STO PR5
01450  0 07400 4 00740          TSX PRINT,4
01451  0 01725 0 01615          HTR PR,0,PR+72
01452  0 02000 0 00221 D        TRA DIGRTN
01453 +000341000000     A       OCT 000341000000 IN SECTION IV - PART 3
01454  452760265125     A1      BCD 7NG FRET TABLE FROM DRUM 2.
01455  636063212243
01456  256026514644
01457  602451644460
01460  023360606060
01461  606060606060
01462  606060606060
01463  633146456003     A2TWO   BCD 2TION 300.
01464  000033606060
01465  603145600500     A3TWO   BCD 2 IN 50.
01466  336060606060
01467  600506336060     A4      BCD 1 56.
01470  050533606060     A5      BCD 155.
01471 +003143000000             OCT 003143000000 IN SECTION IV - PART 2
01472  452760633126             BCD 7NG TIFRD TABLE FROM DRUM 1.
01473  512460632122
01474  432560265146
01475  446024516444
01476  600133606060
01477  606060606060
01500  606060606060
01501  633146456003             BCD 2TION 3066.
01502  000606336060
01503  603145600401             BCD 2 IN 41.
01504  336060606060
01505  600102013360             BCD 1 121.
01506  010207336060             BCD 1127.
01507 +000263000000             OCT 000263000000 IN SECTION IV - PART 3
01510  452760635121             BCD 7NG TRA TABLE FROM DRUM 1.
01511  606321224325
01512  602651464460
01513  245164446001
01514  336060606060
01515  606060606060
01516  606060606060
01517  633146456002             BCD 2TION 230.
01520  030033606060
01521  607125514633             BCD 2 ZERO.
01522  606060606060
01523  600506336060             BCD 1 56.
01524  050533606060             BCD 155.
01525 +000256000000             OCT 000256000000  IN SECTION IV - PART 6
01526  452760222243             BCD 7NG BBLIST TABLE FROM DRUM 3.
01527  316263606321
01530  224325602651
01531  464460245164
01532  446003336060
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01533  606060606060
01534  606060606060
01535  633146456002          BCD 2TION 234.
01536  030433606060
01537  603145600603          BCD 2 IN 63.
01540  336060606060
01541  600700336060          BCD 1 70.
01542  060733606060          BCD 167.
01543 +000160000000          OCT 000160000000      IN SECTION IV - PART 3
01544  452760622563          BCD 7NG SET TABLE FROM DRUM 3.
01545  606321224325
01546  602651464460
01547  245164446003
01550  336060606060
01551  606060606060
01552  606060606060
01553  633146456001          BCD 2TION 137.
01554  030733606060
01555  603145600407          BCD 2 IN 47.
01556  336060606060
01557  600506336060          BCD 1 56.
01560  050533606060          BCD 155.
01561 +000103000000          OCT 000103000000      IN SECTION IV - PART 3
01562  452760622563          BCD 7NG SET TABLE FROM DRUM 3.
01563  606321224325
01564  602651464460
01565  245164446003
01566  336060606060
01567  606060606060
01570  606060606060
01571  633146456006          BCD 2TION 62.
01572  023360606060
01573  603145600407          BCD 2 IN 47.
01574  336060606060
01575  600506336060          BCD 1 56.
01576  050533606060          BCD 155.
01577 +000064000000          OCT 000064000000 IN SECTION IV - PART 5
01600  452760244643          BCD 7NG DOLIST TABLE FROM DRUM 1.
01601  316263606321
01602  224325602651
01603  464460245164
01604  446001336060
01605  606060606060
01606  606060606060
01607  633146456004          BCD 2TION 42.
01610  023360606060
01611  603145600306          BCD 2 IN 36.
01612  336060606060
01613  600307336060          BCD 1 37.
01614  040033606060          BCD 140.
01615  606060606060     PR   BCD 2
01616  606060606060
01617  233025234260          BCD 4CHECK SUM ERROR IN READI
01620  626444602551
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01621  514651603145
01622  605125212431
01623  452760265125     PR1     BCD 7NG FRET TABLE FROM DRUM 2.
01624  636063212243
01625  256026514644
01626  602451644460
01627  023360606060
01630  606060606060
01631  606060606060
01632  606060606060             BCD 9
01633  606060606060
01634  606060606060
01635  606060606060
01636  606060606060
01637  606060606060
01640  606060606060
01641  606060606060
01642  606060606060
01643  234647706043             BCD 4COPY LOOP BEGINS AT LOCA
01644  464647602225
01645  273145626021
01646  636043462321
01647  633146456003     PR2TWO BCD 2TION 3.
01650  336060606060
01651  626321516331             BCD 4STARTING DRUM ADDRESS IS
01652  452760245164
01653  446021242451
01654  256262603162
01655  603145600500     PR3TWO BCD   IN 50.
01656  336060606060
01657  606060606060
01660  606060606060
01661  606060606060
01662  606060606060
01663  606060606060
01664  606060606060
01665  606060606060
01666  606060606060
01667  234644476463             BCD 4COMPUTED CHECK SUM IS IN
01670  252460233025
01671  234260626444
01672  603162603145
01673  600506336060     PR4     BCD 1 56.
01674  606060245164             BCD 4   DRUM CHECK SUM IS IN
01675  446023302523
01676  426062644460
01677  316260314560
01700  050533606060     PR5     BCD  55.
01701  606060606060
01702  606060606060
01703  606060606060
01704  606060606060
01705  606060606060
01706  606060606060
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01707  606060606060
01710  606060606060
01711  606060606060
01712  606060606060          BCD 1
01713  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.
01714  636325444763
01715  626030216525
01716  602225254560
01717  442124256063
01720  466051252124
01721  606330316260
01722  632122432560
01723  234651512523
01724  634370336060
01725  0 00000 0 00000 X
A                00000        END
```

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1            ORG 49                  FORCE NEW RECORD
1                          00061       ORG 49                  FORCE NEW RECORD
      00061   0 01303 0 01570          HTR X-1,0,LOCREC        CARD FOR DE
                           01303       ORG LOCREC
TD    01303   3 00000 0 00061          TXH 49                  4570  FT  34
                           04612 SUBORG SYN84612               THIS IS SUBORG+3
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 76200 0 00304          RDR 4
      01307   0 46000 0 01345          LDA TAG
      01310   0 70000 0 01345          CPY TAG
      01311   0 50000 0 01345          CLA TAG                 SAME INSTRUCTIONS AS
      01312   0 76500 0 00011          LRS 9                   SECTION II - BLOCK 2 - 4527 THRO 4542
      01313   0 73400 6 00000          PAX 0,6
T     01314  -0 75400 0 00000          PXD
      01315   0 76300 0 00011          LLS 9                   AT END OF TIX, ADDRESS OF AC HAS
      01316   0 60100 0 01346          STO SUBES1              DRUM ADDRESS OF FIRST WORD OF
      01317   0 76700 0 00001          ALS 1                   ENTRY AND IR 2 HAS  1 - 2 WORDS + SUM
      01320   0 60100 0 01347          STO SUBES2                                  2 - 4 WORDS + SUM
      01321   0 50000 4 04612          CLA SUBORG,4                                3 - 6 WORDS + SUM
      01322   0 40000 0 01346          ADD SUBES1
      01323   0 40000 0 01347 SUB030   ADD SUBES2
      01324   2 00001 4 01323          TIX SUB030,4,1
      01325   0 07400 4 00730          TSX OCTBCD,4
      01326   0 60200 0 01257          SLW ERAS
      01327   0 56000 0 01257          LDQ ERAS
      01330  -0 76300 0 00014          LGL 12                  SHIFT OUT FIRST 2 BLANKS
      01331  -0 50000 0 01406          CAL PR2
      01332  -0 76300 0 00022          LGL 18
      01333   0 60200 0 01406          SLW PR2
      01334  -0 76300 0 00006          LGL 6
      01335   0 56000 0 01407          LDQ PR3
      01336  -0 76300 0 00036          LGL 30
      01337   0 60200 0 01407          SLW PR3
      01340   0 50000 2 01353          CLA A+1,2
      01341   0 60100 0 01361          STO PR1
      01342   0 07400 4 00740          TSX PRINT,4
      01343   0 01571 0 01353          HTR PR,0,PR+142
      01344   0 02000 0 00221          TRA DIGRTN
      01345   0 00000 0 03700 TAG      HTR83700
      01346   0 00000 0 00000 SUBES1
      01347   0 00000 0 00000 SUBES2
      01350   452760216006             BCD 1NG A 6
      01351   452760216004             BCD 1NG A 4
      01352   452760216002     A       BCD 1NG A 2
      01353   606060606060     PR      BCD 2
      01354   606060606060
      01355   233025234260             BCD 4CHECK SUM ERROR IN READI
      01356   626444602551
      01357   514651603145
      01360   605125212431
      01361   452760216002     PR1     BCD 1NG A 2
      01362   606646512460             BCD   WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
      01363   254563517060
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01364  214524603163
01365  626023302523
01366  426062644460
01367  314560633025
01370  606321646063
01371  212243256046
01372  456024516444
01373  600433606060
01374  606060606060          BCD 5
01375  606060606060
01376  606060606060
01377  606060606060
01400  606060606060
01401  633025602451          BCD 5THE DRUM ADDRESS OF THE ENTRY
01402  644460212424
01403  512562626046
01404  266063302560
01405  254563517060
01406  606060316260    PR2   BCD 1   IS
01407  336060263160    PR3   BCD 1.  FI
01410  652560216363          BCD  VE ATTEMPTS HAVE BEEN MADE TO READ
01411  254447636260
01412  302165256022
01413  252545604421
01414  242560634660
01415  512521246060
01416  606060606060
01417  606060606060
01420  606060606060
01421  606060606060
01422  606060606060          BCD 3
01423  606060606060
01424  606060606060
01425  633025602545          BCD  THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.
01426  635170602346
01427  515125236343
01430  706026514644
01431  606330316260
01432  472151633123
01433  644321516021
01434  242451256262
01435  336060606060
01436  606060606060
01437  606060606060          BCD
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060
01446  606060606060
01447  606060606060
01450  606060606060
01451  606060606060          BCD
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01452  606060606060
01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060
01460  606060606060
01461  606060606060
01462  606060606060
01463  606060606060        BCD
01464  606060606060
01465  606060606060
01466  606060606060
01467  606060606060
01470  606060606060
01471  606060606060
01472  606060606060
01473  606060606060
01474  606060606060
01475  314560465124        BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01476  255160634660
01477  232143436031
01500  456063303162
01501  602431212745
01502  466263312360
01503  663163304664
01504  636024316263
01505  645122314527
01506  602346512562
01507  736002000410        BCD  , 2048 WORDS OF MEMORY
01510  606646512462
01511  604626604425
01512  444651706060
01513  606060606060
01514  606060606060
01515  606060606060
01516  606060606060
01517  606060606060
01520  606060606060
01521  302165256022        BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES
01522  252545605125
01523  212460464563
01524  466024516444
01525  600473602425
01526  626351467031
01527  452760633025
01530  606321646063
01531  212243256025
01532  456351312562
01533  602145246063        BCD   AND THEIR CHECK SUMS.
01534  302531516023
01535  302523426062
01536  644462336060
01537  606060606060
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01540  606060606060
01541  606060606060
01542  606060606060
01543  606060606060
01544  606060606060
01545  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01546  606631434360
01547  222560512562
01550  634651252473
01551  602264636063
01552  302551256031
01553  626045466066
01554  217060634660
01555  234645263151
01556  446063302560
01557  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01560  626444602551
01561  514651604645
01562  606330256024
01563  516444336060
01564  606060606060
01565  606060606060
01566  606060606060
01567  606060606060
01570  606060606060
01571  0 00000 0 00000 X
A                 00000        END
```

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1            ORG 50                    FORCE NEW RECORD
1                        00062           ORG 50                  FORCE NEW RECORD
       00062  0 01303 0 01564           HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00062           TXH 50                  7751  FT  36
                        06626 TAG       SYN86626
                        07773 SUBORG    SYN87773                THIS IS SUBORG + 3
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 50000 0 06626           CLA TAG                 SAME INSTRUCTIONS AS 7710 THRO 7723
       01307  0 76500 0 00011           LRS 9                   IN SECTION II - BLOCK 3 - INIT.
       01310  0 73400 6 00000           PAX 0,6
 T     01311 -0 75400 0 00000           PXD                     AT END OF TIX, ADDRESS OF AC HAS
       01312  0 76300 0 00011           LLS 9                   DRUM ADDRESS OF FIRST WORD OF ENTRY
       01313  0 60100 0 01345           STO SUBES1
       01314  0 76700 0 00001           ALS 1                   AND IR 2 HAS  1  - 2 WORDS + SUM
       01315  0 60100 0 01346           STO SUBES2                            2 - 4 WORDS + SUM
       01316  0 50000 4 07773           CLA SUBORG,4                        3 - 6 WORDS + SUM
       01317  0 40000 0 01345           ADD SUBES1
       01320  0 40000 0 01346 SUB030    ADD SUBES2
       01321  2 00001 4 01320           TIX SUB030,4,1
       01322  0 07400 4 00730           TSX OCTBCD,4
       01323  0 60200 0 01257           SLW ERAS
       01324  0 56000 0 01257           LDQ ERAS
       01325 -0 76300 0 00014           LGL 12                  SHIFT OUT FIRST 2 BLANKS
       01326 -0 50000 0 01402           CAL PR2
       01327 -0 76300 0 00022           LGL 18
       01330  0 60200 0 01402           SLW PR2
       01331 -0 76300 0 00006           LGL 6
       01332  0 56000 0 01403           LDQ PR3
       01333 -0 76300 0 00036           LGL 30
       01334  0 60200 0 01403           SLW PR3
       01335  0 50000 2 01345           CLA A+1,2
       01336  0 60100 0 01355           STO PR1
       01337  0 07400 4 00740           TSX PRINT,4
       01340  0 01565 0 01347           HTR PR,0,PR+142
       01341  0 02000 0 00221           TRA DIGRTN
       01342  452760216006              BCD 1NG A 6
       01343  452760216004              BCD 1NG A 4
       01344  452760216002     A        BCD 1NG A 2
       01345  0 00000 0 00000 SUBES1
       01346  0 00000 0 00000 SUBES2
       01347  606060606060     PR       BCD 2
       01350  606060606060
       01351  233025234260              BCD 4CHECK SUM ERROR IN READI
       01352  626444602551
       01353  514651603145
       01354  605125212431
       01355  452760216002     PR1      BCD 1NG A 2
       01356  606646512460              BCD   WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
       01357  254563517060
       01360  214524603163
       01361  626023302523
       01362  426062644460
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01363  314560633025
01364  606321646063
01365  212243256046
01366  456024516444
01367  600433606060
01370  606060606060          BCD 5
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  633025602451          BCD 5THE DRUM ADDRESS OF THE ENTRY
01376  644460212424
01377  512562626046
01400  266063302560
01401  254563517060
01402  606060316260    PR2   BCD 1   IS
01403  336060263160    PR3   BCD 1.  FI
01404  652560216363          BCD  VE ATTEMPTS HAVE BEEN MADE TO READ
01405  254447636260
01406  302165256022
01407  252545604421
01410  242560634660
01411  512521246060
01412  606060606060
01413  606060606060
01414  606060606060
01415  606060606060
01416  606060606060          BCD 3
01417  606060606060
01420  606060606060
01421  633025602545          BCD  THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.
01422  635170602346
01423  515125236343
01424  706026514644
01425  606330316260
01426  472151633123
01427  644321516021
01430  242451256262
01431  336060606060
01432  606060606060
01433  606060606060          BCD
01434  606060606060
01435  606060606060
01436  606060606060
01437  606060606060
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060          BCD
01446  606060606060
01447  606060606060
01450  606060606060
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01451  606060606060
01452  606060606060
01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060          BCD
01460  606060606060
01461  606060606060
01462  606060606060
01463  606060606060
01464  606060606060
01465  606060606060
01466  606060606060
01467  606060606060
01470  606060606060
01471  314560465124          BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01472  255160634660
01473  232143436031
01474  456063303162
01475  602431212745
01476  466263312360
01477  663163304664
01500  636024316263
01501  645122314527
01502  602346512562
01503  736002000410          BCD  , 2048 WORDS OF MEMORY
01504  606646512462
01505  604626604425
01506  444651706060
01507  606060606060
01510  606060606060
01511  606060606060
01512  606060606060
01513  606060606060
01514  606060606060
01515  302165256022          BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES
01516  252545605125
01517  212460464563
01520  466024516444
01521  600473602425
01522  626351467031
01523  452760633025
01524  606321646063
01525  212243256025
01526  456351312562
01527  602145246063          BCD  AND THEIR CHECK SUMS.
01530  302531516023
01531  302523426062
01532  644462336060
01533  606060606060
01534  606060606060
01535  606060606060
01536  606060606060
```

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01537  606060606060
01540  606060606060
01541  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01542  606631434360
01543  222560512562
01544  634651252473
01545  602264636063
01546  302551256031
01547  626045466066
01550  217060634660
01551  234645263151
01552  446063302560
01553  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01554  626444602551
01555  514651604645
01556  606330256024
01557  516444336060
01560  606060606060
01561  606060606060
01562  606060606060
01563  606060606060
01564  606060606060
01565  0 00000 0 00000 X
A                    00000        END
```

```
1          ORG 51                    FORCE NEW RECORD
1                          00063       ORG 51                  FORCE NEW RECORD
     00063  0 01303 0 01604            HTR X-1,0,LOCREC        CARD FOR DE
                           01303       ORG LOCREC
TD   01303  3 00000 0 00063            TXH 51                  1231  FT  45
     01304  0 07400 4 00740            TSX PRINT,4
     01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
     01306  0 76200 0 00304            RDR 4
     01307  0 46000 0 01357            LDA ADSBTG
     01310  0 70000 0 01356            CPY SUBTAG
     01311  0 50000 0 01356            CLA SUBTAG              MOSTLY SAME INSTRUCTIONS AS 1153 THRO
     01312  0 76500 0 00011            LRS 9                   1166 IN SECTION II, BLOCK 4
     01313  0 73400 6 00000            PAX 0,6
T    01314 -0 75400 0 00000            PXD
     01315  0 76300 0 00011            LLS 9
     01316  0 60100 0 01360            STO SUBES1
     01317  0 76700 0 00001            ALS 1
     01320  0 60100 0 01361            STO SUBES2
     01321 -0 75400 4 00000            PXD 0,4                 MODIFY ADDRESS TO BE SAME
     01322  0 77100 0 00022            ARS 18                  AS SUBORG+3,4
     01323  0 60100 0 01257            STO ERAS
     01324  0 50000 0 01363            CLA ADSBRG
     01325  0 40200 0 01257            SUB ERAS
     01326  0 62100 0 01257            STA ERAS
     01327  0 76200 0 00304            RDR 4
     01330  0 46000 0 01257            LDA ERAS
     01331  0 70000 0 01362            CPY SUBORG
     01332  0 50000 0 01362            CLA SUBORG              ATEND OF TIX, AC ADDRESS IS
     01333  0 40000 0 01360            ADD SUBES1              ADDRESS OF ENTRY ON DRUM AND
     01334  0 40000 0 01361 SUB030     ADD SUBES2              IR2 CONTAINS  1 - 2 WORDS + CHECK SUM,
     01335  2 00001 4 01334            TIX SUB030,4,1          2 - 4 WORDS + SUM, OR  3 - 6 WORDS + SUM
     01336  0 07400 4 00730            TSX OCTBCD,4
     01337  0 60200 0 01257            SLW ERAS
     01340  0 56000 0 01257            LDQ ERAS
     01341 -0 76300 0 00014            LGL 12                  SHIFT OUT FIRST 2 BLANKS
     01342 -0 50000 0 01422            CAL PR2
     01343 -0 76300 0 00022            LGL 18
     01344  0 60200 0 01422            SLW PR2
     01345 -0 76300 0 00006            LGL 6
     01346  0 56000 0 01423            LDQ PR3
     01347 -0 76300 0 00036            LGL 30
     01350  0 60200 0 01423            SLW PR3
     01351  0 50000 2 01367            CLA A+1,2
     01352  0 60100 0 01375            STO PR1
     01353  0 07400 4 00740            TSX PRINT,4
     01354  0 01605 0 01367            HTR PR,0,PR+142
     01355  0 02000 0 00221            TRA DIGRTN
     01356  0 00000 0 00000 SUBTAG
     01357 +000000001237    ADSBTG OCT 000000001237
     01360  0 00000 0 00000 SUBES1
     01361  0 00000 0 00000 SUBES2
     01362  0 00000 0 00000 SUBORG
     01363 +000000001235    ADSBRG OCT 000000001235
     01364  452760216006            BCD 1NG A 6
```

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01365  452760216004          BCD 1NG A 4
01366  452760216002   A      BCD 1NG A 2
01367  606060606060   PR     BCD 2
01370  606060606060
01371  233025234260          BCD 4CHECK SUM ERROR IN READI
01372  626444602551
01373  514651603145
01374  605125212431
01375  452760216002   PR1    BCD 1NG A 2
01376  606646512460          BCD   WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
01377  254563517060
01400  214524603163
01401  626023302523
01402  426062644460
01403  314560633025
01404  606321646063
01405  212243256046
01406  456024516444
01407  600433606060
01410  606060606060          BCD 5
01411  606060606060
01412  606060606060
01413  606060606060
01414  606060606060
01415  633025602451          BCD 5THE DRUM ADDRESS OF THE ENTRY
01416  644460212424
01417  512562626046
01420  266063302560
01421  254563517060
01422  606060316260   PR2    BCD 1    IS
01423  336060263160   PR3    BCD 1.  FI
01424  652560216363          BCD  VE ATTEMPTS HAVE BEEN MADE TO READ
01425  254447636260
01426  302165256022
01427  252545604421
01430  242560634660
01431  512521246060
01432  606060606060
01433  606060606060
01434  606060606060
01435  606060606060
01436  606060606060          BCD 3
01437  606060606060
01440  606060606060
01441  633025602545          BCD  THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.
01442  635170602346
01443  515125236343
01444  706026514644
01445  606330316260
01446  472151633123
01447  644321516021
01450  242451256262
01451  336060606060
01452  606060606060
```

```
01453  606060606060          BCD
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060
01460  606060606060
01461  606060606060
01462  606060606060
01463  606060606060
01464  606060606060
01465  606060606060          BCD
01466  606060606060
01467  606060606060
01470  606060606060
01471  606060606060
01472  606060606060
01473  606060606060
01474  606060606060
01475  606060606060
01476  606060606060
01477  606060606060          BCD
01500  606060606060
01501  606060606060
01502  606060606060
01503  606060606060
01504  606060606060
01505  606060606060
01506  606060606060
01507  606060606060
01510  606060606060
01511  314560465124          BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01512  255160634660
01513  232143436031
01514  456063303162
01515  602431212745
01516  466263312360
01517  663163304664
01520  636024316263
01521  645122314527
01522  602346512562
01523  736002000410          BCD  , 2048 WORDS OF MEMORY
01524  606646512462
01525  604626604425
01526  444651706060
01527  606060606060
01530  606060606060
01531  606060606060
01532  606060606060
01533  606060606060
01534  606060606060
01535  302165256022          BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES
01536  252545605125
01537  212460464563
01540  466024516444
```

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01541  600473602425
01542  626351467031
01543  452760633025
01544  606321646063
01545  212243256025
01546  456351312562
01547  602145246063          BCD   AND THEIR CHECK SUMS.
01550  302531516023
01551  302523426062
01552  644462336060
01553  606060606060
01554  606060606060
01555  606060606060
01556  606060606060
01557  606060606060
01560  606060606060
01561  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01562  606631434360
01563  222560512562
01564  634651252473
01565  602264636063
01566  302551256031
01567  626045466066
01570  217060634660
01571  234645263151
01572  446063302560
01573  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01574  626444602551
01575  514651604645
01576  606330256024
01577  516444336060
01600  606060606060
01601  606060606060
01602  606060606060
01603  606060606060
01604  606060606060
01605  0 00000 0 00000 X
A                00000        END
```

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1            ORG 52                    FORCE NEW RECORD
1                          00064         ORG 52                  FORCE NEW RECORD
     00064   0 01303 0 01564            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
TD   01303   3 00000 0 00064            TXH 52                  4307  FT  51
     01304   0 07400 4 00740            TSX PRINT,4
     01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
                           04331 SUBTAG SYN 2265                4331 OCTAL
                           04327 SUBORG SYN 2263                4327 OCTAL - THIS IS SUBORG + 3
     01306   0 50000 0 04331            CLA SUBTAG              SAME AS INSTRUCTIONS 4246 THRO
     01307   0 76500 0 00011            LRS 9                   4261 IN SECTION II
     01310   0 73400 6 00000            PAX 0,6
T    01311  -0 75400 0 00000            PXD                     AT END OF TIX, AC ADDRESS HAS
     01312   0 76300 0 00011            LLS 9                   DRUM ADDRESS OF ENTRY AND
     01313   0 60100 0 01342            STO SUBES1              IR 2 EQUALS  1 FOR 2 WORD + CHECKSUM
     01314   0 76700 0 00001            ALS 1                                2 FOR 4 WORD + SUM
     01315   0 60100 0 01343            STO SUBES2                           3 FOR 6 WORD + SUM
     01316   0 50000 4 04327            CLA SUBORG,4
     01317   0 40000 0 01342            ADD SUBES1
     01320   0 40000 0 01343 SUB030     ADD SUBES2
     01321   2 00001 4 01320            TIX SUB030,4,1
     01322   0 07400 4 00730            TSX OCTBCD,4
     01323   0 60200 0 01257            SLW ERAS
     01324   0 56000 0 01257            LDQ ERAS
     01325  -0 76300 0 00014            LGL 12                  SHIFT OUT FIRST 2 BLANKS
     01326  -0 50000 0 01402            CAL PR2
     01327  -0 76300 0 00022            LGL 18
     01330   0 60200 0 01402            SLW PR2
     01331  -0 76300 0 00006            LGL 6
     01332   0 56000 0 01403            LDQ PR3
     01333  -0 76300 0 00036            LGL 30
     01334   0 60200 0 01403            SLW PR3
     01335   0 50000 2 01347            CLA A+1,2
     01336   0 60100 0 01355            STO PR1
     01337   0 07400 4 00740            TSX PRINT,4
     01340   0 01565 0 01347            HTR PR,0,PR+142
     01341   0 02000 0 00221            TRA DIGRTN
     01342   0 00000 0 00000 SUBES1
     01343   0 00000 0 00000 SUBES2
     01344   452760216006               BCD 1NG A 6
     01345   452760216004               BCD 1NG A 4
     01346   452760216002       A       BCD 1NG A 2
     01347   606060606060       PR      BCD 2
     01350   606060606060
     01351   233025234260               BCD 4CHECK SUM ERROR IN READI
     01352   626444602551
     01353   514651603145
     01354   605125212431
     01355   452760216002       PR1     BCD 1NG A 2
     01356   606646512460               BCD   WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
     01357   254563517060
     01360   214524603163
     01361   626023302523
     01362   426062644460
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01363  314560633025
01364  606321646063
01365  212243256046
01366  456024516444
01367  600433606060
01370  606060606060          BCD 5
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  633025602451          BCD 5THE DRUM ADDRESS OF THE ENTRY
01376  644460212424
01377  512562626046
01400  266063302560
01401  254563517060
01402  606060316260    PR2   BCD 1   IS
01403  336060263160    PR3   BCD 1.  FI
01404  652560216363          BCD  VE ATTEMPTS HAVE BEEN MADE TO READ.
01405  254447636260
01406  302165256022
01407  252545604421
01410  242560634660
01411  512521246060
01412  606060606060
01413  606060606060
01414  606060606060
01415  606060606060
01416  606060606060          BCD 3
01417  606060606060
01420  606060606060
01421  633025602545          BCD  THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.
01422  635170602346
01423  515125236343
01424  706026514644
01425  606330316260
01426  472151633123
01427  644321516021
01430  242451256262
01431  336060606060
01432  606060606060
01433  606060606060          BCD
01434  606060606060
01435  606060606060
01436  606060606060
01437  606060606060
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060          BCD
01446  606060606060
01447  606060606060
01450  606060606060
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01451  606060606060
01452  606060606060
01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060          BCD
01460  606060606060
01461  606060606060
01462  606060606060
01463  606060606060
01464  606060606060
01465  606060606060
01466  606060606060
01467  606060606060
01470  606060606060
01471  314560465124          BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01472  255160634660
01473  232143436031
01474  456063303162
01475  602431212745
01476  466263312360
01477  663163304664
01500  636024316263
01501  645122314527
01502  602346512562
01503  736002000410          BCD  , 2048 WORDS OF MEMORY
01504  606646512462
01505  604626604425
01506  444651706060
01507  606060606060
01510  606060606060
01511  606060606060
01512  606060606060
01513  606060606060
01514  606060606060
01515  302165256022          BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES
01516  252545605125
01517  212460464563
01520  466024516444
01521  600473602425
01522  626351467031
01523  452760633025
01524  606321646063
01525  212243256025
01526  456351312562
01527  602145246063          BCD   AND THEIR CHECK SUMS.
01530  302531516023
01531  302523426062
01532  644462336060
01533  606060606060
01534  606060606060
01535  606060606060
01536  606060606060
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01537  606060606060
01540  606060606060
01541  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01542  606631434360
01543  222560512562
01544  634651252473
01545  602264636063
01546  302551256031
01547  626045466066
01550  217060634660
01551  234645263151
01552  446063302560
01553  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01554  626444602551
01555  514651604645
01556  606330256024
01557  516444336060
01560  606060606060
01561  606060606060
01562  606060606060
01563  606060606060
01564  606060606060
01565  0 00000 0 00000 X
A                   00000        END
```

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1            ORG 53                    FORCE NEW RECORD
1                          00065         ORG 53                 FORCE NEW RECORD
      00065   0 01303 0 02746            HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD   01303   3 00000 0 00065            TXH 53                  150  FT  75
      01304   0 76200 0 00304            RDR 4
      01305   0 46000 0 02136            LDA D273               THIS IS THA ACL WITH ADDRESS OF
 .    01306   0 70000 0 02136            CPY D273               DRUM CHECK SUM IN CORES
      01307   0 50000 0 02136            CLA D273
      01310   0 62100 0 01311            STA GETSUM
 A    01311   0 50000 0 00000 GETSUM     CLA
      01312   0 60100 0 02137            STO DRMSUM             HAVE ACTUAL DRUM CHECK SUM
      01313   0 76200 0 00304            RDR 4
      01314   0 46000 0 02140            LDA D307               HAVE COMPUTED CHECK SUM FROM
      01315   0 70000 0 02140            CPY D307               PERMANENT LOCATION
      01316   0 76200 0 00304            RDR 4
      01317   0 46000 0 02141            LDA D313               HAVE DRUM SELECT AND
      01320   0 70000 0 02141            CPY D313               INITIAL DRUM ADDRESS
      01321  -0 76000 0 00141            SLT8141                TURN OFF SENSE LIGHT 1
      01322   0 76100 0 00000            NOP
      01323   0 50000 0 01234            CLA PREFX1
      01324   0 40200 0 02142            SUB MEM4K
      01325  -0 10000 0 01327            TNZ LX
      01326   0 76000 0 00141            PSE8141                TURN ON SENSE LIGHT 1, MEMORY IS 4K
      01327  -0 53400 2 00000 LX         LXD 0,2                IR2 WAS SAVED IN DEC LOC ZERO
      01330  -0 75400 2 00000            PXD 0,2
      01331   0 40200 0 01234            SUB PREFX1
      01332  -0 32000 0 01230            ANA DECMSK
      01333   0 53400 2 02135            LXA TAB,2
      01334   0 34000 2 02135 CAS        CAS TAB,2
      01335   0 02000 0 01337            TRA TIXT
      01336   0 02000 0 01655            TRA HAVE
      01337   2 00005 2 01334 TIXT       TIX CAS,2,5
      01340   0 07400 4 00740            TSX PRINT,4            CANNOT IDENTIFY TABLE  VERRRY BAD
      01341   0 01655 0 01343            HTR ER,0,ER+202
      01342   0 00000 0 00221            HTR DIGRTN
      01343   606060606060     ER       BCD 2
      01344   606060606060
      01345   434623216331              BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
      01346   464560462660
      01347   255151465173
      01350   606630312330
      01351   603021626022
      01352   252545604751
      01353   314563252473
      01354   603021626023
      01355   216462252460
      01356   243121274546
      01357   626331236051              BCD  STIC RECORD NUMBER 53
      01360   252346512460
      01361   456444222551
      01362   600503606060
      01363   606060606060
      01364   606060606060
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01365  606060606060
01366  606060606060
01367  606060606060
01370  606060606060
01371  634660222560          BCD  TO BE READ IN.  THIS RECORD COMPARES THE 2S COMPLIMENT OF IN
01372  512521246031
01373  453360606330
01374  316260512523
01375  465124602346
01376  444721512562
01377  606330256002
01400  626023464447
01401  433144254563
01402  604626603145
01403  242567605125          BCD  DEX REGISTER 2 TO A LIST OF 4 TABLE STOPS.
01404  273162632551
01405  600260634660
01406  216043316263
01407  604626600460
01410  632122432560
01411  626346476273
01412  606060606060
01413  606060606060
01414  606060606060
01415  226463604546          BCD  BUT NO MATCH HAS BEEN FOUND.
01416  604421632330
01417  603021626022
01420  252545602646
01421  644524336060
01422  606060606060
01423  606060606060
01424  606060606060
01425  606060606060
01426  606060606060
01427  606060606060          BCD
01430  606060606060
01431  606060606060
01432  606060606060
01433  606060606060
01434  606060606060
01435  606060606060
01436  606060606060
01437  606060606060
01440  606060606060
01441  633025602346          BCD  THE CONTENTS OF IR 2 WERE SAVED IN THE DECREMENT OF LOCATION
01442  456325456362
01443  604626603151
01444  600260662551
01445  256062216525
01446  246031456063
01447  302560242523
01450  512544254563
01451  604626604346
01452  232163314645
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01453  607125514633        BCD   ZERO.
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060
01460  606060606060
01461  606060606060
01462  606060606060
01463  606060606060
01464  606060606060
01465  633031626024        BCD  THIS DECREMENT SHOULD EQUAL ....
01466  252351254425
01467  456360623046
01470  644324602550
01471  642143603333
01472  333360606060
01473  606060606060
01474  606060606060
01475  606060606060
01476  606060606060
01477  606060606060        BCD
01500  606060606060
01501  606060606060
01502  606060606060
01503  606060606060
01504  606060606060
01505  606060606060
01506  606060606060
01507  606060606060
01510  606060606060
01511  606060606060        BCD                    77744   STAG TABLE
01512  606060606060
01513  606060606007
01514  070704046060
01515  606263212760
01516  632122432560
01517  606060606060
01520  606060606060
01521  606060606060
01522  606060606060
01523  606060606060        BCD
01524  606060606060
01525  606060606060
01526  606060606060
01527  606060606060
01530  606060606060
01531  606060606060
01532  606060606060
01533  606060606060
01534  606060606060
01535  606060606060        BCD                    77733   SUCC TABLE
01536  606060606060
01537  606060606007
01540  070703036060
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01541  606264232360
01542  632122432560
01543  606060606060
01544  606060606060
01545  606060606060
01546  606060606060
01547  606060606060          BCD
01550  606060606060
01551  606060606060
01552  606060606060
01553  606060606060
01554  606060606060
01555  606060606060
01556  606060606060
01557  606060606060
01560  606060606060
01561  606060606060          BCD                 77721   PRED TABLE
01562  606060606060
01563  606060606007
01564  070702016060
01565  604751252460
01566  632122432560
01567  606060606060
01570  606060606060
01571  606060606060
01572  606060606060
01573  606060606060          BCD
01574  606060606060
01575  606060606060
01576  606060606060
01577  606060606060
01600  606060606060
01601  606060606060
01602  606060606060
01603  606060606060
01604  606060606060
01605  606060606060          BCD                 77707   BBB TABLE
01606  606060606060
01607  606060606007
01610  070700076060
01611  602222226063
01612  212243256060
01613  606060606060
01614  606060606060
01615  606060606060
01616  606060606060
01617  606060606060          BCD
01620  606060606060
01621  606060606060
01622  606060606060
01623  606060606060
01624  606060606060
01625  606060606060
01626  606060606060
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01627  606060606060
01630  606060606060
01631  512562626062          BCD PRESS START IF YOU WISH TO RESTORE MACHINE TO CONDITION IN WH
01632  632151636031
01633  266070466460
01634  663162306063
01635  466051256263
01636  465125604421
01637  233031452560
01640  634660234645
01641  243163314645
01642  603145606630
01643  312330602551          BCD  ICH ERROR OCCURRED.
01644  514651604623
01645  236451512524
01646  336060606060
01647  606060606060
01650  606060606060
01651  606060606060
01652  606060606060
01653  606060606060
01654  606060606060
01655   0 50000 2 02136 HAVE   CLA TAB+1,2          BCD NAME OF TABLE
01656   0 60100 0 02162        STO PR1
01657   0 50000 2 02141        CLA TAB+4,2          BCD LINE ABOUT SIZE OF TABLE ENTRIES
01660   0 60100 0 02101        STO PRTAB
01661   0 76000 0 00141        SLN 1
01662   0 02000 0 01664        TRA MEM8K
01663   2 00001 2 01664        TIX MEM8K,2,1
01664   0 50000 2 02137 MEM8K  CLA TAB+2,2          THIS IS ADDRESS OF 1ST WORD IN
01665   0 60100 0 02143        STO BUFADR           BUFFER FOR WHATEVER K
01666   0 50000 0 02136        CLA D273             SUBTRACT ADDRESS OF 1ST WORD IN
01667  -0 32000 0 01227        ANA ADDMSK           BUFFER FROM ADDRESS OF DRUM CHECK SUM
01670   0 40200 0 02143        SUB BUFADR
01671   0 60100 0 02144        STO WDC              NOW HAVE ACTUAL WORD COUNT
01672   0 07400 4 00730        TSX OCTBCD,4         CONVERT TO BCD AND STORE IN COMMENT
01673   0 60200 0 01257        SLW ERAS
01674   0 56000 0 01257        LDQ ERAS
01675  -0 76300 0 00014        LGL 12
01676  -0 50000 0 02327        CAL PR6
01677  -0 76300 0 00022        LGL 18
01700   0 60200 0 02327        SLW PR6
01701  -0 76300 0 00006        LGL 6
01702   0 56000 0 02330        LDQ PR7
01703  -0 76300 0 00036        LGL 30
01704   0 60200 0 02330        SLW PR7
01705   0 50000 0 02143        CLA BUFADR           CONVERT ADDRESS OF 1ST WORD OF
01706   0 07400 4 00730        TSX OCTBCD,4         CORE BUFFER AND STORE IN COMMENT
01707   0 60200 0 01257        SLW ERAS
01710   0 56000 0 01257        LDQ ERAS
01711  -0 50000 0 02221        CAL ADMEM
01712  -0 76300 0 00022        LGL 18
01713   0 60200 0 02221        SLW ADMEM
01714  -0 76300 0 00022        LGL 18
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01715  0 56000 0 00717          LDQ BLANKS
01716 -0 76300 0 00022          LGL 18
01717  0 60200 0 02222          SLW ADMEM+1
01720  0 50000 0 02141          CLA D313              FIND NUMBER OF DRUM
01721  0 76700 0 00007          ALS 7
01722 -0 73400 1 00000          PDX 0,1
01723  0 50000 1 02110          CLA DRM,1             BCD TABLE
01724  0 60100 0 02171          STO PR4
01725  0 50000 0 02141          CLA D313
01726 -0 32000 0 02146          ANA DRUMSK            ADD WORD COUNT TO ADDRESS OF
01727  0 62100 0 02145          STA DRMADR            1ST WORD ON DRUM,  SPLIT DRUM
01730  0 40000 0 02144          ADD WDC               IF BITS CAN BE MOVED INTO DECREMENT
01731  0 76700 0 00007          ALS 7
01732 -0 73400 2 00000          PDX 0,2
01733 -3 00000 2 01743          TXL ISDR4,2,0
01734  1 00001 1 01735          TXI SPLIT,1,1
01735 -0 50000 1 02110 SPLIT    CAL DRM,1             NEXT BCD WORD FROM TABLE INTO
01736  0 56000 0 00717          LDQ BLANKS            COMMENT
01737 -0 76300 0 00006          LGL 6
01740  0 60200 0 02202          SLW PR5
01741  0 50000 0 02147          CLA PRSPLT            EXPAND FIRST COMMENT TO SHOW
01742  0 60100 0 02075          STO TSX1              SPLIT BUFFER
01743 -3 00002 1 01746 ISDR4    TXL GETLDA,1,2        IFF BUFFER ON DRUM 4, IT IS CLOBBERED
01744  0 50000 0 02150          CLA PRALL             PRINT SAME
01745  0 60100 0 02103          STO TSX2
01746  0 50000 0 02145 GETLDA  CLA DRMADR            CONVERT ADDRESS OF 1ST WORD ON
01747  0 07400 4 00730          TSX OCTBCD,4          THE DRUM AND STORE IN COMMENT
01750  0 60200 0 01257          SLW ERAS
01751  0 56000 0 01257          LDQ ERAS
01752 -0 76300 0 00014          LGL 12
01753 -0 50000 0 02167          CAL PR2
01754 -0 76300 0 00014          LGL 12
01755  0 60200 0 02167          SLW PR2
01756 -0 76300 0 00014          LGL 12
01757  0 56000 0 02170          LDQ PR3
01760 -0 76300 0 00030          LGL 24
01761  0 60200 0 02170          SLW PR3
01762  0 50000 0 02136          CLA D273              CONVERT AND STORE ADDRESS IN CORES
01763  0 07400 4 00730          TSX OCTBCD,4          OF DRUM CHECK SUM
01764  0 60200 0 02420          SLW PR9
01765  0 56000 0 02140          LDQ D307              CONVERT ALL OF 36 BIT WORD TO PRINT
01766 -0 76300 0 00017          LGL 15                COMPUTED CHECK SUM
01767  0 07400 4 00730          TSX OCTBCD,4
01770  0 60200 0 01257          SLW ERAS
01771  0 56000 0 01257          LDQ ERAS
T 01772 -0 75400 0 00000        PXD
01773 -0 76300 0 00006          LGL 6
01774  0 60200 0 01260          SLW ERAS+1            IE, STORE 00000B
T 01775 -0 75400 0 00000        PXD
01776 -0 76300 0 00006          LGL 6
01777  0 76700 0 00006          ALS 6
02000  0 40000 0 01260          ADD ERAS+1
02001 -0 76300 0 00030          LGL 24
02002  0 60200 0 02376          SLW PR8
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      02003  0 56000 0 02140        LDQ D307
      02004 -0 76300 0 00017        LGL 15
T     02005 -0 75400 0 00000        PXD
      02006 -0 76300 0 00014        LGL 12
      02007  0 07400 4 00730        TSX OCTBCD,4
      02010  0 60200 0 01257        SLW ERAS
      02011  0 56000 0 01257        LDQ ERAS
      02012 -0 76300 0 00022        LGL 18
      02013  0 76700 0 00006        ALS 6
      02014  0 40000 0 01260        ADD ERAS+1
      02015 -0 76300 0 00006        LGL 6
      02016  0 76700 0 00006        ALS 6
      02017  0 40000 0 01260        ADD ERAS+1
      02020 -0 76300 0 00014        LGL 12
      02021  0 60200 0 02377        SLW PR8+1
      02022  0 56000 0 02140        LDQ D307
      02023 -0 76300 0 00033        LGL 27
T     02024 -0 75400 0 00000        PXD
      02025 -0 76300 0 00011        LGL 9
      02026  0 07400 4 00730        TSX OCTBCD,4
      02027  0 60200 0 01257        SLW ERAS
      02030  0 56000 0 01257        LDQ ERAS
      02031 -0 77300 0 00022        RQL 18
      02032 -0 76300 0 00022        LGL 18
      02033  0 56000 0 00717        LDQ BLANKS
      02034 -0 76300 0 00022        LGL 18
      02035  0 60200 0 02400        SLW PR8+2
      02036  0 56000 0 02137        LDQ DRMSUM          CONVERT AND STORE ALL OF 36 BIT
T     02037 -0 75400 0 00000        PXD                 DRUM CHECK SUM
      02040 -0 76300 0 00003        LGL 3
      02041  0 76700 0 00006        ALS 6
      02042 -0 60200 0 02421        ORS PR10
      02043 -0 76300 0 00017        LGL 15
      02044  0 07400 4 00730        TSX OCTBCD,4
      02045  0 60200 0 01257        SLW ERAS
      02046  0 56000 0 01257        LDQ ERAS
      02047 -0 77300 0 00006        RQL 6
      02050 -0 60000 0 02422        STQ PR10+1
      02051  0 56000 0 02137        LDQ DRMSUM
      02052 -0 76300 0 00022        LGL 18
T     02053 -0 75400 0 00000        PXD
      02054 -0 76300 0 00017        LGL 15
      02055 -0 60000 0 01261        STQ ERAS+2
      02056  0 07400 4 00730        TSX OCTBCD,4
      02057  0 60200 0 01257        SLW ERAS
      02060  0 56000 0 01257        LDQ ERAS
      02061 -0 76300 0 00014        LGL 12
      02062  0 76700 0 00006        ALS 6
      02063  0 40000 0 01260        ADD ERAS+1
      02064 -0 76300 0 00030        LGL 24
      02065  0 60200 0 02423        SLW PR10+2
      02066  0 56000 0 01261        LDQ ERAS+2
T     02067 -0 75400 0 00000        PXD
      02070 -0 76300 0 00003        LGL 3
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02071  0 56000 0 00717          LDQ BLANKS
02072 -0 76300 0 00036          LGL 30
02073  0 60200 0 02424          SLW PR10+3
02074  0 07400 4 00740          TSX PRINT,4
02075  0 02177 0 02151 TSX1     HTR PR,0,PR+22
02076  0 07400 4 00740          TSX PRINT,4
02077  0 02223 0 02211          HTR PRCR,0,PRCR+10
02100  0 07400 4 00740          TSX PRINT,4
02101  0 00000 0 00000 PRTAB
02102  0 07400 4 00740          TSX PRINT,4
02103  0 02603 0 02315 TSX2     HTR PRSZ,0,PRSZND
02104  0 02000 0 00221          TRA DIGRTN
02105  245164446004             BCD 1DRUM 4
02106  245164446003             BCD 1DRUM 3
02107  245164446002             BCD 1DRUM 2
02110  245164446001     DRM     BCD 1DRUM 1
02111  0 00034 0 00000 STIR     HTR80,0,34              STAG  DEC HAS IR2 COMPLEMENTED
02112  606263212760             BCD 1 STAG              IF TABLE STAG  IR 2 IS 77744
02113  0 00000 0 05263          HTR85263                BUFFER ADDRESS FIRST WORD 8K
02114  0 00000 0 05061          HTR85061                DITTO 4K
02115  0 02251 0 02223          HTR PRA,0,PRA+22
02116  0 00045 0 00000          HTR80,0,45              SUCC  IR2 IS 77733
02117  606264232360             BCD 1 SUCC
02120  0 00000 0 16734          HTR816734               8K
02121  0 00000 0 07555          HTR87555                4K
02122  0 02265 0 02251          HTR PRB,0,PRB+12
02123  0 00057 0 00000          HTR80,0,57              PRED  IR2 IS 77721
02124  604751252460             BCD 1 PRED
02125  0 00000 0 15674          HTR815674               8K
02126  0 00000 0 07337          HTR87337                4K
02127  0 02301 0 02265          HTR PRC,0,PRC+12
02130  0 00071 0 00000          HTR80,0,71              BBB  IR2 IS 77707
02131  606022222260             BCD 1  BBB
02132  0 00000 0 12533          HTR812533               8K
02133  0 00000 0 06442          HTR86442                4K
02134  0 02315 0 02301          HTR PRD,0,PRD+12
02135  0 00000 0 00024 TAB      HTR TAB-STIR
02136  0 00000 0 00273 D273     HTR8273                 COPY ACL WITH ADDRESS OF DRUM SUM IN CORES
02137  0 00000 0 00000 DRMSUM                           DRUM SUM FROM ADDRESS FOUND ABOVE
02140  0 00000 0 00307 D307     HTR8307                 COMPUTED SUM PICKED UP FROM 307 AND STORED
02141  0 00000 0 00313 D313     HTR8313                 DRUM SELECT AND INITIAL ADDRESS FROM 313
02142 +010000000000     MEM4K   OCT 010000000000
02143  0 00000 0 00000 BUFADR                           CORE ADDRESS OF 1ST WORD OF TABLE
02144  0 00000 0 00000 WDC                              ACTUAL WORD COUNT STORED HERE
02145  0 00000 0 00000 DRMADR                           D313 ANA 3777 IS ADDRESS 1ST WORD ON DRUM
02146  0 00000 0 03777 DRUMSK HTR83777
02147  0 02211 0 02151 PRSPLT HTR PR,0,PR+32
02150  0 02747 0 02315 PRALL  HTR PRSZ,0,X
02151  606060606060     PR      BCD 2
02152  606060606060
02153  233025234260             BCD 7CHECK SUM ERROR IN READING A BUFFER OF THE
02154  626444602551
02155  514651603145
02156  605125212431
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02157  452760216022
02160  642626255160
02161  462660633025
02162  606263212760    PR1     BCD 1 STAG
02163  632122432573            BCD 4TABLE, BEGINNING AT ADDR
02164  602225273145
02165  453145276021
02166  636021242451
02167  606025626260    PR2     BCD 1  ESS            CHANGED TO ESS 12
02170  604645606060    PR3     BCD 1 ON              CHANGED TO 34 ON
02171  245164446001    PR4     BCD 6DRUM 1
02172  606060606060
02173  606060606060
02174  606060606060
02175  606060606060
02176  606060606060
02177  214524602346            BCD 3AND CONTINUED ON D
02200  456331456425
02201  246046456024
02202  516444600233    PR5     BCD 7RUM 2.
02203  606060606060
02204  606060606060
02205  606060606060
02206  606060606060
02207  606060606060
02210  606060606060
02211  606060606060    PRCR    BCD 2
02212  606060606060
02213  314560234651            BCD 6IN CORES, THE BUFFER BEGINS AT LOCAT
02214  256273606330
02215  256022642626
02216  255160222527
02217  314562602163
02220  604346232163
02221  606060314645    ADMEM   BCD 2   ION           CHANGED TO ION 12345
02222  606060606060
02223  606060606060    PRA     BCD 2
02224  606060606060
02225  633025606263            BCD  THE STAG TABLE HAS A 4 BIT ENTRY FOR EACH TAGGED INSTRUCTION
02226  212760632122
02227  432560302162
02230  602160046022
02231  316360254563
02232  517060264651
02233  602521233060
02234  632127272524
02235  603145626351
02236  642363314645
02237  602346444731            BCD   COMPILED.  EACH STAG WORD HOLDS 9 ENTRIES.
02240  432524336060
02241  252123306062
02242  632127606646
02243  512460304643
02244  246260116025
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02245  456351312562
02246  336060606060
02247  606060606060
02250  606060606060
02251  606060606060    PRB     BCD 2
02252  606060606060
02253  633025606264            BCD  THE SUCC TABLE HAS 1 WORD ENTRIES.
02254  232360632122
02255  432560302162
02256  600160664651
02257  246025456351
02260  312562336060
02261  606060606060
02262  606060606060
02263  606060606060
02264  606060606060
02265  606060606060    PRC     BCD 2
02266  606060606060
02267  633025604751            BCD  THE PRED TABLE HAS 1 WORD ENTRIES.
02270  252460632122
02271  432560302162
02272  600160664651
02273  246025456351
02274  312562336060
02275  606060606060
02276  606060606060
02277  606060606060
02300  606060606060
02301  606060606060    PRD     BCD 2
02302  606060606060
02303  633025602222            BCD  THE BBB TABLE HAS 6 WORD ENTRIES.
02304  226063212243
02305  256030216260
02306  066066465124
02307  602545635131
02310  256233606060
02311  606060606060
02312  606060606060
02313  606060606060
02314  606060606060
02315  606060606060    PRSZ    BCD 2
02316  606060606060
02317  633025606321            BCD 8THE TABLE WAS WRITTEN ON THE DRUM FROM A BUFFER
02320  224325606621
02321  626066513163
02322  632545604645
02323  606330256024
02324  516444602651
02325  464460216022
02326  642626255160
02327  606060462660    PR6     BCD 1   OF              CHANGED TO OF 123
02330  606646512460    PR7     BCD 1 WORD              CHANGED TO 4 WORD
02331  626046236321            BCD  S OCTAL.
02332  433360606060
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02333  606060606060
02334  606060606060
02335  606060606060
02336  606060606060
02337  606060606060
02340  606060606060
02341  606060606060
02342  606060606060
02343  252123306022          BCD  EACH BUFFER IS FOLLOWED BY ITS CHECK SUM.
02344  642626255160
02345  316260264643
02346  434666252460
02347  227060316362
02350  602330252342
02351  606264443360
02352  606060606060
02353  606060606060
02354  606060606060
02355  606060606060          BCD
02356  606060606060
02357  606060606060
02360  606060606060
02361  606060606060
02362  606060606060
02363  606060606060
02364  606060606060
02365  606060606060
02366  606060606060
02367  633025602346          BCD 7THE COMPUTED CHECK SUM IN LOCATION 307 IS
02370  444764632524
02371  602330252342
02372  606264446031
02373  456043462321
02374  633146456003
02375  000760316260
02376  006000000000    PR8   BCD  0 00000 0 00000
02377  006000600000
02400  000000606060
02401  606060606060
02402  606060606060
02403  606060606060
02404  606060606060
02405  606060606060
02406  606060606060
02407  606060606060
02410  606060606060          BCD 3
02411  606060606060
02412  606060606060
02413  633025602451          BCD 5THE DRUM CHECK SUM IN LOCATION
02414  644460233025
02415  234260626444
02416  603145604346
02417  232163314645
02420  600102030405    PR9   BCD 1 12345
```

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02421  603162600060   PR10   BCD   IS 0
02422  606060606060
02423  606060606060
02424  606060606060
02425  606060606060
02426  606060606060
02427  606060606060
02430  606060606060
02431  606060606060
02432  606060606060
02433  606060606060          BCD 4
02434  606060606060
02435  606060606060
02436  606060606060
02437  606060606060          BCD
02440  606060606060
02441  606060606060
02442  606060606060
02443  606060606060
02444  606060606060
02445  606060606060
02446  606060606060
02447  606060606060
02450  606060606060
02451  606060606060          BCD
02452  606060606060
02453  606060606060
02454  606060606060
02455  606060606060
02456  606060606060
02457  606060606060
02460  606060606060
02461  606060606060
02462  606060606060
02463  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS SECTION OF THE TAB
02464  636325444763
02465  626030216525
02466  602225254560
02467  442124256063
02470  466051252124
02471  606330316260
02472  622523633146
02473  456046266063
02474  302560632122
02475  432560234651          BCD  LE CORRECTLY FROM THE DRUM.
02476  512523634370
02477  602651464460
02500  633025602451
02501  644433606060
02502  606060606060
02503  606060606060
02504  606060606060
02505  606060606060
02506  606060606060
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02507  606060606060          BCD
02510  606060606060
02511  606060606060
02512  606060606060
02513  606060606060
02514  606060606060
02515  606060606060
02516  606060606060
02517  606060606060
02520  606060606060
02521  606060606060          BCD
02522  606060606060
02523  606060606060
02524  606060606060
02525  606060606060
02526  606060606060
02527  606060606060
02530  606060606060
02531  606060606060
02532  606060606060
02533  606060606060          BCD
02534  606060606060
02535  606060606060
02536  606060606060
02537  606060606060
02540  606060606060
02541  606060606060
02542  606060606060
02543  606060606060
02544  606060606060
02545  606060606060          BCD
02546  606060606060
02547  606060606060
02550  606060606060
02551  606060606060
02552  606060606060
02553  606060606060
02554  606060606060
02555  606060606060
02556  606060606060
02557  454663256040          BCD  NOTE - IF THE CHECK SUM DISCREPANCY IS LARGE, IT MAY INDICAT
02560  603126606330
02561  256023302523
02562  426062644460
02563  243162235125
02564  472145237060
02565  316260432151
02566  272573603163
02567  604421706031
02570  452431232163
02571  256021604721          BCD  E A PART OF THE PROGRAM CANNOT BE REACHED.
02572  516360462660
02573  633025604751
02574  462751214460
```

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02575  232145454663
02576  602225605125
02577  212330252433
02600  606060606060
02601  606060606060
02602  606060606060
02603  606060606060    PRSZND BCD
02604  606060606060
02605  606060606060
02606  606060606060
02607  606060606060
02610  606060606060
02611  606060606060
02612  606060606060
02613  606060606060
02614  606060606060
02615  606060606060           BCD
02616  606060606060
02617  606060606060
02620  606060606060
02621  606060606060
02622  606060606060
02623  606060606060
02624  606060606060
02625  606060606060
02626  606060606060
02627  606060606060           BCD
02630  606060606060
02631  606060606060
02632  606060606060
02633  606060606060
02634  606060606060
02635  606060606060
02636  606060606060
02637  606060606060
02640  606060606060
02641  606060606060           BCD
02642  606060606060
02643  606060606060
02644  606060606060
02645  606060606060
02646  606060606060
02647  606060606060
02650  606060606060
02651  606060606060
02652  606060606060
02653  314560465124           BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
02654  255160634660
02655  232143436031
02656  456063303162
02657  602431212745
02660  466263312360
02661  663163304664
02662  636024316263
```

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02663  645122314527
02664  602346512562
02665  736002000410          BCD   , 2048 WORDS OF MEMORY HAVE BEEN WRITTEN
02666  606646512462
02667  604626604425
02670  444651706030
02671  216525602225
02672  254560665131
02673  636325456060
02674  606060606060
02675  606060606060
02676  606060606060
02677  464560634660          BCD   ON TO DRUM 4, DESTROYING THE TABLES AND THEIR CHECK SUMS.
02700  245164446004
02701  736024256263
02702  514670314527
02703  606330256063
02704  212243256260
02705  214524606330
02706  253151602330
02707  252342606264
02710  446233606060
02711  606060606060          BCD
02712  606060606060
02713  606060606060
02714  606060606060
02715  606060606060
02716  606060606060
02717  606060606060
02720  606060606060
02721  606060606060
02722  606060606060
02723  442544465170          BCD   MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
02724  606631434360
02725  222560512562
02726  634651252473
02727  602264636063
02730  302551256031
02731  626045466066
02732  217060634660
02733  234645263151
02734  446063302560
02735  233025234260          BCD   CHECK SUM ERROR ON THE DRUM.
02736  626444602551
02737  514651604645
02740  606330256024
02741  516444336060
02742  606060606060
02743  606060606060
02744  606060606060
02745  606060606060
02746  606060606060
02747  0 00000 0 00000 X
A                     00000        END
```

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```
1            ORG 54                  FORCE NEW RECORD
1                        00066          ORG 54                  FORCE NEW RECORD
      00066  0 01303 0 01552            HTR X-1,0,LOCREC        CARD FOR DE
                         01303          ORG LOCREC
TD    01303  3 00000 0 00066            TXH 54                   222  FT  94
      01304  0 07400 4 00740            TSX PRINT,4
      01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740            TSX PRINT,4
      01307  0 01553 0 01311            HTR PR,0,PR+162
      01310  0 02000 0 00221            TRA DIGRTN
      01311  606060606060       PR      BCD 2
      01312  606060606060
      01313  233025234260               BCD  CHECK SUM ERROR IN READING THE WORD COUNT OF THE EIFNO TABLE
      01314  626444602551
      01315  514651603145
      01316  605125212431
      01317  452760633025
      01320  606646512460
      01321  234664456360
      01322  462660633025
      01323  602531264546
      01324  606321224325
      01325  602651464460               BCD   FROM DRUM 4.
      01326  245164446004
      01327  336060606060
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  633025602451               BCD  THE DRUM ADDRESS OF THIS ENTRY IS 2, AND IT IS COPIED INTO C
      01340  644460212424
      01341  512562626046
      01342  266063303162
      01343  602545635170
      01344  603162600273
      01345  602145246031
      01346  636031626023
      01347  464731252460
      01350  314563466023
      01351  465125604346               BCD  ORE LOCATION 165.
      01352  232163314645
      01353  600106053360
      01354  606060606060
      01355  606060606060
      01356  606060606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  316362602330               BCD  ITS CHECK SUM IS COPIED FROM 3 INTO 223.  THE COPY LOOP BEGI
      01364  252342606264
```

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01365  446031626023
01366  464731252460
01367  265146446003
01370  603145634660
01371  020203336060
01372  633025602346
01373  477060434646
01374  476022252731
01375  456260216360          BCD  NS AT 210.
01376  020100336060
01377  606060606060
01400  606060606060
01401  606060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE ENTRY CORRECTL
01410  636325444763
01411  626030216525
01412  602225254560
01413  442124256063
01414  466051252124
01415  606330316260
01416  464525602545
01417  635170602346
01420  515125236343
01421  703360606060          BCD  Y.
01422  606060606060
01423  606060606060
01424  606060606060
01425  606060606060
01426  606060606060
01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  606060606060          BCD
01434  606060606060
01435  606060606060
01436  606060606060
01437  606060606060
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060          BCD
01446  606060606060
01447  606060606060
01450  606060606060
01451  606060606060
01452  606060606060
```

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01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  314560465124        BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01460  255160634660
01461  232143436031
01462  456063303162
01463  602431212745
01464  466263312360
01465  663163304664
01466  636024316263
01467  645122314527
01470  602346512562
01471  736002000410        BCD  , 2048 WORDS OF MEMORY
01472  606646512462
01473  604626604425
01474  444651706060
01475  606060606060
01476  606060606060
01477  606060606060
01500  606060606060
01501  606060606060
01502  606060606060
01503  302165256022        BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,
01504  252545605125
01505  212460464563
01506  466024516444
01507  600473602425
01510  626351467031
01511  452760633025
01512  602531264546
01513  606646512460
01514  234664456373
01515  603163626023        BCD  ITS CHECK SUM, AND THE TABLE.
01516  302523426062
01517  644473602145
01520  246063302560
01521  632122432533
01522  606060606060
01523  606060606060
01524  606060606060
01525  606060606060
01526  606060606060
01527  442544465170        BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01530  606631434360
01531  222560512562
01532  634651252473
01533  602264636063
01534  302551256031
01535  626045466066
01536  217060634660
01537  234645263151
01540  446063302560
```

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01541  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01542  626444602551
01543  514651604645
01544  606330256024
01545  516444336060
01546  606060606060
01547  606060606060
01550  606060606060
01551  606060606060
01552  606060606060
01553  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 55                  FORCE NEW RECORD
1                     00067            ORG 55                  FORCE NEW RECORD
      00067  0 01303 0 01552           HTR X-1,0,LOCREC        CARD FOR DE
                     01303            ORG LOCREC
 TD   01303  3 00000 0 00067           TXH 55                   222  FT 107
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01553 0 01311           HTR PR,0,PR+162
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  233025234260              BCD  CHECK SUM ERROR IN READING THE WORD COUNT OF THE EIFNO TABLE
      01314  626444602551
      01315  514651603145
      01316  605125212431
      01317  452760633025
      01320  606646512460
      01321  234664456360
      01322  462660633025
      01323  602531264546
      01324  606321224325
      01325  602651464460              BCD   FROM DRUM 4.
      01326  245164446004
      01327  336060606060
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  633025602451              BCD  THE DRUM ADDRESS OF THIS ENTRY IS 2, AND IT IS COPIED INTO C
      01340  644460212424
      01341  512562626046
      01342  266063303162
      01343  602545635170
      01344  603162600273
      01345  602145246031
      01346  636031626023
      01347  464731252460
      01350  314563466023
      01351  465125604346              BCD  ORE LOCATION 2112.
      01352  232163314645
      01353  600201010233
      01354  606060606060
      01355  606060606060
      01356  606060606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  316362602330              BCD  ITS CHECK SUM IS COPIED FROM 3 INTO 533.  THE COPY LOOP BEGI
      01364  252342606264
```

```
01365  446031626023
01366  464731252460
01367  265146446003
01370  603145634660
01371  050303336060
01372  633025602346
01373  477060434646
01374  476022252731
01375  456260216360          BCD  NS AT 210.
01376  020100336060
01377  606060606060
01400  606060606060
01401  606060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE ENTRY CORRECTL
01410  636325444763
01411  626030216525
01412  602225254560
01413  442124256063
01414  466051252124
01415  606330316260
01416  464525602545
01417  635170602346
01420  515125236343
01421  703360606060          BCD  Y.
01422  606060606060
01423  606060606060
01424  606060606060
01425  606060606060
01426  606060606060
01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  606060606060          BCD
01434  606060606060
01435  606060606060
01436  606060606060
01437  606060606060
01440  606060606060
01441  606060606060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060          BCD
01446  606060606060
01447  606060606060
01450  606060606060
01451  606060606060
01452  606060606060
```

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01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  314560465124          BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01460  255160634660
01461  232143436031
01462  456063303162
01463  602431212745
01464  466263312360
01465  663163304664
01466  636024316263
01467  645122314527
01470  602346512562
01471  736002000410          BCD  , 2048 WORDS OF MEMORY
01472  606646512462
01473  604626604425
01474  444651706060
01475  606060606060
01476  606060606060
01477  606060606060
01500  606060606060
01501  606060606060
01502  606060606060
01503  302165256022          BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,
01504  252545605125
01505  212460464563
01506  466024516444
01507  600473602425
01510  626351467031
01511  452760633025
01512  602531264546
01513  606646512460
01514  234664456373
01515  603163626023          BCD   ITS CHECK SUM, AND THE TABLE.
01516  302523426062
01517  644473602145
01520  246063302560
01521  632122432533
01522  606060606060
01523  606060606060
01524  606060606060
01525  606060606060
01526  606060606060
01527  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01530  606631434360
01531  222560512562
01532  634651252473
01533  602264636063
01534  302551256031
01535  626045466066
01536  217060634660
01537  234645263151
01540  446063302560
```

```
01541  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01542  626444602551
01543  514651604645
01544  606330256024
01545  516444336060
01546  606060606060
01547  606060606060
01550  606060606060
01551  606060606060
01552  606060606060
01553  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 56                    FORCE NEW RECORD
1                          00070         ORG 56                  FORCE NEW RECORD
      00070   0 01303 0 01626            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG L@CREC
 TD   01303   3 00000 0 00070            TXH 56                   241  FT 107
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306   0 76200 0 00304            RDR 4                   165 OCTAL, CONTAINS WORD COUNT
      01307   0 46000 0 01340            LDA A
      01310   0 70000 0 01257            CPY ERAS
      01311   0 50000 0 01257            CLA ERAS
      01312   0 77100 0 00022            ARS 18
      01313   0 60100 0 01271            STO ERAS+10
      01314   0 07400 4 00676            TSX BINDEC,4
      01315   0 60200 0 01257            SLW ERAS
      01316   0 56000 0 01257            LDQ ERAS
      01317  -0 50000 0 01404            CAL PR2
      01320  -0 77300 0 00006            RQL 6
      01321  -0 76300 0 00036            LGL 30
      01322   0 60200 0 01404            SLW PR2
      01323   0 50000 0 01337            CLA TEIFNO
      01324   0 40200 0 01271            SUB ERAS+10
      01325   0 07400 4 00730            TSX OCTBCD,4
      01326   0 60200 0 01257            SLW ERAS
      01327   0 56000 0 01257            LDQ ERAS
      01330  -0 76300 0 00014            LGL 12
      01331  -0 50000 0 01402            CAL PR1
      01332  -0 76300 0 00030            LGL 24
      01333   0 60200 0 01402            SLW PR1
      01334   0 07400 4 00740            TSX PRINT,4
      01335   0 01627 0 01341            HTR PR,0,PR+182
      01336   0 02000 0 00221            TRA DIGRTN
      01337  +000000002112      TEIFNO   OCT 00000002112
      01340   0 00000 0 00165 A          HTR8165
      01341   606060606060     PR       BCD 2
      01342   606060606060
      01343   233025234260               BCD  CHECK SUM ERROR IN READING THE EIFNO TABLE FROM DRUM 4.
      01344   626444602551
      01345   514651603145
      01346   605125212431
      01347   452760633025
      01350   602531264546
      01351   606321224325
      01352   602651464460
      01353   245164446004
      01354   336060606060
      01355   606060606060               BCD
      01356   606060606060
      01357   606060606060
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   606060606060
      01364   606060606060
```

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01365  606060606060
01366  606060606060
01367  633025602451          BCD  THE DRUM ADDRESS OF THE FIRST ENTRY IS 4.  THE TABLE IS COPI
01370  644460212424
01371  512562626046
01372  266063302560
01373  263151626360
01374  254563517060
01375  316260043360
01376  606330256063
01377  212243256031
01400  626023464731
01401  252460314563          BCD 1ED INT
01402  606060604660    PR1   BCD 1    O
01403  602145246031          BCD 1 AND I
01404  606060606062    PR2   BCD 1     S
01405  606646512462          BCD 6 WORDS LONG.
01406  604346452733
01407  606060606060
01410  606060606060
01411  606060606060
01412  606060606060
01413  633025602451          BCD  THE DRUM CHECK SUM IS IN 533.  THE COMPUTED CHECK SUM IS NOT
01414  644460233025
01415  234260626444
01416  603162603145
01417  600503033360
01420  606330256023
01421  464447646325
01422  246023302523
01423  426062644460
01424  316260454663
01425  606263465125          BCD   STORED, THEREFORE IT IS NOT AVAILABLE.
01426  247360633025
01427  512526465125
01430  603163603162
01431  604546636021
01432  652131432122
01433  432533606060
01434  606060606060
01435  606060606060
01436  606060606060
01437  633025602346          BCD  THE COPY LOOP BEGINS AT LOCATION 223.
01440  477060434646
01441  476022252731
01442  456260216360
01443  434623216331
01444  464560020203
01445  336060606060
01446  606060606060
01447  606060606060
01450  606060606060
01451  606060606060          BCD
01452  606060606060
```

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01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060
01460  606060606060
01461  606060606060
01462  606060606060
01463  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THE EIFNO TABLE CORRECT
01464  636325444763
01465  626030216525
01466  602225254560
01467  442124256063
01470  466051252124
01471  606330256025
01472  312645466063
01473  212243256023
01474  465151252363
01475  437033606060          BCD  LY.
01476  606060606060
01477  606060606060
01500  606060606060
01501  606060606060
01502  606060606060
01503  606060606060
01504  606060606060
01505  606060606060
01506  606060606060
01507  606060606060          BCD
01510  606060606060
01511  606060606060
01512  606060606060
01513  606060606060
01514  606060606060
01515  606060606060
01516  606060606060
01517  606060606060
01520  606060606060
01521  606060606060          BCD
01522  606060606060
01523  606060606060
01524  606060606060
01525  606060606060
01526  606060606060
01527  606060606060
01530  606060606060
01531  606060606060
01532  606060606060
01533  314560465124          BCD  IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01534  255160634660
01535  232143436031
01536  456063303162
01537  602431212745
01540  466263312360
```

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01541  663163304664
01542  636024316263
01543  645122314527
01544  602346512562
01545  736002000410          BCD   , 2048 WORDS OF MEMORY
01546  606646512462
01547  604626604425
01550  444651706060
01551  606060606060
01552  606060606060
01553  606060606060
01554  606060606060
01555  606060606060
01556  606060606060
01557  302165256022          BCD  HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,
01560  252545605125
01561  212460464563
01562  466024516444
01563  600473602425
01564  626351467031
01565  452760633025
01566  602531264546
01567  606646512460
01570  234664456373
01571  606330256063          BCD   THE TABLE, AND ITS CHECK SUM.
01572  212243257360
01573  214524603163
01574  626023302523
01575  426062644433
01576  606060606060
01577  606060606060
01600  606060606060
01601  606060606060
01602  606060606060
01603  442544465170          BCD  MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01604  606631434360
01605  222560512562
01606  634651252473
01607  602264636063
01610  302551256031
01611  626045466066
01612  217060634660
01613  234645263151
01614  446063302560
01615  233025234260          BCD  CHECK SUM ERROR ON THE DRUM.
01616  626444602551
01617  514651604645
01620  606330256024
01621  516444336060
01622  606060606060
01623  606060606060
01624  606060606060
01625  606060606060
01626  606060606060
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A        01627  0 00000 0 00000 X
                          00000 .      END
```

```
1            ORG 57                  FORCE NEW RECORD
1                        00071         ORG 57                 FORCE NEW RECORD
      00071   0 01303 0 01437         HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
TD    01303   3 00000 0 00071         TXH 57                 1274  FT  22
      01304   0 07400 4 00740         TSX PRINT,4
      01305   0 01244 0 01237         HTR MACHIN,0,MACHIN+5
      01306   0 76200 0 00304         RDR 4
      01307   0 46000 0 01322         LDA A
      01310   0 70000 0 01257         CPY ERAS
      01311   0 50200 0 01323         CLS OTA                FORM LOCATION OF FIRST WORD IN TABLE
      01312   0 40000 0 01257         ADD ERAS
      01313   0 07400 4 00730         TSX OCTBCD,4
      01314   0 56000 0 00717         LDQ BLANKS
      01315  -0 76300 0 00006         LGL 6
      01316   0 60200 0 01363         SLW PR1
      01317   0 07400 4 00740         TSX PRINT,4
      01320   0 01440 0 01324         HTR PR,0,PR+76
      01321   0 02000 0 00221         TRA DIGRTN
      01322   0 00000 0 01256 A       HTR81256               LOCATION OF WORD COUNT OF FLOCON TABLE
T     01323  -0 75400 0 05453 OTA     PXD85453               ADDRESS OF LAST TABLE ENTRY PLUS ONE.
      01324   606060606060     PR     BCD 2
      01325   606060606060
      01326   233025234260            BCD  CHECK SUM ERROR IN READING FLOCON TABLE FROM DRUM 2.  COPY L
      01327   626444602551
      01330   514651603145
      01331   605125212431
      01332   452760264346
      01333   234645606321
      01334   224325602651
      01335   464460245164
      01336   446002336060
      01337   234647706043
      01340   464647602225            BCD  OOP BEGINS AT LOCATION 1250.
      01341   273145626021
      01342   636043462321
      01343   633146456001
      01344   020500336060
      01345   606060606060
      01346   606060606060
      01347   606060606060
      01350   606060606060
      01351   606060606060
      01352   626321516331            BCD 9STARTING DRUM ADDRESS IS IN 551.   THE TABLE BEGINS AT
      01353   452760245164
      01354   446021242451
      01355   256262603162
      01356   603145600505
      01357   013360606063
      01360   302560632122
      01361   432560222527
      01362   314562602163
      01363   600102030460     PR1    BCD 1 1234
      01364   214524602346            BCD  AND CONSISTS OF BLOCKS OF FIFTY WORDS,
```

```
01365  456231626362
01366  604626602243
01367  462342626046
01370  266026312663
01371  706066465124
01372  627360606060
01373  606060606060
01374  606060606060
01375  606060606060
01376  252123306022          BCD  EACH BLOCK PRECEDED BY ITS OWN CHECK SUM.  CHECK SUMMING IS
01377  434623426047
01400  512523252425
01401  246022706031
01402  636260466645
01403  602330252342
01404  606264443360
01405  602330252342
01406  606264444431
01407  452760316260
01410  244645256022          BCD  DONE BY ADD-AND-CARRY-LOGICAL AND COMPLEMENT.
01411  706021242440
01412  214524402321
01413  515170404346
01414  273123214360
01415  214524602346
01416  444743254425
01417  456333606060
01420  606060606060
01421  606060606060
01422  316360316260          BCD  IT IS NOT STORED.  FIVE ATTEMPTS HAVE BEEN MADE TO READ THE
01423  454663606263
01424  465125243360
01425  602631652560
01426  216363254447
01427  636260302165
01430  256022252545
01431  604421242560
01432  634660512521
01433  246063302560
01434  254563315125          BCD 4ENTIRE TABLE CORRECTLY.
01435  606321224325
01436  602346515125
01437  236343703360
01440  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 58                    FORCE NEW RECORD
1                          00072         ORG 58                  FORCE NEW RECORD
      00072  0 01303 0 01420             HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD   01303  3 00000 0 00072             TXH 58                  1345  FT  22
      01304  0 07400 4 00740             TSX PRINT,4
      01305  0 01244 0 01237             HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740             TSX PRINT,4
      01307  0 01421 0 01311             HTR PR,0,PR+72
      01310  0 02000 0 00221             TRA DIGRTN
      01311  606060606060     PR         BCD 2
      01312  606060606060
      01313  233025234260                BCD  CHECK SUM ERROR IN READING DIM1 TABLE FROM DRUM 3.  COPY LOO
      01314  626444602551
      01315  514651603145
      01316  605125212431
      01317  452760243144
      01320  016063212243
      01321  256026514644
      01322  602451644460
      01323  033360602346
      01324  477060434646
      01325  476022252731                BCD  P BEGINS AT LOCATION 1316.  STARTING DRUM
      01326  456260216360
      01327  434623216331
      01330  464560010301
      01331  063360606263
      01332  215163314527
      01333  602451644460
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  212424512562                BCD  ADDRESS IS IN 614.  THE TABLE IS COMPOSED OF TWO WORD ENTRIE
      01340  626031626031
      01341  456006010433
      01342  606063302560
      01343  632122432560
      01344  316260234644
      01345  474662252460
      01346  462660636646
      01347  606646512460
      01350  254563513125
      01351  627360252123                BCD  S, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.
      01352  306025456351
      01353  706026464343
      01354  466625246022
      01355  706031636260
      01356  466645602330
      01357  252342606264
      01360  443360606060
      01361  606060606060
      01362  606060606060
      01363  233025234260                BCD  CHECK SUMMING IS DONE BY ADD-AND-CARRY-LOGICAL AND COMPLEMEN
      01364  626444443145
```

```
01365  276031626024
01366  464525602270
01367  602124244021
01370  452440232151
01371  517040434627
01372  312321436021
01373  452460234644
01374  474325442545
01375  633360603163          BCD  T.  IT IS NOT STORED.  FIVE ATTEMPTS
01376  603162604546
01377  636062634651
01400  252433606026
01401  316525602163
01402  632544476362
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  302165256022          BCD  HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.
01410  252545604421
01411  242560634660
01412  512521246063
01413  302560254563
01414  315125606321
01415  224325602346
01416  515125236343
01417  703360606060
01420  606060606060
01421  0 00000 0 00000 X
A                00000       ... END
```

```
1            ORG 59                    FORCE NEW RECORD
1                          00073         ORG 59                  FORCE NEW RECORD
       00073  0 01303 0 01420            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00073            TXH 59                  1377  FT  22
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01421 0 01311            HTR PR,0,PR+72
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  233025234260               BCD  CHECK SUM ERROR IN READING DIM2 TABLE FROM DRUM 3.  COPY LOO
       01314  626444602551
       01315  514651603145
       01316  605125212431
       01317  452760243144
       01320  026063212243
       01321  256026514644
       01322  602451644460
       01323  033360602346
       01324  477060434646
       01325  476022252731               BCD  P BEGINS AT LOCATION 1350.  STARTING DRUM
       01326  456260216360
       01327  434623216331
       01330  464560010305
       01331  003360606263
       01332  215163314527
       01333  602451644460
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  212424512562               BCD  ADDRESS IS IN 621.  THE TABLE IS COMPOSED OF TWO WORD ENTRIE
       01340  626031626031
       01341  456006020133
       01342  606063302560
       01343  632122432560
       01344  316260234644
       01345  474662252460
       01346  462660636646
       01347  606646512460
       01350  254563513125
       01351  627360252123               BCD  S, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.
       01352  306025456351
       01353  706026464343
       01354  466625246022
       01355  706031636260
       01356  466645602330
       01357  252342606264
       01360  443360606060
       01361  606060606060
       01362  606060606060
       01363  233025234260               BCD  CHECK SUMMING IS DONE BY AN ADD-AND-CARRY-LOGICAL AND COMPLE
       01364  626444443145
```

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```
01365  276031626024
01366  464525602270
01367  602145602124
01370  244021452440
01371  232151517040
01372  434627312321
01373  436021452460
01374  234644474325
01375  442545633360          BCD  MENT.  IT IS NOT STORED.  FIVE ATTEMPTS
01376  603163603162
01377  604546636062
01400  634651252433
01401  606026316525
01402  602163632544
01403  476362606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  302165256022          BCD  HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.
01410  252545604421
01411  242560634660
01412  512521246063
01413  302560254563
01414  315125606321
01415  224325602346
01416  515125236343
01417  703360606060
01420  606060606060
01421  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 60                    FORCE NEW RECORD
1                          00074         ORG 60                 FORCE NEW RECORD
        00074  0 01303 0 01420           HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00074           TXH 60                 1444  FT  22
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01421 0 01311           HTR PR,0,PR+72
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  233025234260              BCD  CHECK SUM ERROR IN READING DIM3 TABLE FROM DRUM 3.  COPY LOO
        01314  626444602551
        01315  514651603145
        01316  605125212431
        01317  452760243144
        01320  036063212243
        01321  256026514644
        01322  602451644460
        01323  033360602346
        01324  477060434646
        01325  476022252731              BCD  P BEGINS AT LOCATION 1413.  STARTING DRUM
        01326  456260216360
        01327  434623216331
        01330  464560010401
        01331  033360606263
        01332  215163314527
        01333  602451644460
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  212424512562              BCD  ADDRESS IS IN 626.  THE TABLE IS COMPOSED OF THREE WORD ENTR
        01340  626031626031
        01341  456006020633
        01342  606063302560
        01343  632122432560
        01344  316260234644
        01345  474662252460
        01346  462660633051
        01347  252560664651
        01350  246025456351
        01351  312562736025              BCD  IES, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.
        01352  212330602545
        01353  635170602646
        01354  434346662524
        01355  602270603163
        01356  626046664560
        01357  233025234260
        01360  626444336060
        01361  606060606060
        01362  606060606060
        01363  233025234260              BCD  CHECK SUMMING IS DONE BY AN ADD-AND-CARRY-LOGICAL AND COMPLE
        01364  626444443145
```

```
01365  276031626024
01366  464525602270
01367  602145602124
01370  244021452440
01371  232151517040
01372  434627312321
01373  436021452460
01374  234644474325
01375  442545633360          BCD  MENT.  IT IS NOT STORED.  FIVE ATTEMPTS
01376  603163603162
01377  604546636062
01400  634651252433
01401  606026316525
01402  602163632544
01403  476362606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  302165256022          BCD  HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.
01410  252545604421
01411  242560634660
01412  512521246063
01413  302560254563
01414  315125606321
01415  224325602346
01416  515125236343
01417  703360606060
01420  606060606060
01421  0 00000 0 00000 X
A                     00000        END
```

CLL

```
1            ORG 61                  FORCE NEW RECORD
1                        00075         ORG 61                FORCE NEW RECORD
       00075  0 01303 0 01350         HTR X-1,0,LOCREC      CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00075         TXH 61                1031  FT  24
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01351 0 01311         HTR PR,0,PR+32
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  632147256023            BCD  TAPE CHECK IN READING TIFGO TABLE, TAPE 2, FILE 5, RECORD 6.
       01314  302523426031
       01315  456051252124
       01316  314527606331
       01317  262746606321
       01320  224325736063
       01321  214725600273
       01322  602631432560
       01323  057360512523
       01324  465124600633
       01325  606023464770            BCD    COPY LOOP BEGINS AT LOCATION 771.
       01326  604346464760
       01327  222527314562
       01330  602163604346
       01331  232163314645
       01332  600707013360
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                      00000         END
```

```
1            ORG 62                    FORCE NEW RECORD
1                          00076         ORG 62                  FORCE NEW RECORD
       00076  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00076            TXH 62                  1221  FT  22
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING A CIT RECORD FROM TAPE 3.  COPY LOOP B
       01314  302523426031
       01315  456051252124
       01316  314527602160
       01317  233163605125
       01320  234651246026
       01321  514644606321
       01322  472560033360
       01323  602346477060
       01324  434646476022
       01325  252731456260               BCD  EGINS AT LOCATION 1173.
       01326  216360434623
       01327  216331464560
       01330  010107033360
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                         00000         END
```

```
1            ORG 63                    FORCE NEW RECORD
1                        00077           ORG 63                  FORCE NEW RECORD
.      00077  0 01303 0 01422           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD    01303  3 00000 0 00077           TXH 63                  7720  FT  21
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01423 0 01311           HTR PR,0,PR+74
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  632147256023              BCD  TAPE CHECK IN READING A RECORD FROM TAPE 2.  THIS RECORD IS
       01314  302523426031
       01315  456051252124
       01316  314527602160
       01317  512523465124
       01320  602651464460
       01321  632147256002
       01322  336060633031
       01323  626051252346
       01324  512460316260
       01325  216063212243              BCD  A TABLE ASSEMBLED BY SECTION 1 PRIME
       01326  256021626225
       01327  442243252460
       01330  227060622523
       01331  633146456001
       01332  604751314425
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  265146446025              BCD  FROM ENTRIES ON TAPE 3 INTO A BUFFER AND WRITTEN ON TAPE 2.
       01340  456351312562
       01341  604645606321
       01342  472560036031
       01343  456346602160
       01344  226426262551
       01345  602145246066
       01346  513163632545
       01347  604645606321
       01350  472560023360
       01351  606264225146              BCD   SUBROUTINE WHICH WRITES THE TAPE BEGINS AT
       01352  646331452560
       01353  663031233060
       01354  665131632562
       01355  606330256063
       01356  214725602225
       01357  273145626021
       01360  636060606060
       01361  606060606060
       01362  606060606060
       01363  434623216331              BCD  LOCATION 7656.  THE RECORD HAS BEEN READ BACK INTO LOCATION
       01364  464560070605
```

```
01365  063360606330
01366  256051252346
01367  512460302162
01370  602225254560
01371  512521246022
01372  212342603145
01373  634660434623
01374  216331464560
01375  070603026021          BCD  7632 AND THE RTT INSTRUCTION HAS FAILED
01376  452460633025
01377  605163636031
01400  456263516423
01401  633146456030
01402  216260262131
01403  432524606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  252123306063          BCD  EACH TIME.  FIVE ATTEMPTS HAVE BEEN MADE TO WRITE THIS RECOR
01410  314425336060
01411  263165256021
01412  636325444763
01413  626030216525
01414  602225254560
01415  442124256063
01416  466066513163
01417  256063303162
01420  605125234651
01421  246023465151          BCD 2D CORRECTLY.
01422  252363437033
01423  0 00000 0 00000 X
A                   00000    END
```

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```
1            ORG 64                  FORCE NEW RECORD
1                        00100         ORG 64                  FORCE NEW RECORD
       00100  0 01303 0 01422          HTR X-1,0,LOCREC        CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00100          TXH 64                  7627  FT  21
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01423 0 01311          HTR PR,0,PR+74
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING A RECORD FROM TAPE 4.  THIS RECORD IS
       01314  302523426031
       01315  456051252124
       01316  314527602160
       01317  512523465124
       01320  602651464460
       01321  632147256004
       01322  336060633031
       01323  626051252346
       01324  512460316260
       01325  216063212243             BCD  A TABLE IDENTIFICATION WORD AND AN ENTRY
       01326  256031242545
       01327  633126312321
       01330  633146456066
       01331  465124602145
       01332  246021456025
       01333  456351706060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  442124256022             BCD  MADE BY SECTION 1 ON TAPE 4.  SECTION 1 PRIME IS ATTEMPTING
       01340  706062252363
       01341  314645600160
       01342  464560632147
       01343  256004336060
       01344  622523633146
       01345  456001604751
       01346  314425603162
       01347  602163632544
       01350  476331452760
       01351  634660476463             BCD  TO PUT ALL THE SIMILAR ENTRIES INTO ONE
       01352  602143436063
       01353  302560623144
       01354  314321516025
       01355  456351312562
       01356  603145634660
       01357  464525606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  226426262551             BCD  BUFFER BEFORE WRITING THE TABLE ON TAPE 2.  COPY LOOP BEGINS
       01364  602225264651
```

```
01365  256066513163
01366  314527606330
01367  256063212243
01370  256046456063
01371  214725600233
01372  606023464770
01373  604346464760
01374  222527314562
01375  602163604346          BCD   AT LOCATION 7550.  RECORD IDENTIFICATION
01376  232163314645
01377  600705050033
01400  606051252346
01401  512460312425
01402  456331263123
01403  216331464560
01404  606060606060
01405  606060606060
01406  606060606060
01407  316260216360          BCD  IS AT 7631.  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECOR
01410  070603013360
01411  602631652560
01412  216363254447
01413  636260302165
01414  256022252545
01415  604421242560
01416  634660512521
01417  246063303162
01420  605125234651
01421  246023465151          BCD 2D CORRECTLY.
01422  252363437033
01423  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 65                  FORCE NEW RECORD
1                        00101         ORG 65                 FORCE NEW RECORD
       00101  0 01303 0 01350         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00101         TXH 65                   61  FT  47
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01351 0 01311         HTR PR,0,PR+32
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  632147256023            BCD  TAPE CHECK IN READING 2 WORD RECORD FROM TAPE 2, FILE 7.  CO
       01314  302523426031
       01315  456051252124
       01316  314527600260
       01317  664651246051
       01320  252346512460
       01321  265146446063
       01322  214725600273
       01323  602631432560
       01324  073360602346
       01325  477060434646            BCD  PY LOOP IS AT LOCATION 30.
       01326  476031626021
       01327  636043462321
       01330  633146456003
       01331  003360606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                      00000         END
```

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```
1            ORG 66                    FORCE NEW RECORD
1                          00102         ORG 66 .                FORCE NEW RECORD
     00102   0 01303 0 01350             HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
TD   01303   3 00000 0 00102             TXH 66                   116  FT  53
                                             66                   132  FT  53
     01304   0 07400 4 00740             TSX PRINT,4
     01305   0 01244 0 01237             HTR MACHIN,0,MACHIN+5
     01306   0 07400 4 00740             TSX PRINT,4
     01307   0 01351 0 01311             HTR PR,0,PR+32
     01310   0 02000 0 00221             TRA DIGRTN
     01311   606060606060      PR        BCD 2
     01312   606060606060
     01313   632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 3, FILE 1.  COPY LOOP
     01314   302523426031
     01315   456051252124
     01316   314527605125
     01317   234651246026
     01320   514644606321
     01321   472560037360
     01322   263143256001
     01323   336060234647
     01324   706043464647
     01325   603162602163               BCD   IS AT LOCATION 51.
     01326   604346232163
     01327   314645600501
     01330   336060606060
     01331   606060606060
     01332   606060606060
     01333   606060606060
     01334   606060606060
     01335   606060606060
     01336   606060606060
     01337   263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
     01340   636325444763
     01341   626030216525
     01342   602225254560
     01343   442124256063
     01344   466051252124
     01345   606330316260
     01346   512523465124
     01347   602346515125
     01350   236343703360
     01351   0 00000 0 00000 X
A                          00000         END
```

```
1            ORG 67                    FORCE NEW RECORD
1                        00103           ORG 67                  FORCE NEW RECORD
       00103  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00103            TXH 67                  4026  FT  51
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 2, FILE 6.  COPY LOOP
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560027360
       01322  263143256006
       01323  336060234647
       01324  706043464647
       01325  603162602163               BCD   IS AT LOCATION 4012.
       01326  604346232163
       01327  314645600400
       01330  010233606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                      00000            END
```

```
1            ORG 68                          FORCE NEW RECORD
1                        00104                 ORG 68                 FORCE NEW RECORD
       00104  0 01303 0 01350                  HTR X-1,0,LOCREC       CARD FOR DE
                        01303                  ORG LOCREC
 TD    01303  3 00000 0 00104                  TXH 68                 4054  FT  51
       01304  0 07400 4 00740                  TSX PRINT,4
       01305  0 01244 0 01237                  HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740                  TSX PRINT,4
       01307  0 01351 0 01311                  HTR PR,0,PR+32
       01310  0 02000 0 00221                  TRA DIGRTN
       01311  606060606060     PR              BCD 2
       01312  606060606060
       01313  632147256023                     BCD  TAPE CHECK IN READING TAGTAG RECORD FROM TAPE 4, FILE 2.  CO
       01314  302523426031
       01315  456051252124
       01316  314527606321
       01317  276321276051
       01320  252346512460
       01321  265146446063
       01322  214725600473
       01323  602631432560
       01324  023360602346
       01325  477060434646                     BCD  PY LOOP IS AT LOCATION 4027.
       01326  476031626021
       01327  636043462321
       01330  633146456004
       01331  000207336060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021                     BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                      00000                  END
```

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```
1            ORG 69                  FORCE NEW RECORD
1                        00105         ORG 69                 FORCE NEW RECORD
     00105   0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
TD   01303   3 00000 0 00105          TXH 69                 4155  FT  34
     01304   0 07400 4 00740          TSX PRINT,4
     01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
     01306   0 07400 4 00740          TSX PRINT,4
     01307   0 01351 0 01311          HTR PR,0,PR+32
     01310   0 02000 0 00221          TRA DIGRTN
     01311   606060606060     PR      BCD 2
     01312   606060606060
     01313   632147256023             BCD  TAPE CHECK IN READING DOTAG RECORD FROM TAPE 3, FILE 1.  COP
     01314   302523426031
     01315   456051252124
     01316   314527602446
     01317   632127605125
     01320   234651246026
     01321   514644606321
     01322   472560037360
     01323   263143256001
     01324   336060234647
     01325   706043464647             BCD  Y LOOP IS AT LOCATION 4116.
     01326   603162602163
     01327   604346232163
     01330   314645600401
     01331   010633606060
     01332   606060606060
     01333   606060606060
     01334   606060606060
     01335   606060606060
     01336   606060606060
     01337   263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
     01340   636325444763
     01341   626030216525
     01342   602225254560
     01343   442124256063
     01344   466051252124
     01345   606330316260
     01346   512523465124
     01347   602346515125
     01350   236343703360
     01351   0 00000 0 00000 X
A                        00000         END
```

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```
1            ORG 70                  FORCE NEW RECORD
1                        00106         ORG 70                FORCE NEW RECORD
       00106  0 01303 0 01350         HTR X-1,0,LOCREC      CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00106         TXH 70                6744  FT  41
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01351 0 01311         HTR PR,0,PR+32
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  314523465151            BCD  INCORRECT RECORD TAPE 2, FILE 7.  RECORD IS 2 WORDS, EACH IS
       01314  252363605125
       01315  234651246063
       01316  214725600273
       01317  602631432560
       01320  073360605125
       01321  234651246031
       01322  626002606646
       01323  512462736025
       01324  212330603162
       01325  605125234651            BCD   RECORD COUNT OF FILE 6.  RECORD HAS BEEN
       01326  246023466445
       01327  636046266026
       01330  314325600633
       01331  606051252346
       01332  512460302162
       01333  602225254560
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  512521246006            BCD  READ 6 TIMES AND FAILED EACH TIME TO FIND THE WORDS EQUAL.
       01340  606331442562
       01341  602145246026
       01342  213143252460
       01343  252123306063
       01344  314425606346
       01345  602631452460
       01346  633025606646
       01347  512462602550
       01350  642143336060
       01351  0 00000 0 00000 X
 A                      00000         END
```

```
1            ORG 71                  FORCE NEW RECORD
1                        00107         ORG 71                  FORCE NEW RECORD
       00107  0 01303 0 01350         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00107         TXH 71                  6767  FT  39
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01351 0 01311         HTR PR,0,PR+32
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  632147256023            BCD  TAPE CHECK IN READING DOTAG RECORD FROM TAPE 2, FILE 6.  COP
       01314  302523426031
       01315  456051252124
       01316  314527602446
       01317  632127605125
       01320  234651246026
       01321  514644606321
       01322  472560027360
       01323  263143256006
       01324  336060234647
       01325  706043464647            BCD  Y LOOP IS AT LOCATION 6730.
       01326  603162602163
       01327  604346232163
       01330  314645600607
       01331  030033606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 72                  FORCE NEW RECORD
1                        00110         ORG 72                FORCE NEW RECORD
      00110  0 01303 0 01413          HTR X-1,0,LOCREC      CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00110          TXH 72                7070  FT  36
      01304  0 07400 4 00740          TSX PRINT,4
      01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740          TSX PRINT,4
      01307  0 01414 0 01311          HTR PR,0,PR+67
      01310  0 02000 0 00221          TRA DIGRTN
      01311  606060606060     PR      BCD 2
      01312  606060606060
      01313  632147256023             BCD  TAPE CHECK IN READING DOTAG RECORD FROM TAPE 3, FILE 1.  REC
      01314  302523426031
      01315  456051252124
      01316  314527602446
      01317  632127605125
      01320  234651246026
      01321  514644606321
      01322  472560037360
      01323  263143256001
      01324  336060512523
      01325  465124602346             BCD  ORD CONTAINS A NUMBER OF 9 WORD ENTRIES.
      01326  456321314562
      01327  602160456444
      01330  222551604626
      01331  601160664651
      01332  246025456351
      01333  312562336060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  234647706043             BCD  COPY LOOP AT LOCATION 7043 READS ONLY FIRST AND SECOND WORD
      01340  464647602163
      01341  604346232163
      01342  314645600700
      01343  040360512521
      01344  246260464543
      01345  706026315162
      01346  636021452460
      01347  622523464524
      01350  606646512460
      01351  462660252123             BCD  OF EACH ENTRY, COPY AT LOCATION 7054 COPIES
      01352  306025456351
      01353  707360234647
      01354  706021636043
      01355  462321633146
      01356  456007000504
      01357  602346473125
      01360  626060606060
      01361  606060606060
      01362  606060606060
      01363  466330255160             BCD  OTHER 7 WORDS INTO ERASABLE STORAGE AND RETURNS TO 7043 FOR
      01364  076066465124
```

```
01365  626031456346
01366  602551216221
01367  224325606263
01370  465121272560
01371  214524605125
01372  636451456260
01373  634660070004
01374  036026465160
01375  452567636025          BCD  NEXT ENTRY.  FIVE ATTEMPTS HAVE BEEN MADE
01376  456351703360
01377  602631652560
01400  216363254447
01401  636260302165
01402  256022252545
01403  604421242560
01404  606060606060
01405  606060606060
01406  606060606060
01407  634660512521          BCD 5TO READ THIS RECORD CORRECTLY.
01410  246063303162
01411  605125234651
01412  246023465151
01413  252363437033
01414  0 00000 0 00000 X
A                    00000   END
```

```
1            ORG 73                    FORCE NEW RECORD
1                        00111           ORG 73                  FORCE NEW RECORD
       00111  0 01303 0 01554           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD    01303  3 00000 0 00111           TXH 73                  7123  FT  27
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306 -0 53400 4 01232           LXD ZERO,4
       01307  0 50000 0 07125           CLA 3669                7125 OCTAL
       01310  0 34000 4 01514 C         CAS TABLE,4
       01311  0 02000 0 01313           TRA A
       01312  0 02000 0 01454           TRA HAVE
       01313  1 00003 4 01314 A         TXI B,4,3
       01314 -3 00017 4 01310 B         TXL C,4,15
       01315  0 07400 4 00740           TSX PRINT,4
       01316  0 01454 0 01320           HTR ER,0,ER+92
       01317  0 00000 0 01472           HTR D
       01320  606060606060     ER       BCD 2
       01321  606060606060
       01322  434623216331              BCD  LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
       01323  464560462660
       01324  255151465173
       01325  606630312330
       01326  603021626022
       01327  252545604751
       01330  314563252473
       01331  603021626023
       01332  216462252460
       01333  243121274546
       01334  626331236051              BCD  STIC RECORD NUMBER 73
       01335  252346512460
       01336  456444222551
       01337  600703606060
       01340  606060606060
       01341  606060606060
       01342  606060606060
       01343  606060606060
       01344  606060606060
       01345  606060606060
       01346  634660222560              BCD  TO BE READ IN.  THIS RECORD COMPARES THE IDENTIFICATION WORD
       01347  512521246031
       01350  453360606330
       01351  316260512523
       01352  465124602346
       01353  444721512562
       01354  606330256031
       01355  242545633126
       01356  312321633146
       01357  456066465124
       01360  604626602160              BCD   OF A TAPE RECORD, LOCATION 7125, TO A LIST
       01361  632147256051
       01362  252346512473
       01363  604346232163
       01364  314645600701
```

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```
01365  020573606346
01366  602160433162
01367  636060606060
01370  606060606060
01371  606060606060
01372  462660066047          BCD  OF 6 POSSIBLE TAPE IDENTIFICATION WORDS, BUT THE SEARCH HAS
01373  466262312243
01374  256063214725
01375  603124254563
01376  312631232163
01377  314645606646
01400  512462736022
01401  646360633025
01402  606225215123
01403  306030216260
01404  262131432524          BCD  FAILED.  TABLE IDENTIFICATION WORDS
01405  336060632122
01406  432560312425
01407  456331263123
01410  216331464560
01411  664651246260
01412  606060606060
01413  606060606060
01414  606060606060
01415  606060606060
01416  215125603145          BCD  ARE IN 1463, 1463 PLUS 3, ETC.  PRESS START IF YOU WISH TO R
01417  600104060373
01420  600104060360
01421  474364626003
01422  736025632333
01423  606047512562
01424  626062632151
01425  636031266070
01426  466460663162
01427  306063466051
01430  256263465125          BCD  ESTORE MACHINE TO CONDITION IN WHICH
01431  604421233031
01432  452560634660
01433  234645243163
01434  314645603145
01435  606630312330
01436  606060606060
01437  606060606060
01440  606060606060
01441  606060606060
01442  255151465160          BCD  ERROR OCCURRED.
01443  462323645151
01444  252433606060
01445  606060606060
01446  606060606060
01447  606060606060
01450  606060606060
01451  606060606060
01452  606060606060
```

```
01453  606060606060
01454   0 56000 4.01512 HAVE   LDQ TABLE-2,4
01455  -0 50000 0 01522        CAL PR1
01456  -0 76300 0 00014        LGL 12
01457   0 60200 0 01522        SLW PR1
01460  -0 76300 0 00030        LGL 24
01461   0 56000 0 01523        LDQ PR2
01462  -0 76300 0 00014        LGL 12
01463   0 60200 0 01523        SLW PR2
01464  -0 50000 4 01513        CAL TABLE-1,4
01465   0 56000 0 01531        LDQ PR3
01466  -0 76300 0 00030        LGL 24
01467   0 60200 0 01531        SLW PR3
01470   0 07400 4 00740        TSX PRINT,4
01471   0 01555 0 01515        HTR PR,0,PR+32
01472   0 02000 0 00221 D      TRA DIGRTN
01473  264651652143            BCD 1FORVAL
01474  606060606011            BCD 1     9          NUMBER OF RECORD IN FILE 5
01475   0 00000 0 00006        HTR 6                IDENTIFICATION IN RECORD
01476  264651652151            BCD 1FORVAR
01477  606060600100            BCD 1    10
01500   0 00000 0 00005        HTR 5
01501  264651632127            BCD 1FORTAG
01502  606060600101            BCD 1    11
01503   0 00000 0 00004        HTR 4
01504  606351212460            BCD 1 TRAD
01505  606060606007            BCD 1     7
01506   0 00000 0 00003        HTR 3
01507  606331262746            BCD 1 TIFGO
01510  606060606006            BCD 1     6
01511   0 00000 0 00002        HTR 2
01512  606324466060            BCD 1 TDO
01513  606060606010            BCD 1     8
01514   0 00000 0 00001 TABLE  HTR 1
01515  606060606060     PR     BCD 2
01516  606060606060
01517  632147256023            BCD 3TAPE CHECK IN READ
01520  302523426031
01521  456051252124
01522  606031452760     PR1    BCD 1  ING
01523  605160606060     PR2    BCD 1 R
01524  252346512473            BCD 5ECORD, TAPE 2, FILE 5, RECORD
01525  606321472560
01526  027360263143
01527  256005736051
01530  252346512460
01531  336060236060     PR3    BCD 1.  C
01532  464770604346            BCD 9OPY LOOP IS AT LOCATION 7066.
01533  464760316260
01534  216360434623
01535  216331464560
01536  070006063360
01537  606060606060
01540  606060606060
```

```
01541  606060606060
01542  606060606060
01543  263165256021          BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01544  636325444763
01545  626030216525
01546  602225254560
01547  442124256063
01550  466051252124
01551  606330316260
01552  512523465124
01553  602346515125
01554  236343703360
01555  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 74                    FORCE NEW RECORD
1                          00112         ORG 74                 FORCE NEW RECORD
        00112  0 01303 0 01425           HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00112           TXH 74                   74  FT  56
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01426 0 01311           HTR PR,0,PR+77
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING RECORD FROM TAPE 2.  ERROR CHECKING IS
        01314  302523426031
        01315  456051252124
        01316  314527605125
        01317  234651246026
        01320  514644606321
        01321  472560023360
        01322  602551514651
        01323  602330252342
        01324  314527603162
        01325  602163604346              BCD   AT LOCATION 64, BUT THERE ARE
        01326  232163314645
        01327  600604736022
        01330  646360633025
        01331  512560215125
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  036023464770              BCD  3 COPY LOOPS WHICH USE THIS CHECKING.  LOCATION 30 TO READ T
        01340  604346464762
        01341  606630312330
        01342  606462256063
        01343  303162602330
        01344  252342314527
        01345  336060434623
        01346  216331464560
        01347  030060634660
        01350  512521246063
        01351  302560016066              BCD  HE 1 WORD RECORD IN FILE 7,
        01352  465124605125
        01353  234651246031
        01354  456026314325
        01355  600773606060
        01356  606060606060
        01357  606060606060
        01360  606060606060
        01361  606060606060
        01362  606060606060
        01363  434623216331              BCD  LOCATION 43 TO READ FORTAG, THE 11TH RECORD IN FILE 5, OR LO
        01364  464560040360
```

```
01365  634660512521
01366  246026465163
01367  212773606330
01370  256001016330
01371  605125234651
01372  246031456026
01373  314325600573
01374  604651604346
01375  232163314645          BCD  CATION 557 TO READ A 1 WORD
01376  600505076063
01377  466051252124
01400  602160016066
01401  465124606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  512523465124          BCD  RECORD IN FILE 3.  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS
01410  603145602631
01411  432560033360
01412  602631652560
01413  216363254447
01414  636260302165
01415  256022252545
01416  604421242560
01417  634660512521
01420  246063303162
01421  605125234651          BCD 5 RECORD CORRECTLY.
01422  246023465151
01423  252363437033
01424  606060606060
01425  606060606060
01426  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 75                    FORCE NEW RECORD
1                        00113           ORG 75                  FORCE NEW RECORD
       00113  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00113            TXH 75                   350  FT  58
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING TIFGO RECORD FROM TAPE 2, FILE 5, RECO
       01314  302523426031
       01315  456051252124
       01316  314527606331
       01317  262746605125
       01320  234651246026
       01321  514644606321
       01322  472560027360
       01323  263143256005
       01324  736051252346
       01325  512460063360               BCD  RD 6.  COPY LOOP IS AT LOCATION 324.
       01326  602346477060
       01327  434646476031
       01330  626021636043
       01331  462321633146
       01332  456003020433
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 76                  FORCE NEW RECORD
1                        00114         ORG 76                  FORCE NEW RECORD
        00114  0 01303 0 01350         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD     01303  3 00000 0 00114         TXH 76                   375  FT  58
        01304  0 07400 4 00740         TSX PRINT,4
        01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740         TSX PRINT,4
        01307  0 01351 0 01311         HTR PR,0,PR+32
        01310  0 02000 0 00221         TRA DIGRTN
        01311  606060606060     PR     BCD 2
        01312  606060606060
        01313  632147256023            BCD  TAPE CHECK IN READING TRAD RECORD FROM TAPE 2, FILE 5, RECOR
        01314  302523426031
        01315  456051252124
        01316  314527606351
        01317  212460512523
        01320  465124602651
        01321  464460632147
        01322  256002736026
        01323  314325600573
        01324  605125234651
        01325  246007336060            BCD  D 7.  COPY LOOP IS AT LOCATION 352.
        01326  234647706043
        01327  464647603162
        01330  602163604346
        01331  232163314645
        01332  600305023360
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 77                    FORCE NEW RECORD
1                          00115         ORG 77                  FORCE NEW RECORD
        00115  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00115           TXH 77                   410  FT  58
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060      PR      BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING THE FIRST WORD OF FILE 1, TAPE 4.  COP
        01314  302523426031
        01315  456051252124
        01316  314527606330
        01317  256026315162
        01320  636066465124
        01321  604626602631
        01322  432560017360
        01323  632147256004
        01324  336060234647
        01325  706043464647              BCD  Y LOOP IS AT LOCATION 401.
        01326  603162602163
        01327  604346232163
        01330  314645600400
        01331  013360606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE WORD CORRECTLY
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  464525606646
        01347  512460234651
        01350  512523634370
        01351  0 00000 0 00000 X
 A                         00000         END
```

```
1            ORG 78                    FORCE NEW RECORD
1                        00116           ORG 78                  FORCE NEW RECORD
        00116  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00116           TXH 78                   430  FT  58
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING TRALEV RECORD FROM TAPE 4, FILE 1, REC
        01314  302523426031
        01315  456051252124
        01316  314527606351
        01317  214325656051
        01320  252346512460
        01321  265146446063
        01322  214725600473
        01323  602631432560
        01324  017360512523
        01325  465124600133              BCD  ORD 1.  COPY LOOP IS AT LOCATION 400.
        01326  606023464770
        01327  604346464760
        01330  316260216360
        01331  434623216331
        01332  464560040000
        01333  336060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 79                    FORCE NEW RECORD
1                        00117           ORG 79                  FORCE NEW RECORD
      00117  0 01303 0 01350             HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD   01303  3 00000 0 00117             TXH 79                   446  FT  58
      01304  0 07400 4 00740             TSX PRINT,4
      01305  0 01244 0 01237             HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740             TSX PRINT,4
      01307  0 01351 0 01311             HTR PR,0,PR+32
      01310  0 02000 0 00221             TRA DIGRTN
      01311  606060606060      PR        BCD 2
      01312  606060606060
      01313  632147256023                BCD  TAPE CHECK IN READING TRALEV RECORD FROM TAPE 4, FILE 1, REC
      01314  302523426031
      01315  456051252124
      01316  314527606351
      01317  214325656051
      01320  252346512460
      01321  265146446063
      01322  214725600473
      01323  602631432560
      01324  017360512523
      01325  465124600233                BCD  ORD 2.  COPY LOOP IS AT LOCATION 432.
      01326  606023464770
      01327  604346464760
      01330  316260216360
      01331  434623216331
      01332  464560040302
      01333  336060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  263165256021                BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340  636325444763
      01341  626030216525
      01342  602225254560
      01343  442124256063
      01344  466051252124
      01345  606330316260
      01346  512523465124
      01347  602346515125
      01350  236343703360
      01351  0 00000 0 00000 X
A                        00000           END
```

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```
1            ORG 80                  FORCE NEW RECORD
1                        00120         ORG 80                  FORCE NEW RECORD
      00120   0 01303 0 01350         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD   01303   3 00000 0 00120         TXH 80                   510  FT  56
      01304   0 07400 4 00740         TSX PRINT,4
      01305   0 01244 0 01237         HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740         TSX PRINT,4
      01307   0 01351 0 01311         HTR PR,0,PR+32
      01310   0 02000 0 00221         TRA DIGRTN
      01311   606060606060     PR     BCD 2
      01312   606060606060
      01313   632147256023            BCD  TAPE CHECK IN READING CIT RECORD FROM TAPE 2. FILE 2.  COPY
      01314   302523426031
      01315   456051252124
      01316   314527602331
      01317   636051252346
      01320   512460265146
      01321   446063214725
      01322   600233602631
      01323   432560023360
      01324   602346477060
      01325   434646476031            BCD  LOOP IS AT LOCATION 506.
      01326   626021636043
      01327   462321633146
      01330   456005000633
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340   636325444763
      01341   626030216525
      01342   602225254560
      01343   442124256063
      01344   466051252124
      01345   606330316260
      01346   512523465124
      01347   602346515125
      01350   236343703360
      01351   0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 81                    FORCE NEW RECORD
1                        00121           ORG 81                  FORCE NEW RECORD
      00121  0 01303 0 01350             HTR X-1,0,LOCREC        CARD FOR DE
                       01303             ORG LOCREC
 TD   01303  3 00000 0 00121             TXH 81                   520  FT  56
      01304  0 07400 4 00740             TSX PRINT,4
      01305  0 01244 0 01237             HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740             TSX PRINT,4
      01307  0 01351 0 01311             HTR PR,0,PR+32
      01310  0 02000 0 00221             TRA DIGRTN
      01311  606060606060     PR         BCD 2
      01312  606060606060
      01313  632147256023                BCD  TAPE CHECK IN READING COMPDO RECORD FROM TAPE 4, FILE 2.  CO
      01314  302523426031
      01315  456051252124
      01316  314527602346
      01317  444724466051
      01320  252346512460
      01321  265146446063
      01322  214725600473
      01323  602631432560
      01324  023360602346
      01325  477060434646                BCD  PY LOOP IS AT LOCATION 516.
      01326  476031626021
      01327  636043462321
      01330  633146456005
      01331  010633606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  263165256021                BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340  636325444763
      01341  626030216525
      01342  602225254560
      01343  442124256063
      01344  466051252124
      01345  606330316260
      01346  512523465124
      01347  602346515125
      01350  236343703360
      01351  0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 82                  FORCE NEW RECORD
1                        00122         ORG 82                 FORCE NEW RECORD
      00122   0 01303 0 01353         HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303   3 00000 0 00122         TXH 82                  674  FT  60
      01304   0 07400 4 00740         TSX PRINT,4
      01305   0 01244 0 01237         HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740         TSX PRINT,4
      01307   0 01354 0 01311         HTR PR,0,PR+35
      01310   0 02000 0 00221         TRA DIGRTN
      01311   606060606060     PR     BCD 2
      01312   606060606060
      01313   632147256023            BCD  TAPE CHECK IN READING A RECORD FROM THE TIFGO FILE.  THIS IS
      01314   302523426031
      01315   456051252124
      01316   314527602160
      01317   512523465124
      01320   602651464460
      01321   633025606331
      01322   262746602631
      01323   432533606063
      01324   303162603162
      01325   606330256010            BCD   THE 8TH FILE OF TAPE 2.  COPY LOOP IS AT
      01326   633060263143
      01327   256046266063
      01330   214725600233
      01331   606023464770
      01332   604346464760
      01333   316260216360
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   434623216331            BCD  LOCATION 654.  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS REC
      01340   464560060504
      01341   336060263165
      01342   256021636325
      01343   444763626030
      01344   216525602225
      01345   254560442124
      01346   256063466051
      01347   252124606330
      01350   316260512523
      01351   465124602346            BCD 3ORD CORRECTLY.
      01352   515125236343
      01353   703360606060
      01354   0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 83                    FORCE NEW RECORD
1                        00123           ORG 83                  FORCE NEW RECORD
      00123   0 01303 0 01355            HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD   01303   3 00000 0 00123            TXH 83                   720  FT  60
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740            TSX PRINT,4
      01307   0 01356 0 01311            HTR PR,0,PR+37
      01310   0 02000 0 00221            TRA DIGRTN
      01311   606060606060      PR       BCD 2
      01312   606060606060
      01313   632147256023               BCD  TAPE CHECK IN READING A RECORD FROM TAPE 3, FILE 1.  THIS FI
      01314   302523426031
      01315   456051252124
      01316   314527602160
      01317   512523465124
      01320   602651464460
      01321   632147256003
      01322   736026314325
      01323   600133606063
      01324   303162602631
      01325   432560316260               BCD  LE IS A MERGE OF THE COMPAIL AND COMPDO FILES.
      01326   216044255127
      01327   256046266063
      01330   302560234644
      01331   472131436021
      01332   452460234644
      01333   472446602631
      01334   432562336060
      01335   606060606060
      01336   606060606060
      01337   234647706043               BCD  COPY LOOP IS AT LOCATION 700.  FIVE ATTEMPTS HAVE BEEN MADE
      01340   464647603162
      01341   602163604346
      01342   232163314645
      01343   600700003360
      01344   602631652560
      01345   216363254447
      01346   636260302165
      01347   256022252545
      01350   604421242560
      01351   634660512521               BCD 5TO READ THIS RECORD CORRECTLY.
      01352   246063303162
      01353   605125234651
      01354   246023465151
      01355   252363437033
      01356   0 00000 0 00000 X
A                        00000            END
```

```
1            ORG 84                    FORCE NEW RECORD
1                        00124           ORG 84                  FORCE NEW RECORD
       00124  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00124           TXH 84                   303  FT  73
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01351 0 01311           HTR PR,0,PR+32
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  632147256023              BCD  TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1.  COPY LOOP
       01314  302523426031
       01315  456051252124
       01316  314527602331
       01317  636051252346
       01320  512473606321
       01321  472560047360
       01322  263143256001
       01323  336060234647
       01324  706043464647
       01325  603162602163              BCD   IS AT LOCATION 265.
       01326  604346232163
       01327  314645600206
       01330  053360606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 85                    FORCE NEW RECORD
1                        00125           ORG 85                 FORCE NEW RECORD
      00125   0 01303 0 01350            HTR X-1,0,LOCREC       CARD FOR DE
                         01303           ORG LOCREC
 TD   01303   3 00000 0 00125            TXH 85                  350  FT  62
      01304   0 07400 4 00740            TSX PRINT,4
      01305   0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740            TSX PRINT,4
      01307   0 01351 0 01311            HTR PR,0,PR+32
      01310   0 02000 0 00221            TRA DIGRTN
      01311   606060606060      PR       BCD 2
      01312   606060606060
      01313   632147256023               BCD  TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1.  COPY LOOP
      01314   302523426031
      01315   456051252124
      01316   314527602331
      01317   636051252346
      01320   512473606321
      01321   472560047360
      01322   263143256001
      01323   336060234647
      01324   706043464647
      01325   603162602163               BCD   IS AT LOCATION 327.
      01326   604346232163
      01327   314645600302
      01330   073360606060
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340   636325444763
      01341   626030216525
      01342   602225254560
      01343   442124256063
      01344   466051252124
      01345   606330316260
      01346   512523465124
      01347   602346515125
      01350   236343703360
      01351   0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 86                  FORCE NEW RECORD
1                        ·00126        ORG 86                FORCE NEW RECORD
       00126  0 01303 0 01350          HTR X-1,0,LOCREC      CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00126          TXH 86                 517  FT  62
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,PR+32
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING TIFGO RECORD FROM TAPE 2, FILE 5, RECO
       01314  302523426031
       01315  456051252124
       01316  314527606331
       01317  262746605125
       01320  234651246026
       01321  514644606321
       01322  472560027360
       01323  263143256005
       01324  736051252346
       01325  512460063360             BCD  RD 6.  COPY LOOP IS AT LOCATION 522.
       01326  602346477060
       01327  434646476031
       01330  626021636043
       01331  462321633146
       01332  456005020233
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                       00000         END
```

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```
1            ORG 87                    FORCE NEW RECORD
1                        00127           ORG 87                  FORCE NEW RECORD
       00127  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD    01303  3 00000 0 00127            TXH 87                   553  FT  62
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING TRAD RECORD FROM TAPE 2, FILE 5, RECOR
       01314  302523426031
       01315  456051252124
       01316  314527606351
       01317  212460512523
       01320  465124602651                    ,
       01321  464460632147
       01322  256002736026
       01323  314325600573
       01324  605125234651
       01325  246007336060               BCD  D 7.  COPY LOOP IS AT LOCATION 556.
       01326  234647706043
       01327  464647603162
       01330  602163604346
       01331  232163314645
       01332  600505063360
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 88                    FORCE NEW RECORD
1                        00130           ORG 88                  FORCE NEW RECORD
        00130  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00130           TXH 88                   716  FT  62
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060      PR      BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING FRET RECORD FROM TAPE 2, FILE 5, RECOR
        01314  302523426031
        01315  456051252124
        01316  314527602651
        01317  256360512523
        01320  465124602651
        01321  464460632147
        01322  256002736026
        01323  314325600573
        01324  605125234651
        01325  246001023360              BCD  D 12.  COPY LOOP IS AT LOCATION 721.
        01326  602346477060
        01327  434646476031
        01330  626021636043
        01331  462321633146
        01332  456007020133
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 89                  FORCE NEW RECORD
1                        00131         ORG 89                FORCE NEW RECORD
       00131  0 01303 0 01352         HTR X-1,0,LOCREC      CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00131         TXH 89                1023  FT  64
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01353 0 01313         HTR PR,0,PR+32
       01310  0 50000 0 01233         CLA DECONE            SET CONTROL FOR BST
       01311  0 62200 0 00000         STD 0
       01312  0 02000 0 00221         TRA DIGRTN
       01313  606060606060     PR     BCD 2
       01314  606060606060
       01315  632147256023            BCD  TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1.  COPY LOOP
       01316  302523426031
       01317  456051252124
       01320  314527602331
       01321  636051252346
       01322  512473606321
       01323  472560047360
       01324  263143256001
       01325  336060234647
       01326  706043464647
       01327  603162602163            BCD   IS AT LOCATION 1026.
       01330  604346232163
       01331  314645600100
       01332  020633606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  606060606060
       01340  606060606060
       01341  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01342  636325444763
       01343  626030216525
       01344  602225254560
       01345  442124256063
       01346  466051252124
       01347  606330316260
       01350  512523465124
       01351  602346515125
       01352  236343703360
       01353  0 00000 0 00000 X
 A                      00000         END
```

```
1            ORG 90                    FORCE NEW RECORD
1                        00132           ORG 90                  FORCE NEW RECORD
        00132  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00132           TXH 90                  1175  FT  62
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060      PR      BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING DOTAG RECORD, TAPE 2, FILE 6.  COPY LO
        01314  302523426031
        01315  456051252124
        01316  314527602446
        01317  632127605125
        01320  234651247360
        01321  632147256002
        01322  736026314325
        01323  600633606023
        01324  464770604346
        01325  464760316260              BCD  OP IS AT LOCATION 1200.
        01326  216360434623
        01327  216331464560
        01330  010200003360
        01331  606060606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 91                    FORCE NEW RECORD
1                        00133           ORG 91                 FORCE NEW RECORD
       00133  0 01303 0 01350            HTR X-1,0,LOCREC       CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00133            TXH 91                  327  FT  86
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 2.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560023360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146               BCD  OCATION 330.
       01326  456003030033
       01327  606060606060
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                      00000            END
```

```
1            ORG 92                    FORCE NEW RECORD
1                        00134           ORG 92                  FORCE NEW RECORD
        00134  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00134           TXH 92                   437  FT  84
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060      PR      BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING RECORD FROM TAPE 3.  COPY LOOP IS AT L
        01314  302523426031                                                                          .
        01315  456051252124
        01316  314527605125
        01317  234651246026
        01320  514644606321
        01321  472560033360
        01322  602346477060
        01323  434646476031
        01324  626021636043
        01325  462321633146              BCD  OCATION 325.
        01326  456003020533
        01327  606060606060
        01330  606060606060
        01331  606060606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 93                  FORCE NEW RECORD
1                        00135         ORG 93                  FORCE NEW RECORD
       00135  0 01303 0 01350         HTR X-1,0,LOCREC        CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00135         TXH 93                  1240  FT  75
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01351 0 01311         HTR PR,0,PR+32
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  632147256023            BCD  TAPE CHECK IN READING RECORD FROM TAPE 3, FILE 3.  COPY LOOP
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560037360
       01322  263143256003
       01323  336060234647
       01324  706043464647
       01325  603162602163            BCD   IS AT LOCATION 1241.
       01326  604346232163
       01327  314645600102
       01330  040133606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 94                    FORCE NEW RECORD
1                        00136           ORG 94                  FORCE NEW RECORD
        00136  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                         01303           ORG LOCREC
 TD     01303  3 00000 0 00136           TXH 94                  3540  FT  88
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  632147256023              BCD  TAPE CHECK IN READING RECORD FROM TAPE 4.  COPY LOOP IS AT L
        01314  302523426031
        01315  456051252124
        01316  314527605125
        01317  234651246026
        01320  514644606321
        01321  472560043360
        01322  602346477060
        01323  434646476031
        01324  626021636043
        01325  462321633146              BCD  OCATION 3534.
        01326  456003050304
        01327  336060606060
        01330  606060606060
        01331  606060606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  263165256021              BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
        01340  636325444763
        01341  626030216525
        01342  602225254560
        01343  442124256063
        01344  466051252124
        01345  606330316260
        01346  512523465124
        01347  602346515125
        01350  236343703360
        01351  0 00000 0 00000 X
 A                       00000           END
```

```
1            ORG 95                    FORCE NEW RECORD
1                        00137           ORG 95                  FORCE NEW RECORD
       00137  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00137            TXH 95                  4453  FT  88
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 4.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560043360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146               BCD  OCATION 4421.
       01326  456004040201
       01327  336060606060
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000           END
```

```
1            ORG 96                    FORCE NEW RECORD
1                          00140         ORG 96                  FORCE NEW RECORD
       00140  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00140            TXH 96                    46  FT  90
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 3.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560033360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146               BCD  OCATION 32.
       01326  456003023360
       01327  606060606060
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                         00000         END
```

```
1            ORG 95                    FORCE NEW RECORD
1                          00137         ORG 95                  FORCE NEW RECORD
       00137  0 01303 0 01350            HTR X-1,0,LOCREC        CARD FOR DE
                          01303         ORG LOCREC
 TD    01303  3 00000 0 00137            TXH 95                  4453  FT  88
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01351 0 01311            HTR PR,0,PR+32
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 4.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560043360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146               BCD  OCATION 4421.
       01326  456004040201
       01327  336060606060
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021               BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                          00000         END
```

```
1            ORG 96                  FORCE NEW RECORD
1                          00140       ORG 96                 FORCE NEW RECORD
      00140   0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                           01303       ORG LOCREC
 TD   01303   3 00000 0 00140          TXH 96                   46  FT  90
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01351 0 01311          HTR PR,0,PR+32
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   632147256023             BCD  TAPE CHECK IN READING RECORD FROM TAPE 3.  COPY LOOP IS AT L
      01314   302523426031
      01315   456051252124
      01316   314527605125
      01317   234651246026
      01320   514644606321
      01321   472560033360
      01322   602346477060
      01323   434646476031
      01324   626021636043
      01325   462321633146             BCD  OCATION 32.
      01326   456003023360
      01327   606060606060
      01330   606060606060
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340   636325444763
      01341   626030216525
      01342   602225254560
      01343   442124256063
      01344   466051252124
      01345   606330316260
      01346   512523465124
      01347   602346515125
      01350   236343703360
      01351   0 00000 0 00000 X
A                          00000       END
```

```
1            ORG 97                    FORCE NEW RECORD
1                          00141         ORG 97                 FORCE NEW RECORD
       00141  0 01303 0 01353            HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD    01303  3 00000 0 00141            TXH 97                  330  FT  90
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01354 0 01311            HTR PR,0,PR+35
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  632147256023               BCD  TAPE CHECK IN READING RECORD FROM TAPE 2.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560023360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146               BCD  OCATION 304 AND READS FROM FILE 3,
       01326  456003000460
       01327  214524605125
       01330  212462602651
       01331  464460263143
       01332  256003736060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  047360057360               BCD  4, 5, 7, 9 OR 10.  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS
       01340  077360116046
       01341  516001003360
       01342  602631652560
       01343  216363254447
       01344  636260302165
       01345  256022252545
       01346  604421242560
       01347  634660512521
       01350  246063303162
       01351  605125234651               BCD 3 RECORD CORRECTLY.
       01352  246023465151
       01353  252363437033
       01354  0 00000 0 00000 X
A                          00000         END
```

```
1            ORG 98                    FORCE NEW RECORD
1                        00142           ORG 98                  FORCE NEW RECORD
       00142  0 01303 0 01355           HTR X-1,0,LOCREC        CARD FOR DE
                        01303           ORG LOCREC
 TD    01303  3 00000 0 00142           TXH 98                   141  FT  92
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01356 0 01311           HTR PR,0,PR+37
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  632147256023              BCD  TAPE CHECK IN READING SUBROUTINE DEFINITION TABLE FROM TAPE
       01314  302523426031
       01315  456051252124
       01316  314527606264
       01317  225146646331
       01320  452560242526
       01321  314531633146
       01322  456063212243
       01323  256026514644
       01324  606321472560
       01325  027360512523              BCD  2, RECORD 2, FILE 5.
       01326  465124600273
       01327  602631432560
       01330  053360606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  234647706043              BCD  COPY LOOP IS AT LOCATION 135.  FIVE ATTEMPTS HAVE BEEN MADE
       01340  464647603162
       01341  602163604346
       01342  232163314645
       01343  600103053360
       01344  602631652560
       01345  216363254447
       01346  636260302165
       01347  256022252545
       01350  604421242560
       01351  634660512521              BCD 5TO READ THIS RECORD CORRECTLY.
       01352  246063303162
       01353  605125234651
       01354  246023465151
       01355  252363437033
       01356  0 00000 0 00000 X
A                       00000           END
```

```
1            ORG 99                  FORCE NEW RECORD
1                        00143         ORG 99                  FORCE NEW RECORD
       00143  0 01303 0 01343         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00143         TXH 99                   356  FT  92
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01344 0 01311         HTR PR,0,PR+27
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  632147256023            BCD  TAPE CHECK IN READING CIT TABLE, TAPE 3.  COPY LOOP IS AT LO
       01314  302523426031
       01315  456051252124
       01316  314527602331
       01317  636063212243
       01320  257360632147
       01321  256003336060
       01322  234647706043
       01323  464647603162
       01324  602163604346
       01325  232163314645            BCD  CATION 352.  FIVE ATTEMPTS HAVE BEEN MADE TO
       01326  600305023360
       01327  602631652560
       01330  216363254447
       01331  636260302165
       01332  256022252545
       01333  604421242560
       01334  634660606060
       01335  606060606060
       01336  606060606060
       01337  512521246063            BCD 5READ THIS RECORD CORRECTLY.
       01340  303162605125
       01341  234651246023
       01342  465151252363
       01343  437033606060
       01344  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 100                  FORCE NEW RECORD
1                        00144          ORG 100                FORCE NEW RECORD
      00144   0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD   01303   3 00000 0 00144          TXH 100                 562  FT  92
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01351 0 01311          HTR PR,0,PR+32
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   632147256023             BCD  TAPE CHECK IN READING OP TABLE FROM TAPE 2, FILE 6.  COPY LO
      01314   302523426031
      01315   456051252124
      01316   314527604647
      01317   606321224325
      01320   602651464460
      01321   632147256002
      01322   736026314325
      01323   600633606023
      01324   464770604346
      01325   464760316260             BCD  OP IS AT LOCATION 556.
      01326   216360434623
      01327   216331464560
      01330   050506336060
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340   636325444763
      01341   626030216525
      01342   602225254560
      01343   442124256063
      01344   466051252124
      01345   606330316260
      01346   512523465124
      01347   602346515125
      01350   236343703360
      01351   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 101                  FORCE NEW RECORD
1                          00145        ORG 101                FORCE NEW RECORD
      00145   0 01303 0 01343          HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD   01303   3 00000 0 00145          TXH 101                 765  FT  92
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01344 0 01311          HTR PR,0,PR+27
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   632147256023             BCD  TAPE CHECK IN READING CIT TABLE, TAPE 3.  COPY LOOP IS AT LO
      01314   302523426031
      01315   456051252124
      01316   314527602331
      01317   636063212243
      01320   257360632147
      01321   256003336060
      01322   234647706043
      01323   464647603162
      01324   602163604346
      01325   232163314645             BCD  CATION 761.  FIVE ATTEMPTS HAVE BEEN MADE TO
      01326   600706013360
      01327   602631652560
      01330   216363254447
      01331   636260302165
      01332   256022252545
      01333   604421242560
      01334   634660606060
      01335   606060606060
      01336   606060606060
      01337   512521246063             BCD 5READ THIS RECORD CORRECTLY.
      01340   303162605125
      01341   234651246023
      01342   465151252363
      01343   437033606060
      01344   0 00000 0 00000 X
 A                         00000        END
```

```
1            ORG 102                 FORCE NEW RECORD
1                          00146       ORG 102                 FORCE NEW RECORD
       00146  0 01303 0 01350          HTR X-1,0,LOCREC        CARD FOR DE
                           01303       ORG LOCREC
 TD    01303  3 00000 0 00146          TXH 102                 1135  FT  92
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,PR+32
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING HOLARG TABLE FROM TAPE 2, RECORD 4, FI
       01314  302523426031
       01315  456051252124
       01316  314527603046
       01317  432151276063
       01320  212243256026
       01321  514644606321
       01322  472560027360
       01323  512523465124
       01324  600473602631
       01325  432560053360             BCD  LE 5.  COPY LOOP IS AT LOCATION 1131.
       01326  602346477060
       01327  434646476031
       01330  626021636043
       01331  462321633146
       01332  456001010301
       01333  336060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
 A                         00000       END
```

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```
1            ORG 103                  FORCE NEW RECORD
1                        00147          ORG 103                FORCE NEW RECORD
      00147  0 01303 0 01362           HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303  3 00000 0 00147           TXH 103                 245  FT   9
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01363 0 01311           HTR PR,0,PR+42
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  632147256023              BCD  TAPE CHECK IN READING RECORD FROM TAPE 2.  COPY LOOP IS AT L
      01314  302523426031
      01315  456051252124
      01316  314527605125
      01317  234651246026
      01320  514644606321
      01321  472560023360
      01322  602346477060
      01323  434646476031
      01324  626021636043
      01325  462321633146              BCD  OCATION 220.  FIVE ATTEMPTS HAVE BEEN MADE
      01326  456002020033
      01327  606026316525
      01330  602163632544
      01331  476362603021
      01332  652560222525
      01333  456044212425
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  634660512521              BCD  TO READ THIS RECORD CORRECTLY.  PROGRAM CANNOT CONTINUE TO P
      01340  246063303162
      01341  605125234651
      01342  246023465151
      01343  252363437033
      01344  606047514627
      01345  512144602321
      01346  454546636023
      01347  464563314564
      01350  256063466047
      01351  514623256262              BCD  ROCESS LISTING TAPES FOR OUTPUT.
      01352  604331626331
      01353  452760632147
      01354  256260264651
      01355  604664634764
      01356  633360606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 104                  FORCE NEW RECORD
1                        00150          ORG 104                FORCE NEW RECORD
      00150  0 01303 0 01362           HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303  3 00000 0 00150           TXH 104                 264  FT   7
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01363 0 01311           HTR PR,0,PR+42
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  632147256023              BCD  TAPE CHECK IN READING RECORD FROM TAPE 2.  COPY LOOP IS AT L
      01314  302523426031
      01315  456051252124
      01316  314527605125
      01317  234651246026
      01320  514644606321
      01321  472560023360
      01322  602346477060
      01323  434646476031
      01324  626021636043
      01325  462321633146              BCD  OCATION 265.  FIVE ATTEMPTS HAVE BEEN MADE
      01326  456002060533
      01327  606026316525
      01330  602163632544
      01331  476362603021
      01332  652560222525
      01333  456044212425
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  634660512521              BCD  TO READ THIS RECORD CORRECTLY.  PROGRAM CANNOT CONTINUE TO P
      01340  246063303162
      01341  605125234651
      01342  246023465151
      01343  252363437033
      01344  606047514627
      01345  512144602321
      01346  454546636023
      01347  464563314564
      01350  256063466047
      01351  514623256262              BCD  ROCESS LISTING TAPES FOR OUTPUT.
      01352  604331626331
      01353  452760632147
      01354  256260264651
      01355  604664634764
      01356  633360606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  0 00000 0 00000 X
 A                       00000          END
```

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```
1            ORG 105                 FORCE NEW RECORD
1                        00151         ORG 105                 FORCE NEW RECORD
      00151   0 01303 0 01374         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD   01303   3 00000 0 00151         TXH 105                 3730  FT  115
      01304   0 07400 4 00740         TSX PRINT,4
      01305   0 01244 0 01237         HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740         TSX PRINT,4
      01307   0 01375 0 01311         HTR PR,0,PR+52
      01310   0 02000 0 00221         TRA DIGRTN
      01311   606060606060     PR     BCD 2
      01312   606060606060
      01313   632147256023            BCD  TAPE CHECK IN READING TAPE RECORD OF CARD IMAGE FROM TAPE 3.
      01314   302523426031
      01315   456051252124
      01316   314527606321
      01317   472560512523
      01320   465124604626
      01321   602321512460
      01322   314421272560
      01323   265146446063
      01324   214725600333
      01325   606023464770            BCD    COPY LOOP IS AT LOCATION 3655.
      01326   604346464760
      01327   316260216360
      01330   434623216331
      01331   464560030605
      01332   053360606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   633031626062            BCD  THIS STOP MAY ALSO BE DUE TO AN INCORRECT RECORD WHICH CONTA
      01340   634647604421
      01341   706021436246
      01342   602225602464
      01343   256063466021
      01344   456031452346
      01345   515125236360
      01346   512523465124
      01347   606630312330
      01350   602346456321
      01351   314562604446            BCD  INS MORE THAN 25 WORDS.
      01352   512560633021
      01353   456002056066
      01354   465124623360
      01355   606060606060
      01356   606060606060
      01357   606060606060
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   263165256021            BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
```

```
01364  636325444763
01365  626030216525
01366  602225254560
01367  442124256063
01370  466051252124
01371  606330316260
01372  512523465124
01373  602346515125
01374  236343703360
01375  0 00000 0 00000 X
A                00000        ..END
```

```
1            ORG 106                  FORCE NEW RECORD
1                        00152          ORG 106                FORCE NEW RECORD
       00152  0 01303 0 01362          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00152          TXH 106                 311  FT   9
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01363 0 01311          HTR PR,0,PR+42
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING RECORD FROM TAPE 3.  COPY LOOP IS AT L
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246026
       01320  514644606321
       01321  472560033360
       01322  602346477060
       01323  434646476031
       01324  626021636043
       01325  462321633146             BCD  OCATION 263.  FIVE ATTEMPTS HAVE BEEN MADE
       01326  456002060333
       01327  606026316525
       01330  602163632544
       01331  476362603021
       01332  652560222525
       01333  456044212425
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  634660512521             BCD  TO READ THIS RECORD CORRECTLY.  PROGRAM CANNOT CONTINUE TO P
       01340  246063303162
       01341  605125234651
       01342  246023465151
       01343  252363437033
       01344  606047514627
       01345  512144602321
       01346  454546636023
       01347  464563314564
       01350  256063466047
       01351  514623256262             BCD  ROCESS LISTING TAPES FOR OUTPUT.
       01352  604331626331
       01353  452760632147
       01354  256260264651
       01355  604664634764
       01356  633360606060
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 107                  FORCE NEW RECORD
1                        00153          ORG 107                FORCE NEW RECORD
       00153  0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00153          TXH 107                 410  FT  96
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,PR+32
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING COMMON TABLE FROM TAPE 2, RECORD 3, FI
       01314  302523426031
       01315  456051252124
       01316  314527602346
       01317  444446456063
       01320  212243256026
       01321  514644606321
       01322  472560027360
       01323  512523465124
       01324  600373602631
       01325  432560053360             BCD  LE 5.  COPY LOOP IS AT LOCATION 404.
       01326  602346477060
       01327  434646476031
       01330  626021636043
       01331  462321633146
       01332  456004000433
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 108                  FORCE NEW RECORD
1                        00154          ORG 108                FORCE NEW RECORD
      00154   0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00154          TXH 108                 460  FT  98
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01351 0 01311          HTR PR,0,PR+32
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   632147256023             BCD  TAPE CHECK IN READING SUBDEF TABLE FROM TAPE 2, RECORD 2, FI
      01314   302523426031
      01315   456051252124
      01316   314527606264
      01317   222425266063
      01320   212243256026
      01321   514644606321
      01322   472560027360
      01323   512523465124
      01324   600273602631
      01325   432560053360             BCD  LE 5.  COPY LOOP IS AT LOCATION 454.
      01326   602346477060
      01327   434646476031
      01330   626021636043
      01331   462321633146
      01332   456004050433
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
      01340   636325444763
      01341   626030216525
      01342   602225254560
      01343   442124256063
      01344   466051252124
      01345   606330316260
      01346   512523465124
      01347   602346515125
      01350   236343703360
      01351   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 109                  FORCE NEW RECORD
1                        00155          ORG 109                FORCE NEW RECORD
       00155  0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00155          TXH 109                 223  FT 113
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,PR+32
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING CIT, TAPE 4, IN THE SECOND PASS OF CIT
       01314  302523426031
       01315  456051252124
       01316  314527602331
       01317  637360632147
       01320  256004736031
       01321  456063302560
       01322  622523464524
       01323  604721626260
       01324  462660233163
       01325  606321472560             BCD   TAPE RECORD.  COPY LOOP IS AT LOCATION 217.
       01326  512523465124
       01327  336060234647
       01330  706043464647
       01331  603162602163
       01332  604346232163
       01333  314645600201
       01334  073360606060
       01335  606060606060
       01336  606060606060
       01337  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000          END
```

1213

```
1            ORG 110                  FORCE NEW RECORD
1                        00156          ORG 110                FORCE NEW RECORD
       00156  0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00156          TXH 110                 255  FT 103
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,PR+32
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256023             BCD  TAPE CHECK IN READING RECORD.OF COMPILED INSTRUCTIONS FROM T
       01314  302523426031
       01315  456051252124
       01316  314527605125
       01317  234651246046
       01320  266023464447
       01321  314325246031
       01322  456263516423
       01323  633146456260
       01324  265146446063
       01325  214725600433             BCD  APE 4.  COPY LOOP IS AT LOCATION 251.
       01326  606023464770
       01327  604346464760
       01330  316260216360
       01331  434623216331
       01332  464560020501
       01333  336060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263165256021             BCD  FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
       01340  636325444763
       01341  626030216525
       01342  602225254560
       01343  442124256063
       01344  466051252124
       01345  606330316260
       01346  512523465124
       01347  602346515125
       01350  236343703360
       01351  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 111                  FORCE NEW RECORD
1                          00157        ORG 111                FORCE NEW RECORD
      00157  0 01303 0 01420           HTR X-1,0,LOCREC       CARD FOR DE
                          01303        ORG LOCREC
 TD   01303  3 00000 0 00157           TXH 111                1001  FT  24
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01421 0 01311           HTR PR,0,PR+72
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  632147256002              BCD  TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TIFGO TABLE, FILE
      01314  603162604546
      01315  636023465151
      01316  252363437060
      01317  474662316331
      01320  464525246063
      01321  466051252124
      01322  606331262746
      01323  606321224325
      01324  736026314325
      01325  600573605125              BCD   5, RECORD 6.  THE FORTAG TABLE, RECORD 11,
      01326  234651246006
      01327  336060633025
      01330  602646516321
      01331  276063212243
      01332  257360512523
      01333  465124600101
      01334  736060606060
      01335  606060606060
      01336  606060606060
      01337  302162604164              BCD  HAS JUST BEEN WRITTEN ON TAPE 2.  BEGINNING AT LOCATION 764,
      01340  626360222525
      01341  456066513163
      01342  632545604645
      01343  606321472560
      01344  023360602225
      01345  273145453145
      01346  276021636043
      01347  462321633146
      01350  456007060473
      01351  606231676022              BCD   SIX BST INSTRUCTIONS ARE GIVEN
      01352  626360314562
      01353  635164236331
      01354  464562602151
      01355  256027316525
      01356  456060606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  222526465125              BCD  BEFORE THE RDS.  THE CPY AT 775 SHOWS THAT THIS RECORD IS NO
      01364  606330256051
```

```
01365  246233606063
01366  302560234770
01367  602163600707
01370  056062304666
01371  626063302163
01372  606330316260
01373  512523465124
01374  603162604546
01375  636063312627          BCD  T TIFGO (IDENTIFICATION WORD IN 7745).
01376  466074312425
01377  456331263123
01400  216331464560
01401  664651246031
01402  456007070405
01403  343360606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  633025605125          BCD  THE RECORD IDENTIFICATION OF THE TAPE IS IN 7747.
01410  234651246031
01411  242545633126
01412  312321633146
01413  456046266063
01414  302560632147
01415  256031626031
01416  456007070407
01417  336060606060
01420  606060606060
01421  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 112                  FORCE NEW RECORD
1                        00160          ORG 112                FORCE NEW RECORD
       00160  0 01303 0 01346          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00160          TXH 112                 123  FT  53
                                           112                 124  FT  53
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01347 0 01311          HTR PR,0,PR+30
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  254524604626             BCD  END OF RECORD NOT PROPERLY REACHED, TAPE 3, FILE 1.  TEST WO
       01314  605125234651
       01315  246045466360
       01316  475146472551
       01317  437060512521
       01320  233025247360
       01321  632147256003
       01322  736026314325
       01323  600133606063
       01324  256263606646
       01325  512460314560             BCD  RD IN RECORD SHOWS THAT COPY AT
       01326  512523465124
       01327  606230466662
       01330  606330216360
       01331  234647706021
       01332  636060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  434623216331             BCD 8LOCATION 122 SHOULD CAUSE END OF RECORD SKIP.
       01340  464560010202
       01341  606230466443
       01342  246023216462
       01343  256025452460
       01344  462660512523
       01345  465124606242
       01346  314733606060
       01347  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 113                  FORCE NEW RECORD
1                        00161          ORG 113                FORCE NEW RECORD
      00161  0 01303 0 01374           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00161           TXH 113                6736  FT  41
                                           113                6737  FT  41
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01375 0 01311           HTR PR,0,PR+52
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  255151465160              BCD  ERROR IN READING THE SINGLE 2 WORD RECORD FROM TAPE 2, FILE
      01314  314560512521
      01315  243145276063
      01316  302560623145
      01317  274325600260
      01320  664651246051
      01321  252346512460
      01322  265146446063
      01323  214725600273
      01324  602631432560
      01325  073360606321              BCD  7.  TAPE SHOULD BE POSITIONED AFTER
      01326  472560623046
      01327  644324602225
      01330  604746623163
      01331  314645252460
      01332  212663255160
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  263143256044              BCD  FILE MARK, FILE 7.  BEGINNING AT 6730, TWO BST S ARE GIVEN,
      01340  215142736026
      01341  314325600733
      01342  606022252731
      01343  454531452760
      01344  216360060703
      01345  007360636646
      01346  602262636062
      01347  602151256027
      01350  316525457360
      01351  633025456021              BCD  THEN AN RTB AND THREE CPY S.
      01352  456051632260
      01353  214524606330
      01354  512525602347
      01355  706062336060
      01356  606060606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  234647706021              BCD  COPY AT LOCATION 6735 SHOULD CAUSE END OF RECORD SKIP.
```

1714

```
01364  636043462321
01365  633146456006
01366  070305606230
01367  466443246023
01370  216462256025
01371  452460462660
01372  512523465124
01373  606242314733
01374  606060606060
01375  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 114 .                FORCE NEW RECORD
1                        00162          ORG 114                FORCE NEW RECORD
       00162  0 01303 0 01373          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00162          TXH 114                7112  FT  27
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01374 0 01311          HTR PR,0,PR+51
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256002             BCD  TAPE 2 IS NOT POSITIONED CORRECTLY TO READ RECORD FROM FILE
       01314  603162604546
       01315  636047466231
       01316  633146452524
       01317  602346515125
       01320  236343706063
       01321  466051252124
       01322  605125234651
       01323  246026514644
       01324  602631432560
       01325  053360602346             BCD  5.  COPY LOOP AT LOCATION 7060 READS
       01326  477060434646
       01327  476021636043
       01330  462321633146
       01331  456007000600
       01332  605125212462
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  512523465124             BCD  RECORDS 6 THROUGH 11 AND HAS FOUND THAT IDENTIFICATION OF RE
       01340  626006606330
       01341  514664273060
       01342  010160214524
       01343  603021626026
       01344  466445246063
       01345  302163603124
       01346  254563312631
       01347  232163314645
       01350  604626605125
       01351  234651247360             BCD  CORD, LOCATION 7127,
       01352  434623216331
       01353  464560070102
       01354  077360606060
       01355  606060606060
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  244625626045             BCD 9DOES NOT MATCH EXPECTED IDENTIFICATION, LOCATION 7125.
       01364  466360442163
```

```
01365  233060256747
01366  252363252460
01367  312425456331
01370  263123216331
01371  464573604346
01372  232163314645
01373  600701020533
01374  0 00000 0 00000 X
A                 00000        END
```

1221

```
1            ORG 115                  FORCE NEW RECORD
1                        00163          ORG 115                FORCE NEW RECORD
       00163  0 01303 0 01420          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00163          TXH 115                  51  FT  56
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01421 0 01311          HTR PR,0,PR+72
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256002             BCD  TAPE 2 IS NOT CORRECTLY POSITIONED TO READ FORTAG, FILE 5, R
       01314  603162604546
       01315  636023465151
       01316  252363437060
       01317  474662316331
       01320  464525246063
       01321  466051252124
       01322  602646516321
       01323  277360263143
       01324  256005736051
       01325  252346512460             BCD  ECORD 11.  ROUTINE AT LOCATION 31
       01326  010133606051
       01327  466463314525
       01330  602163604346
       01331  232163314645
       01332  600301606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  512521246260             BCD  READS THE 1 WORD RECORD OF FILE 7 WHICH IS RECORD COUNT OF F
       01340  633025600160
       01341  664651246051
       01342  252346512460
       01343  462660263143
       01344  256007606630
       01345  312330603162
       01346  605125234651
       01347  246023466445
       01350  636046266026
       01351  314325600633             BCD  ILE 6.  7 IS ADDED TO THIS COUNT AND
       01352  606007603162
       01353  602124242524
       01354  606346606330
       01355  316260234664
       01356  456360214524
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  633025606321             BCD  THE TAPE IS BACKSPACED OVER FILE 6, FILE MARK AND THE LAST 4
       01364  472560316260
```

```
01365  222123426247
01366  212325246046
01367  652551602631
01370  432560067360
01371  263143256044
01372  215142602145
01373  246063302560
01374  432162636004
01375  605125234651          BCD   RECORDS IN FILE 5.  RECORD IDENTIFICATION
01376  246260314560
01377  263143256005
01400  336060512523
01401  465124603124
01402  254563312631
01403  232163314645
01404  606060606060
01405  606060606060
01406  606060606060
01407  314560434623          BCD  IN LOCATION 2326 SHOWS THAT THIS IS NOT FORTAG RECORD.
01410  216331464560
01411  020302066062
01412  304666626063
01413  302163606330
01414  316260316260
01415  454663602646
01416  516321276051
01417  252346512433
01420  606060606060
01421  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 116                  FORCE NEW RECORD
1                        00164          ORG 116                 FORCE NEW RECORD
       00164  0 01303 0 01375          HTR X-1,0,LOCREC        CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00164          TXH 116                  331  FT  58
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01376 0 01311          HTR PR,0,PR+53
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  632147256002             BCD  TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TIFGO RECORD.  RD
       01314  603162604546
       01315  636023465151
       01316  252363437060
       01317  474662316331
       01320  464525246063
       01321  466051252124
       01322  606331262746
       01323  605125234651
       01324  243360605124
       01325  626043464647             BCD  S LOOP AT LOCATION 30 HAS SPACED TAPE 2
       01326  602163604346
       01327  232163314645
       01330  600300603021
       01331  626062472123
       01332  252460632147
       01333  256002606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  264651662151             BCD  FORWARD FROM BEGINNING OF 3RD FILE TO BEGINNING OF TIFGO, FI
       01340  246026514644
       01341  602225273145
       01342  453145276046
       01343  266003512460
       01344  263143256063
       01345  466022252731
       01346  454531452760
       01347  462660633126
       01350  274673602631
       01351  432560057360             BCD  LE 5, RECORD 6.  IDENTIFICATION WORD
       01352  512523465124
       01353  600633606031
       01354  242545633126
       01355  312321633146
       01356  456066465124
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  462660512523             BCD  OF RECORD IN LOCATION 5471, SHOWS THAT THIS IS NOT TIFGO REC
       01364  465124603145
```

```
01365  604346232163
01366  314645600504
01367  070173606230.
01370  466662606330
01371  216360633031
01372  626031626045
01373  466360633126
01374  274660512523
01375  465124336060          BCD 1ORD.
01376  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 117                  FORCE NEW RECORD
1                          00165        ORG 117                FORCE NEW RECORD
      00165  0 01303 0 01374           HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD   01303  3 00000 0 00165           TXH 117                 357  FT  58
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01375 0 01311           HTR PR,0,PR+52
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  632147256002              BCD  TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TRAD, FILE 5, REC
      01314  603162604546
      01315  636023465151
      01316  252363437060
      01317  474662316331
      01320  464525246063
      01321  466051252124
      01322  606351212473
      01323  602631432560
      01324  057360512523
      01325  465124600733              BCD  ORD 7.  RECORD 6, TIFGO, HAS
      01326  606051252346
      01327  512460067360
      01330  633126274673
      01331  603021626060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  416462636022              BCD  JUST BEEN READ SUCCESSFULLY, BUT IDENTIFICATION WORD, LOCATI
      01340  252545605125
      01341  212460626423
      01342  232562622664
      01343  434370736022
      01344  646360312425
      01345  456331263123
      01346  216331464560
      01347  664651247360
      01350  434623216331
      01351  464560060706              BCD  ON 6766, SHOWS THAT NEXT RECORD IS NOT TRAD.
      01352  067360623046
      01353  666260633021
      01354  636045256763
      01355  605125234651
      01356  246031626045
      01357  466360635121
      01360  243360606060
      01361  606060606060
      01362  606060606060
      01363  234647706043              BCD  COPY LOOP IS AT LOCATION 352.
      01364  464647603162
```

```
01365  602163604346
01366  232163314645
01367  600305023360
01370  606060606060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  0 00000 0 00000 X
A                00000        END
```

```
1            ORG 118                  FORCE NEW RECORD
1                        00166          ORG 118                FORCE NEW RECORD
       00166  0 01303 0 01430          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00166          TXH 118                 524  FT  62
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01431 0 01311          HTR PR,0,PR+80
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262131436451             BCD  FAILURE TO READ CORRECT RECORD FROM TAPE 2, FILE 5.  TAPE SH
       01314  256063466051
       01315  252124602346
       01316  515125236360
       01317  512523465124
       01320  602651464460
       01321  632147256002
       01322  736026314325
       01323  600533606063
       01324  214725606230
       01325  466443246022             BCD  OULD BE POSITIONED TO READ RECORD 6, TIFGO,
       01326  256047466231
       01327  633146452524
       01330  606346605125
       01331  212460512523
       01332  465124600673
       01333  606331262746
       01334  736060606060
       01335  606060606060
       01336  606060606060
       01337  512523465124             BCD  RECORD 7, TRAD, OR RECORD 12, FRET.  ONE OF THE ROUTINES WHI
       01340  600773606351
       01341  212473604651
       01342  605125234651
       01343  246001027360
       01344  265125633360
       01345  604645256046
       01346  266063302560
       01347  514664633145
       01350  256260663031
       01351  233060646225             BCD  CH USES INFORMATION FROM THESE RECORDS HAS
       01352  626031452646
       01353  514421633146
       01354  456026514644
       01355  606330256225
       01356  605125234651
       01357  246260302162
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  264664452460             BCD  FOUND THAT THE IDENTIFICATION OF THE RECORD DOES NOT MATCH T
       01364  633021636063
```

```
01365  302560312425
01366  456331263123
01367  216331464560
01370  462660633025
01371  605125234651
01372  246024462562
01373  604546636044
01374  216323306063
01375  302560256747          BCD  HE EXPECTED IDENTIFICATION.  THE ROUTINE
01376  252363252460
01377  312425456331
01400  263123216331
01401  464533606063
01402  302560514664
01403  633145256060
01404  606060606060
01405  606060606060
01406  606060606060
01407  512521243145          BCD  READING A PARTICULAR RECORD IS AT LOCATION 435 FOR TIFGO, LO
01410  276021604721
01411  516331236443
01412  215160512523
01413  465124603162
01414  602163604346
01415  232163314645
01416  600403056026
01417  465160633126
01420  274673604346
01421  232163314645          BCD 8CATION 525 FOR TRAD, OR LOCATION 643 FOR FRET.
01422  600502056026
01423  465160635121
01424  247360465160
01425  434623216331
01426  464560060403
01427  602646516026
01430  512563336060
01431  0 00000 0 00000 X
A                    00000   END
```

```
1            ORG 119                    FORCE NEW RECORD
1                          00167          ORG 119                 FORCE NEW RECORD
        00167  0 01303 0 01442            HTR X-1,0,LOCREC        CARD FOR DE
                           01303          ORG LOCREC
 TD     01303  3 00000 0 00167            TXH 119                  314  FT  90
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
        01306  0 76200 0 00304            RDR 4
        01307  0 46000 0 01344            LDA AA
        01310  0 70000 0 01257            CPY ERAS
        01311 -0 75400 0 00000            PXD 0,0
        01312  0 56000 0 01257            LDQ ERAS
        01313 -0 76300 0 00003            LGL 3                   FIRST OCTAL NUMBER INTO COMMENT
        01314 -0 60200 0 01363            ORS A
        01315 -0 76300 0 00017            LGL 15
        01316  0 07400 4 00730            TSX OCTBCD,4
        01317  0 60200 0 01364            SLW B                   B 23456
        01320  0 56000 0 01257            LDQ ERAS                FIX TAG FIELD
        01321 -0 77300 0 00022            RQL 18
        01322 -0 50000 0 00717            CAL BLANKS
        01323  0 76700 0 00003            ALS 3
        01324 -0 76300 0 00003            LGL 3
        01325  0 60200 0 01365            SLW C
        01326  0 50000 0 01257            CLA ERAS
        01327  0 07400 4 00730            TSX OCTBCD,4            B 89101112
        01330  0 60200 0 01366            SLW D
        01331  0 56000 0 01366            LDQ D
        01332 -0 50000 0 01365            CAL C
        01333 -0 76300 0 00030            LGL 24                  B7B8910
        01334  0 60200 0 01365            SLW C
        01335 -0 76300 0 00014            LGL 12
        01336  0 56000 0 00717            LDQ BLANKS
        01337 -0 76300 0 00030            LGL 24
        01340  0 60200 0 01366            SLW D                   1112BBBB
        01341  0 07400 4 00740            TSX PRINT,4
        01342  0 01443 0 01345            HTR PR,0,PR+62
        01343  0 02000 0 00221            TRA DIGRTN
        01344  0 00000 0 00612 AA         HTR8612
        01345  606060606060    PR         BCD 2
        01346  606060606060
        01347  632147256002               BCD  TAPE 2 IS NOT CORRECTLY POSITIONED.  CURRENT FILE 5 RECORD I
        01350  603162604546
        01351  636023465151
        01352  252363437060
        01353  474662316331
        01354  464525243360
        01355  602364515125
        01356  456360263143
        01357  256005605125
        01360  234651246031
        01361  242545633126               BCD 2DENTIFICATIO
        01362  312321633146
        01363  456031626000            A BCD 1N IS 0
 A      01364  0 00000 0 00000         B HTR
```

```
A     01365  0 00000 0 00000      C HTR
      01366  606060606060         D BCD 5
      01367  606060606060
      01370  606060606060
      01371  606060606060
      01372  606060606060
      01373  214524602446           BCD  AND DOES NOT MATCH EXPECTED RECORD IDENTIFICATION WHICH WAS
      01374  256260454663
      01375  604421632330
      01376  602567472523
      01377  632524605125
      01400  234651246031
      01401  242545633126
      01402  312321633146
      01403  456066303123
      01404  306066216260
      01405  314560633025           BCD  IN THE ACCUMULATOR AND IS NOT STORED.
      01406  602123236444
      01407  644321634651
      01410  602145246031
      01411  626045466360
      01412  626346512524
      01413  336060606060
      01414  606060606060
      01415  606060606060
      01416  606060606060
      01417  633031626062           BCD  THIS SUBROUTINE BEGINS AT 304 AND IS USED TO READ IN ANY OF
      01420  642251466463
      01421  314525602225
      01422  273145626021
      01423  636003000460
      01424  214524603162
      01425  606462252460
      01426  634660512521
      01427  246031456021
      01430  457060462660
      01431  633025605125           BCD  THE RECORDS IN FILE 5, TAPE 2.
      01432  234651246260
      01433  314560263143
      01434  256005736063
      01435  214725600233
      01436  606060606060
      01437  606060606060
      01440  606060606060
      01441  606060606060
      01442  606060606060
      01443  0 00000 0 00000 X
A                   00000          END
```

```
1            ORG 120                 FORCE NEW RECORD
1                        00170         ORG 120                FORCE NEW RECORD
       00170  0 01303 0 01330          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00170          TXH 120                  36  FT  53
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01331 0 01311          HTR PR,0,PR+16
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF RECORD, TAPE 4.  COPY LOOP AT LOCATION 30 IS SP
       01314  254524604626
       01315  605125234651
       01316  247360632147
       01317  256004336060
       01320  234647706043
       01321  464647602163
       01322  604346232163
       01323  314645600300
       01324  603162606247
       01325  212331452760             BCD 4ACING OVER FIRST FILE.
       01326  466525516026
       01327  315162636026
       01330  314325336060
       01331  0 00000 0 00000 X
 A                       00000         END
```

123

```
1            ORG 121                  FORCE NEW RECORD
1                        00171          ORG 121                FORCE NEW RECORD
      00171  0 01303 0 01331           HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303  3 00000 0 00171           TXH 121                4417  FT  88
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01332 0 01311           HTR PR,0,PR+17
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  262143622560              BCD  FALSE END OF RECORD, TAPE 4.  COPY LOOP AT LOCATION 4413 IS
      01314  254524604626
      01315  605125234651
      01316  247360632147
      01317  256004336060
      01320  234647706043
      01321  464647602163
      01322  604346232163
      01323  314645600404
      01324  010360316260
      01325  215151214527              BCD 5ARRANGED TO FIND END OF FILE.
      01326  252460634660
      01327  263145246025
      01330  452460462660
      01331  263143253360
      01332  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 122                  FORCE NEW RECORD
1                        00172          ORG 122                FORCE NEW RECORD
       00172  0 01303 0 01353          HTR X-1,0,LOCREC       CARD FOR DE
               .         01303          ORG LOCREC
 TD    01303  3 00000 0 00172          TXH 122                7053  FT  36
                                           122                7057  FT  36
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01354 0 01311          HTR PR,0,PR+35
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF RECORD READING DOTAG RECORD FROM TAPE 3, FILE 1
       01314  254524604626
       01315  605125234651
       01316  246051252124
       01317  314527602446
       01320  632127605125
       01321  234651246026
       01322  514644606321
       01323  472560037360
       01324  263143256001
       01325  336060512523             BCD  .  RECORD CONTAINS A NUMBER OF 9 WORD ENTRIES.
       01326  465124602346
       01327  456321314562
       01330  602160456444
       01331  222551604626
       01332  601160664651
       01333  246025456351
       01334  312562336060
       01335  606060606060
       01336  606060606060
       01337  234647706043             BCD  COPY LOOP AT LOCATION 7043 READS ONLY FIRST AND SECOND WORD
       01340  464647602163
       01341  604346232163
       01342  314645600700
       01343  040360512521
       01344  246260464543
       01345  706026315162
       01346  636021452460
       01347  622523464524
       01350  606646512460
       01351  462660252123             BCD 3OF EACH ENTRY.
       01352  306025456351
       01353  703360606060
       01354  0 00000 0 00000 X
 A                        00000     -   END
```

```
1            ORG 123                 FORCE NEW RECORD
1                        00173         ORG 123                FORCE NEW RECORD
      00173  0 01303 0 01350           HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00173           TXH 123                7250  FT  27
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01351 0 01311           HTR PR,0,PR+32
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  262143622560              BCD  FALSE END OF RECORD TAPE 2, FILE 5.  COPY AT LOCATION 7245 S
      01314  254524604626
      01315  605125234651
      01316  246063214725
      01317  600273602631
      01320  432560053360
      01321  602346477060
      01322  216360434623
      01323  216331464560
      01324  070204056062
      01325  304664432460              BCD  HOULD TRANSFER TO
      01326  635121456226
      01327  255160634660
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  512462602163              BCD  RDS AT LOCATION 7244, OR CAUSE FILE SKIP AT END OF FILE 5.
      01340  604346232163
      01341  314645600702
      01342  040473604651
      01343  602321646225
      01344  602631432560
      01345  624231476021
      01346  636025452460
      01347  462660263143
      01350  256005336060
      01351  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 124                    FORCE NEW RECORD
1                        00174            ORG 124                FORCE NEW RECORD
        00174  0 01303 0 01377            HTR X-1,0,LOCREC       CARD FOR DE
                         01303            ORG LOCREC
 TD     01303  3 00000 0 00174            TXH 124                  62  FT  53
                                              124                  63  FT  53
                                              124                  66  FT  53
                                              124                  67  FT  53
                                              124                  72  FT  53
                                              124                  73  FT  53
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740            TSX PRINT,4
        01307  0 01400 0 01311            HTR PR,0,PR+55
        01310  0 02000 0 00221            TRA DIGRTN
        01311  606060606060      PR       BCD 2
        01312  606060606060
        01313  262143622560               BCD  FALSE END OF RECORD OR FALSE END OF FILE IN READING, TAPE 3,
        01314  254524604626
        01315  605125234651
        01316  246046516026
        01317  214362256025
        01320  452460462660
        01321  263143256031
        01322  456051252124
        01323  314527736063
        01324  214725600373
        01325  602631432560               BCD   FILE 1, FROM VARIABLE LENGTH RECORD WHICH
        01326  017360265146
        01327  446065215131
        01330  212243256043
        01331  254527633060
        01332  512523465124
        01333  606630312330
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  623046644324               BCD  SHOULD HAVE BEEN WRITTEN AS A SERIES OF 4 WORD ENTRIES.  COP
        01340  603021652560
        01341  222525456066
        01342  513163632545
        01343  602162602160
        01344  622551312562
        01345  604626600460
        01346  664651246025
        01347  456351312562
        01350  336060234647
        01351  706043464647               BCD  Y LOOP AT LOCATION 53 READS
        01352  602163604346
        01353  232163314645
        01354  600503605125
        01355  212462606060
        01356  606060606060
        01357  606060606060
```

```
01360  606060606060
01361  606060606060
01362  606060606060
01363  046066465124          BCD  4 WORDS AT A TIME AND CHECKS AGAINST THIS IN READING 2ND, 3R
01364  626021636021
01365  606331442560
01366  214524602330
01367  252342626021
01370  272131456263
01371  606330316260
01372  314560512521
01373  243145276002
01374  452473600351
01375  246021452460          BCD 3D AND 4TH WORD.
01376  046330606646
01377  512433606060
01400  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 125                  FORCE NEW RECORD
1                        00175          ORG 125                FORCE NEW RECORD
      00175  0 01303 0 01367           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00175           TXH 125                7075  FT  27
                                           125                7076  FT  27
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01370 0 01311           HTR PR,0,PR+47
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  262143622560              BCD  FALSE END OF FILE OR FALSE END OF RECORD IN READING RECORD F
      01314  254524604626
      01315  602631432560
      01316  465160262143
      01317  622560254524
      01320  604626605125
      01321  234651246031
      01322  456051252124^
      01323  314527605125
      01324  234651246026
      01325  514644606321              BCD  ROM TAPE 2, FILE 5.  RECORDS IN THIS FILE
      01326  472560027360
      01327  263143256005
      01330  336060512523
      01331  465124626031
      01332  456063303162
      01333  602631432560
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  215125604431              BCD  ARE MINIMUM 2 WORDS, IDENTIFICATION WORD AND WORD COUNT.  CO
      01340  453144644460
      01341  026066465124
      01342  627360312425
      01343  456331263123
      01344  216331464560
      01345  664651246021
      01346  452460664651
      01347  246023466445
      01350  633360602346
      01351  477060434646              BCD  PY LOOP AT LOCATION 7070 DOES NOT ATTEMPT
      01352  476021636043
      01353  462321633146
      01354  456007000700
      01355  602446256260
      01356  454663602163
      01357  632544476360
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  634660512521              BCD 5TO READ MORE THAN 2 WORDS.
```

```
01364  246044465125
01365  606330214560
01366  026066465124
01367  623360606060
01370  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 126                    FORCE NEW RECORD
1                        00176            ORG 126                FORCE NEW RECORD
        00176  0 01303 0 01374            HTR X-1,0,LOCREC       CARD FOR DE
                         01303            ORG LOCREC
 TD     01303  3 00000 0 00176            TXH 126                7563  FT  21
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740            TSX PRINT,4
        01307  0 01375 0 01311  .         HTR PR,0,PR+52
        01310  0 02000 0 00221            TRA DIGRTN
        01311  606060606060     PR        BCD 2
        01312  606060606060
        01313  262143622560               BCD  FALSE END OF FILE IN READING A RECORD FROM TAPE 4.  COPY LOO
        01314  254524604626
        01315  602631432560
        01316  314560512521
        01317  243145276021
        01320  605125234651
        01321  246026514644
        01322  606321472560
        01323  043360602346
        01324  477060434646
        01325  476022252731               BCD  P BEGINS AT LOCATION 7552.
        01326  456260216360
        01327  434623216331
        01330  464560070505
        01331  023360606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  633025602346               BCD  THE COPY AT LOCATION 7561 IS AT LEAST THE SECOND ONE GIVEN A
        01340  477060216360
        01341  434623216331
        01342  464560070506
        01343  016031626021
        01344  636043252162
        01345  636063302560
        01346  622523464524
        01347  604645256027
        01350  316525456021
        01351  452460316260               BCD  ND IS PROGRAMMED TO FIND
        01352  475146275121
        01353  444425246063
        01354  466026314524
        01355  606060606060
        01356  606060606060
        01357  606060606060
        01360  606060606060
        01361  606060606060
        01362  606060606060
        01363  214560254524               BCD  AN END OF RECORD SKIP.
        01364  604626605125
```

```
01365  234651246062
01366  423147336060
01367  606060606060
01370  606060606060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 127                    FORCE NEW RECORD
1                        00177            ORG 127                FORCE NEW RECORD
       00177  0 01303 0 01374            HTR X-1,0,LOCREC       CARD FOR DE
                        01303            ORG LOCREC
 TD    01303  3 00000 0 00177            TXH 127.               7555  FT  21
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01375 0 01311            HTR PR,0,PR+52
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  262143622560               BCD  FALSE END OF FILE IN READING THE FIRST WORD OF A RECORD FROM
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  302560263151
       01321  626360664651
       01322  246046266021
       01323  605125234651
       01324  246026514644
       01325  606321472560               BCD   TAPE 4.  COPY LOOP IS AT LOCATION 7552.
       01326  043360602346
       01327  477060434646
       01330  476031626021
       01331  636043462321
       01332  623146456007
       01333  050502336060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  633025602346               BCD  THE COPY AT LOCATION 7553 DOES NOT ATTEMPT TO READ MORE THAN
       01340  477060216360
       01341  434623216331
       01342  464560070505
       01343  036024462562
       01344  604546636021
       01345  636325444763
       01346  606346605125
       01347  212460444651
       01350  256063302145
       01351  606330256031               BCD   THE IDENTIFICATION WORD OF THESE RECORDS,
       01352  242545633126
       01353  312321633146
       01354  456066465124
       01355  604626606330
       01356  256225605125
       01357  234651246273
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  663031233060               BCD  WHICH ARE AT LEAST TWO WORDS LONG.
       01364  215125602163
```

```
01365  604325216263
01366  606366466066
01367  465124626043
01370  464527336060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  0 00000 0 00000 X
A                 00000          ,END
```

```
1              ORG 128                 FORCE NEW·RECORD
1                          00200         ORG 128                FORCE NEW RECORD
        00200  0 01303 0 01350           HTR X-1,0,LOCREC       CARD FOR DE
                           01303         ORG LOCREC
 TD     01303  3 00000 0 00200           TXH 128                4035  FT  51
        01304  0 07400 4 00740           TSX PRINT,4
        01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740           TSX PRINT,4
        01307  0 01351 0 01311           HTR PR,0,PR+32
        01310  0 02000 0 00221           TRA DIGRTN
        01311  606060606060     PR       BCD 2
        01312  606060606060
        01313  262143622560              BCD  FALSE END OF FILE IN READING TAGTAG RECORD FROM TAPE 4, FILE
        01314  254524604626
        01315  602631432560
        01316  314560512521
        01317  243145276063
        01320  212763212760
        01321  512523465124
        01322  602651464460
        01323  632147256004
        01324  736026314325
        01325  600233606023              BCD   2.  COPY LOOP IS AT LOCATION 4027.
        01326  464770604346
        01327  464760316260
        01330  216360434623
        01331  216331464560
        01332  040002073360
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  234647706021              BCD  COPY AT 4033 IS PROGRAMMED TO FIND END OF RECORD SKIP.
        01340  636004000303
        01341  603162604751
        01342  462751214444
        01343  252460634660
        01344  263145246025
        01345  452460462660
        01346  512523465124
        01347  606242314733
        01350  606060606060
        01351  0 00000 0 00000 X
A                          00000         END
```

```
1            ORG 129                FORCE NEW RECORD
1                        00201        ORG 129                FORCE NEW RECORD
      00201  0 01303 0 01342          HTR X-1,0,LOCREC       CARD FOR DE
                         01303        ORG LOCREC
 TD   01303  3 00000 0 00201          TXH 129                4161  FT  34
      01304  0 07400 4 00740          TSX PRINT,4
      01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740          TSX PRINT,4
      01307  0 01343 0 01311          HTR PR,0,PR+26
      01310  0 02000 0 00221          TRA DIGRTN
      01311  606060606060     PR      BCD 2
      01312  606060606060
      01313  262143622560             BCD  FALSE END OF FILE IN READING DOTAG RECORD FROM TAPE 3, FILE
      01314  254524604626
      01315  602631432560
      01316  314560512521
      01317  243145276024
      01320  466321276051
      01321  252346512460
      01322  265146446063
      01323  214725600373
      01324  602631432560
      01325  013360602346             BCD  1.  COPY LOOP AT LOCATION 4157 SHOULD CAUSE
      01326  477060434646
      01327  476021636043
      01330  462321633146
      01331  456004010507
      01332  606230466443
      01333  246023216462
      01334  256060606060
      01335  606060606060
      01336  606060606060
      01337  254524604626             BCD 4END OF RECORD SKIP.
      01340  605125234651
      01341  246062423147
      01342  336060606060
      01343  0 00000 0 00000 X
 A                       00000        END
```

1245

```
1            ORG 130                  FORCE NEW RECORD
1                        00202          ORG 130                FORCE NEW RECORD
        00202  0 01303 0 01353          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD     01303  3 00000 0 00202          TXH 130                7052  FT  36
                                             130                7056  FT  36
        01304  0 07400 4 00740          TSX PRINT,4
        01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740          TSX PRINT,4
        01307  0 01354 0 01311          HTR PR,0,PR+35
        01310  0 02000 0 00221          TRA DIGRTN
        01311  606060606060     PR      BCD 2
        01312  606060606060
        01313  262143622560             BCD  FALSE END OF FILE IN READING DOTAG RECORD FROM TAPE 3, FILE
        01314  254524604626
        01315  602631432560
        01316  314560512521
        01317  243145276024
        01320  466321276051
        01321  252346512460
        01322  265146446063
        01323  214725600373
        01324  602631432560
        01325  013360605125             BCD  1.  RECORD CONTAINS A NUMBER OF 9 WORD ENTRIES.
        01326  234651246023
        01327  464563213145
        01330  626021604564
        01331  442225516046
        01332  266011606646
        01333  512460254563
        01334  513125623360
        01335  606060606060
        01336  606060606060
        01337  234647706043             BCD  COPY LOOP AT LOCATION 7043 ONLY READS FIRST AND SECOND WORD
        01340  464647602163
        01341  604346232163
        01342  314645600700
        01343  040360464543
        01344  706051252124
        01345  626026315162
        01346  636021452460
        01347  622523464524
        01350  606646512460
        01351  462660252123             BCD 3OF EACH ENTRY.
        01352  306025456351
        01353  703360606060
        01354  0 00000 0 00000 X
 A                       00000          END
```

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```
1            ORG 131                  FORCE NEW RECORD
1                        00203          ORG 131                FORCE NEW RECORD
      00203   0 01303 0 01375          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
TD    01303   3 00000 0 00203          TXH 131                7103  FT  27
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01376 0 01311          HTR PR,0,PR+53
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   262143622560             BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 2, FILE 5.  RE
      01314   254524604626
      01315   602631432560
      01316   314560512521
      01317   243145276051
      01320   252346512460
      01321   265146446063
      01322   214725600273
      01323   602631432560
      01324   053360605125
      01325   234651246260             BCD  CORDS IN THIS FILE ARE MINIMUM 2 WORDS,
      01326   314560633031
      01327   626026314325
      01330   602151256044
      01331   314531446444
      01332   600260664651
      01333   246273606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   312425456331             BCD  IDENTIFICATION AND WORD COUNT.  COPY AT LOCATION 7101 IS AT
      01340   263123216331
      01341   464560214524
      01342   606646512460
      01343   234664456333
      01344   606023464770
      01345   602163604346
      01346   232163314645
      01347   600701000160
      01350   316260216360
      01351   432521626360             BCD  LEAST THIRD COPY GIVEN, AND IS PROGRAMMED
      01352   633031512460
      01353   234647706027
      01354   316525457360
      01355   214524603162
      01356   604751462751
      01357   214444252460
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   634660263145             BCD  TO FIND END OF RECORD SKIP.  COPY LOOP BEGINS AT LOCATION 70
      01364   246025452460
```

```
01365  462660512523
01366  465124606242
01367  314733606023
01370  464770604346
01371  464760222527
01372  314562602163
01373  604346232163
01374  314645600700
01375  070033606060          BCD 170.
01376  0 00000 0 00000 X
A                   00000    END
```

```
1            ORG 132                  FORCE NEW RECORD
1                          00204        ORG 132                FORCE NEW RECORD
      00204   0 01303 0 01367           HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD   01303   3 00000 0 00204           TXH 132                7135  FT  27
      01304   0 07400 4 00740           TSX PRINT,4
      01305   0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740           TSX PRINT,4
      01307   0 01370 0 01311           HTR PR,0,PR+47
      01310   0 02000 0 00221           TRA DIGRTN
      01311   606060606060     PR       BCD 2
      01312   606060606060
      01313   262143622560              BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 2, FILE 5, REC
      01314   254524604626
      01315   602631432560
      01316   314560512521
      01317   243145276051
      01320   252346512460
      01321   265146446063
      01322   214725600273
      01323   602631432560
      01324   057360512523
      01325   465124601033              BCD  ORD 8.  COPY LOOP IS GENERAL
      01326   606023464770
      01327   604346464760
      01330   316260272545
      01331   255121436060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   626422514664              BCD  SUBROUTINE AT LOCATION 7060.  COPY AT LOCATION 7133 IS PROGR
      01340   633145256021
      01341   636043462321
      01342   633146456007
      01343   000600336060
      01344   234647706021
      01345   636043462321
      01346   633146456007
      01347   010303603162
      01350   604751462751
      01351   214444252460              BCD  AMMED TO FIND END OF RECORD SKIP
      01352   634660263145
      01353   246025452460
      01354   462660512523
      01355   465124606242
      01356   314760606060
      01357   606060606060
      01360   606060606060
      01361   606060606060
      01362   606060606060
      01363   264651606330              BCD 5FOR THIS SPECIFIC RECORD.
      01364   316260624725
```

```
01365  233126312360
01366  512523465124
01367  336060606060
01370  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 133                  FORCE NEW RECORD
1                        00205          ORG 133                FORCE NEW RECORD
      00205   0 01303 0 01356          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00205          TXH 133                  60  FT  56
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01357 0 01311          HTR PR,0,PR+38
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   262143622560             BCD  FALSE END OF FILE IN READING FORTAG RECORD TAPE 2, FILE 5, R
      01314   254524604626
      01315   602631432560
      01316   314560512521
      01317   243145276026
      01320   465163212760
      01321   512523465124
      01322   606321472560
      01323   027360263143
      01324   256005736051
      01325   252346512460             BCD  ECORD 11.  THERE ARE 14 RECORDS
      01326   010133606063
      01327   302551256021
      01330   512560010460
      01331   512523465124
      01332   626060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   314560633031             BCD  IN THIS FILE.  COPY LOOP IS AT LOCATION 43.  COPY AT LOCATIO
      01340   626026314325
      01341   336060234647
      01342   706043464647
      01343   603162602163
      01344   604346232163
      01345   314645600403
      01346   336060234647
      01347   706021636043
      01350   462321633146
      01351   456005066062             BCD 6N 56 SHOULD FIND END OF RECORD SKIP.
      01352   304664432460
      01353   263145246025
      01354   452460462660
      01355   512523465124
      01356   606242314733
      01357   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 134                  FORCE NEW RECORD
1                          00206        ORG 134                 FORCE NEW RECORD
       00206  0 01303 0 01350           HTR X-1,0,LOCREC        CARD FOR DE
                           01303        ORG LOCREC
 TD    01303  3 00000 0 00206           TXH 134                  340  FT  58
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01351 0 01311           HTR PR,0,PR+32
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  262143622560              BCD  FALSE END OF FILE IN READING TIFGO FROM TAPE 2, FILE 5, RECO
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  312627466026
       01321  514644606321
       01322  472560027360
       01323  263143256005
       01324  736051252346
       01325  512460063360              BCD  RD 6.  THERE ARE 14 RECORDS IN THIS FILE.
       01326  606330255125
       01327  602151256001
       01330  046051252346
       01331  512462603145
       01332  606330316260
       01333  263143253360
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  234647706021              BCD  COPY AT LOCATION 336 SHOULD FIND END OF RECORD SKIP.
       01340  636043462321
       01341  633146456003
       01342  030660623046
       01343  644324602631
       01344  452460254524
       01345  604626605125
       01346  234651246062
       01347  423147336060
       01350  606060606060
       01351  0 00000 0 00000 X
 A                         00000        END
```

```
1            ORG 135                    FORCE NEW RECORD
1                        00207            ORG 135                FORCE NEW RECORD
       00207  0 01303 0 01357            HTR X-1,0,LOCREC       CARD FOR DE
                        01303            ORG LOCREC
 TD    01303  3 00000 0 00207            TXH 135                 366  FT  58
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01360 0 01311            HTR PR,0,PR+39
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060      PR       BCD 2
       01312  606060606060
       01313  262143622560               BCD  FALSE END OF FILE IN READING TRAD RECORD TAPE 2, FILE 5, REC
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  512124605125
       01321  234651246063
       01322  214725600273
       01323  602631432560
       01324  057360512523
       01325  465124600733               BCD  ORD 7.  THERE ARE 14 RECORDS
       01326  606063302551
       01327  256021512560
       01330  010460512523
       01331  465124626060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314560633031               BCD  IN THIS FILE.  COPY LOOP IS AT LOCATION 352.  COPY AT LOCATI
       01340  626026314325
       01341  336060234647
       01342  706043464647
       01343  603162602163
       01344  604346232163
       01345  314645600305
       01346  023360602346
       01347  477060216360
       01350  434623216331
       01351  464560030604               BCD 70N 364 SHOULD FIND END OF RECORD SKIP.
       01352  606230466443
       01353  246026314524
       01354  602545246046
       01355  266051252346
       01356  512460624231
       01357  473360606060
       01360  0 00000 0 00000 X
 A                       00000            END
```

123

```
1            ORG 136                  FORCE NEW RECORD
1                        00210          ORG 136                FORCE NEW RECORD
      00210  0 01303 0 01347           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00210           TXH 136                 417  FT  58
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01350 0 01311           HTR PR,0,PR+31
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  262143622560              BCD  FALSE END OF FILE IN READING TRALEV RECORD FROM TAPE 4, FILE
      01314  254524604626
      01315  602631432560
      01316  314560512521
      01317  243145276063
      01320  512143256560
      01321  512523465124
      01322  602651464460
      01323  632147256004
      01324  736026314325
      01325  600173605125              BCD   1, RECORD 1.  COPY LOOP IS AT LOCATION 401.
      01326  234651246001
      01327  336060234647
      01330  706043464647
      01331  603162602163
      01332  604346232163
      01333  314645600400
      01334  013360606060
      01335  606060606060
      01336  606060606060
      01337  234647706021              BCD 9COPY AT LOCATION 415 SHOULD FIND END OF RECORD SKIP.
      01340  636043462321
      01341  633146456004
      01342  010560623046
      01343  644324602631
      01344  452460254524
      01345  604626605125
      01346  234651246062
      01347  423147336060
      01350  0 00000 0 00000 X
 A                       00000          END
```

```
1            ORG 137                  FORCE NEW RECORD
1                        00211          ORG 137                FORCE NEW RECORD
       00211  0 01303 0 01334          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00211          TXH 137                 454  FT  62
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01335 0 01311          HTR PR,0,PR+20
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF FILE IN READING TIFGO RECORD FROM TAPE 2, FILE
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  312627466051
       01321  252346512460
       01322  265146446063
       01323  214725600273
       01324  602631432560
       01325  057360512523             BCD 85, RECORD 6.  COPY LOOP IS AT LOCATION 447.
       01326  465124600633
       01327  606023464770
       01330  604346464760
       01331  316260216360
       01332  434623216331
       01333  464560040407
       01334  336060606060
       01335  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 138                  FORCE NEW RECORD
1                          00212        ORG 138                FORCE NEW RECORD
       00212  0 01303 0 01334           HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD    01303  3 00000 0 00212           TXH 138                 534  FT  62
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01335 0 01311           HTR PR,0,PR+20
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060     PR       BCD 2
       01312  606060606060
       01313  262143622560              BCD  FALSE END OF FILE IN READING TRAD RECORD FROM TAPE 2, FILE 5
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  512124605125
       01321  234651246026
       01322  514644606321
       01323  472560027360
       01324  263143256005
       01325  736051252346              BCD 8, RECORD 7.  COPY LOOP IS AT LOCATION 530.
       01326  512460073360
       01327  602346477060
       01330  434646476031
       01331  626021636043
       01332  462321633146
       01333  456005030033
       01334  606060606060
       01335  0 00000 0 00000 X
A                          00000        END
```

```
1            ORG 139                  FORCE NEW RECORD
1                        00213          ORG 139                FORCE NEW RECORD
      00213  0 01303 0 01350           HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303  3 00000 0 00213           TXH 139                 336  FT  86
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01351 0 01311           HTR PR,0,PR+32
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  262143622560              BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 3, WHICH SHOUL
      01314  254524604626
      01315  602631432560
      01316  314560512521
      01317  243145276051
      01320  252346512460
      01321  265146446063
      01322  214725600373
      01323  606630312330
      01324  606230466443
      01325  246030216525              BCD  D HAVE BEEN POSITIONED AFTER FILE MARK
      01326  602225254560
      01327  474662316331
      01330  464525246021
      01331  266325516026
      01332  314325604421
      01333  514260606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  216360633025              BCD  AT THE END OF THE 8TH FILE.  COPY LOOP IS AT LOCATION 325.
      01340  602545246046
      01341  266063302560
      01342  106330602631
      01343  432533606023
      01344  464770604346
      01345  464760316260
      01346  216360434623
      01347  216331464560
      01350  030205336060
      01351  0 00000 0 00000 X
 A                       00000          END
```

```
1            ORG 140                  FORCE NEW RECORD
1                        00214          ORG 140                FORCE NEW RECORD
       00214  0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00214          TXH 140                1211  FT  75
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01351 0 01311          HTR PR,0,X
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  262143622560            BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 3, FILE 3.  TH
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276051
       01320  252346512460
       01321  265146446063
       01322  214725600373
       01323  602631432560
       01324  033360606330
       01325  256225602151            BCD  ESE ARE 15 WORD RECORDS AND
       01326  256001056066
       01327  465124605125
       01330  234651246260
       01331  214524606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  633025512560            BCD  THERE IS AN END OF FILE MARK.  COPY LOOP IS AT LOCATION 1172
       01340  316260214560
       01341  254524604626
       01342  602631432560
       01343  442151423360
       01344  602346477060
       01345  434646476031
       01346  626021636043
       01347  462321633146
       01350  456001010702
       01351  0 00000 0 00000 X
A                       00000          END
```

```
1            ORG 141                  FORCE NEW RECORD
1                        00215          ORG 141                FORCE NEW RECORD
       00215  0 01303 0 01344          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00215          TXH 141                1221  FT  75
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01345 0 01311          HTR PR,0,PR+28
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  262143622560            BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 3, FILE 3.  TH
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276051
       01320  252346512460
       01321  265146446063
       01322  214725600373
       01323  602631432560
       01324  033360606330
       01325  316260263143            BCD  IS FILE DOES NOT HAVE A FILE MARK AT THE END.
       01326  256024462562
       01327  604546636030
       01330  216525602160
       01331  263143256044
       01332  215142602163
       01333  606330256025
       01334  452433606060
       01335  606060606060
       01336  606060606060
       01337  234647706043            BCD 6COPY LOOP IS AT LOCATION 1172.
       01340  464647603162
       01341  602163604346
       01342  232163314645
       01343  600101070233
       01344  606060606060
       01345  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 142                 FORCE NEW RECORD
1                          00216       ORG 142                FORCE NEW RECORD
       00216  0 01303 0 01374          HTR X-1,0,LOCREC       CARD FOR DE
                          01303        ORG LOCREC
 TD    01303  3 00000 0 00216          TXH 142                  37  FT  90
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01375 0 01311          HTR PR,0,PR+52
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF FILE IN READING CIT RECORD FROM TAPE 3, WHICH S
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276023
       01320  316360512523
       01321  465124602651
       01322  464460632147
       01323  256003736066
       01324  303123306062
       01325  304664432460             BCD  HOULD HAVE BEEN POSITIONED AFTER FILE MARK.
       01326  302165256022
       01327  252545604746
       01330  623163314645
       01331  252460212663
       01332  255160263143
       01333  256044215142
       01334  336060606060
       01335  606060606060
       01336  606060606060
       01337  234647706043             BCD  COPY LOOP BEGINS AT LOCATION 30 WITH 2 BST INSTRUCTIONS.  CO
       01340  464647602225
       01341  273145626021
       01342  636043462321
       01343  633146456003
       01344  006066316330
       01345  600260226263
       01346  603145626351
       01347  642363314645
       01350  623360602346
       01351  477060216360             BCD  PY AT 35 IS PROGRAMMED
       01352  030560316260
       01353  475146275121
       01354  444425246060
       01355  606060606060
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  634660263145             BCD  TO FIND END OF RECORD SKIP.
       01364  246025452460
```

1260

```
01365  462660512523
01366  465124606242
01367  314733606060
01370  606060606060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  0 00000 0 00000 X
A                     00000        END
```

```
1            ORG 143                 FORCE NEW RECORD
1                        00217         ORG 143                 FORCE NEW RECORD
       00217  0 01303 0 01362         HTR X-1,0,LOCREC        CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00217         TXH 143                  321  FT  90
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01363 0 01311         HTR PR,0,PR+42
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  262143622560            BCD  FALSE END OF FILE IN READING A RECORD FROM TAPE 2.  COPY LOO
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276021
       01320  605125234651
       01321  246026514644
       01322  606321472560
       01323  023360602346
       01324  477060434646
       01325  476031626021            BCD  P IS AT LOCATION 305 AND READS FROM
       01326  636043462321
       01327  633146456003
       01330  000560214524
       01331  605125212462
       01332  602651464460
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  263143256003            BCD  FILE 3, 4, 5, 7, 9 OR 10.  COPY AT LOCATION 317 IS PROGRAMME
       01340  736004736005
       01341  736007736011
       01342  604651600100
       01343  336060234647
       01344  706021636043
       01345  462321633146
       01346  456003010760
       01347  316260475146
       01350  275121444425
       01351  246063466026            BCD  D TO FIND END OF RECORD SKIP.
       01352  314524602545
       01353  246046266051
       01354  252346512460
       01355  624231473360
       01356  606060606060
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  0 00000 0 00000 X
A                        00000         END
```

1262

```
1            ORG 144                  FORCE NEW RECORD
1                        00220          ORG 144                FORCE NEW RECORD
       00220  0 01303 0 01332          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD    01303  3 00000 0 00220          TXH 144                1341  FT  92
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01333 0 01311          HTR PR,0,PR+18
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 2, RECORD 2, F
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276051
       01320  252346512460
       01321  265146446063
       01322  214725600273
       01323  605125234651
       01324  246002736026
       01325  314325600533             BCD 6ILE 5.  COPY LOOP IS AT LOCATION 135.
       01326  606023464770
       01327  604346464760
       01330  316260216360
       01331  434623216331
       01332  464560010305
       01333  0 00000 0 00000 X
 A                       00000          END
```

```
1            ORG 145                  FORCE NEW RECORD
1                        00221          ORG 145                FORCE NEW RECORD
       00221  0 01303 0 01333          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00221          TXH 145                1347  FT  92
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01334 0 01311          HTR PR,0,PR+19
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF FILE IN READING RECORD FROM TAPE 2, RECORD 4, F
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276051
       01320  252346512460
       01321  265146446063
       01322  214725600273
       01323  605125234651
       01324  246004736026
       01325  314325600533             BCD 7ILE 5.  COPY LOOP IS AT LOCATION 1131.
       01326  606023464770
       01327  604346464760
       01330  316260216360
       01331  434623216331
       01332  464560010103
       01333  013360606060
       01334  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 146                 FORCE NEW RECORD
1                        00222         ORG 146                FORCE NEW RECORD
      00222  0 01303 0 01350          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00222          TXH 146                3672  FT  115
      01304  0 07400 4 00740          TSX PRINT,4
      01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740          TSX PRINT,4
      01307  0 01351 0 01311          HTR PR,0,PR+32
      01310  0 02000 0 00221          TRA DIGRTN
      01311  606060606060     PR      BCD 2
      01312  606060606060
      01313  262143622560             BCD  FALSE END OF FILE IN READING TAPE RECORD OF CARD IMAGE FROM
      01314  254524604626
      01315  602631432560
      01316  314560512521
      01317  243145276063
      01320  214725605125
      01321  234651246046
      01322  266023215124
      01323  603144212725
      01324  602651464460
      01325  632147256003             BCD  TAPE 3.  COPY AT LOCATION 3670 SHOULD
      01326  336060234647
      01327  706021636043
      01330  462321633146
      01331  456003060700
      01332  606230466443
      01333  246060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  232164622560             BCD  CAUSE END OF RECORD SKIP.  COPY LOOP IS AT LOCATION 3655.
      01340  254524604626
      01341  605125234651
      01342  246062423147
      01343  336060234647
      01344  706043464647
      01345  603162602163
      01346  604346232163
      01347  314645600306
      01350  050533606060
      01351  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 147                  FORCE NEW RECORD
1                        00223          ORG 147                FORCE NEW RECORD
       00223  0 01303 0 01351          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00223          TXH 147                 427  FT  96
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01352 0 01311          HTR PR,0,PR+33
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262143622560             BCD  FALSE END OF FILE IN READING THE COMMON RECORD FROM TAPE 2,
       01314  254524604626
       01315  602631432560
       01316  314560512521
       01317  243145276063
       01320  302560234644
       01321  444645605125
       01322  234651246026
       01323  514644606321
       01324  472560027360
       01325  512523465124             BCD  RECORD 3, FILE 5.  COPY LOOP IS AT LOCATION 404.
       01326  600373602631
       01327  432560053360
       01330  602346477060
       01331  434646476031
       01332  626021636043
       01333  462321633146
       01334  456004000433
       01335  606060606060
       01336  606060606060
       01337  234647706021             BCD  COPY AT LOCATION 414 IS PROGRAMMED TO FIND END OF RECORD SKI
       01340  636043462321
       01341  633146456004
       01342  010460316260
       01343  475146275121
       01344  444425246063
       01345  466026314524
       01346  602545246046
       01347  266051252346
       01350  512460624231
       01351  473360606060             BCD 1P.
       01352  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 148                  FORCE NEW RECORD
1                          00224        ORG 148                FORCE NEW RECORD
      00224  0 01303 0 01352            HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD   01303  3 00000 0 00224            TXH 148                 624  FT   98
      01304  0 07400 4 00740            TSX PRINT,4
      01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740            TSX PRINT,4
      01307  0 01353 0 01311            HTR PR,0,PR+34
      01310  0 02000 0 00221            TRA DIGRTN
      01311  606060606060      PR       BCD 2
      01312  606060606060
      01313  262143622560               BCD  FALSE END OF FILE IN READING SUBDEF TABLE FROM TAPE 2, RECOR
      01314  254524604626
      01315  602631432560
      01316  314560512521
      01317  243145276062
      01320  642224252660
      01321  632122432560
      01322  265146446063
      01323  214725600273
      01324  605125234651
      01325  246002736026               BCD  D 2, FILE 5.  COPY LOOP IS AT
      01326  314325600533
      01327  606023464770
      01330  604346464760
      01331  316260216360
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  434623216331               BCD  LOCATION 454.  COPY AT 464 IS PROGRAMMED TO FIND END OF RECO
      01340  464560040504
      01341  336060234647
      01342  706021636004
      01343  060460316260
      01344  475146275121
      01345  444425246063
      01346  466026314524
      01347  602545246046
      01350  266051252346
      01351  512460624231               BCD 2RD SKIP.
      01352  473360606060
      01353  0 00000 0 00000 X
A                          00000        END
```

```
1            ORG 149                  FORCE NEW RECORD
1                        00225          ORG 149                FORCE NEW RECORD
       00225  0 01303 0 01357          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00225          TXH 149                6004  FT  32
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01360 0 01311          HTR PR,0,PR+39
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  216062642262             BCD  A SUBSCRIPT COMBINATION, AT LEAST 1 INDEX OF WHICH IS UNDER
       01314  235131476360
       01315  234644223145
       01316  216331464573
       01317  602163604325
       01320  216263600160
       01321  314524256760
       01322  462660663031
       01323  233060316260
       01324  644524255160
       01325  234645635146             BCD  CONTROL OF A DO, IS BEING EXAMINED.
       01326  436046266021
       01327  602446736031
       01330  626022253145
       01331  276025672144
       01332  314525243360
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  216062642262             BCD  A SUBSCRIPT HAS BEEN FOUND WITHOUT SUCH AN INDEX.  THE LOGIC
       01340  235131476360
       01341  302162602225
       01342  254560264664
       01343  452460663163
       01344  304664636062
       01345  642330602145
       01346  603145242567
       01347  336060633025
       01350  604346273123
       01351  604626606330             BCD 7 OF THE PROGRAM MAKES THIS IMPOSSIBLE.
       01352  256047514627
       01353  512144604421
       01354  422562606330
       01355  316260314447
       01356  466262312243
       01357  253360606060
       01360  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 150                  FORCE NEW RECORD
1                        00226          ORG 150                FORCE NEW RECORD
       00226  0 01303 0 01355          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD    01303  3 00000 0 00226          TXH 150                6710  FT  27
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01356 0 01311          HTR PR,0,PR+37
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  514664633145             BCD  ROUTINE AT LOCATION 6711 SHOULD BE ABLE TO CONTINUE ANALYSIS
       01314  256021636043
       01315  462321633146
       01316  456006070101
       01317  606230466443
       01320  246022256021
       01321  224325606346
       01322  602346456331
       01323  456425602145
       01324  214370623162
       01325  604626604525             BCD   OF NEXT DO IN NEST.  CURRENT LEVEL FOR AN
       01326  676360244660
       01327  314560452562
       01330  633360602364
       01331  515125456360
       01332  432565254360
       01333  264651602145
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314545255160             BCD  INNER DO HAS BEEN REDUCED TO 1.  LOGIC OF THE PROGRAM MAKES
       01340  244660302162
       01341  602225254560
       01342  512524642325
       01343  246063466001
       01344  336060434627
       01345  312360462660
       01346  633025604751
       01347  462751214460
       01350  442142256260
       01351  633031626031             BCD 5THIS IMPOSSIBLE.
       01352  444746626231
       01353  224325336060
       01354  606060606060
       01355  606060606060
       01356  0 00000 0 00000 X
 A                       00000          END
```

```
1            ORG 151                  FORCE NEW RECORD
1                        00227          ORG 151                FORCE NEW RECORD
       00227  0 01303 0 01355          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00227          TXH 151                6373  FT  27
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01356 0 01311          HTR PR,0,PR+37
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  216024466045             BCD  A DO NESTED WITHIN ANOTHER DO HAS BEEN FOUND TO HAVE A LEVEL
       01314  256263252460
       01315  663163303145
       01316  602145466330
       01317  255160244660
       01320  302162602225
       01321  254560264664
       01322  452460634660
       01323  302165256021
       01324  604325652543
       01325  602162623127             BCD   ASSIGNMENT LESS THAN OR EQUAL TO 1.
       01326  454425456360
       01327  432562626063
       01330  302145604651
       01331  602550642143
       01332  606346600133
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  633025604346             BCD  THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE. THE LEVEL CO
       01340  273123604626
       01341  606330256047
       01342  514627512144
       01343  604421422562
       01344  606330316260
       01345  314447466262
       01346  312243253360
       01347  633025604325
       01350  652543602346
       01351  644563603162             BCD 5UNT IS IN INDEX REGISTER 2.
       01352  603145603145
       01353  242567605125
       01354  273162632551
       01355  600233606060
       01356  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 152                  FORCE NEW RECORD
1                        00230          ORG 152                FORCE NEW RECORD
       00230  0 01303 0 01366          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00230          TXH 152                6376  FT  27
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01367 0 01311          HTR PR,0,PR+46
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  314524256760            BCD  INDEX REGISTER 1 HAS BEEN INCREMENTED BEYOND THE MAXIMUM SET
       01314  512527316263
       01315  255160016030
       01316  216260222525
       01317  456031452351
       01320  254425456325
       01321  246022257046
       01322  452460633025
       01323  604421673144
       01324  644460622563
       01325  633145276047            BCD  TING PERMISSABLE IN THIS SECTION OF PROGRAM,
       01326  255144316262
       01327  212243256031
       01330  456063303162
       01331  606225236331
       01332  464560462660
       01333  475146275121
       01334  447360606060
       01335  606060606060
       01336  606060606060
       01337  242562473163            BCD  DESPITE A TEST IN THE ROUTINE WHICH PREVENTS THIS.  PROGRAM
       01340  256021606325
       01341  626360314560
       01342  633025605146
       01343  646331452560
       01344  663031233060
       01345  475125652545
       01346  636260633031
       01347  623360604751
       01350  462751214460
       01351  623046644324            BCD  SHOULD BE ABLE TO OBTAIN DOTAG ENTRY
       01352  602225602122
       01353  432560634660
       01354  462263213145
       01355  602446632127
       01356  602545635170
       01357  606060606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  264651604525            BCD 4FOR NEXT OUTER DO.
       01364  676360466463
```

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        01365  255160244633
        01366  606060606060
        01367  0 00000 0 00000 X
A                      00000        END
```

```
1            ORG 153                  FORCE NEW RECORD
1                        00231          ORG 153                FORCE NEW RECORD
       00231  0 01303 0 01400          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00231          TXH 153                5742  FT  27
                                            153                5763  FT  27
                                            153                5764  FT  27
                        06306 TIFX     SYN 3270               6306 OCTAL
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 50000 0 06306          CLA TIFX               CURRENT INDEX TO TIFGO ENTRIES
       01307  0 77100 0 00022          ARS 18
       01310  0 62100 0 01400          STA TIFGO
       01311  0 50000 0 01377          CLA TIFZ               ADDRESS OF TIFGO BUFFER, THIS IS NOW
       01312  0 40200 0 01400          SUB TIFGO              ON DRUM 4
       01313  0 62100 0 01340          STA A
       01314  0 76200 0 00304          RDR 4
       01315  0 46000 0 01340          LDA A
       01316  0 70000 0 01400          CPY TIFGO              INTERNAL NUMBER OF TIFGO IN DECREMENT
       01317  0 50000 0 01400          CLA TIFGO
       01320  0 77100 0 00022          ARS 18                 GET EXTERNAL STATEMENT NUMBER
       01321  0 07400 4 00613          TSX EXBETA,4
       01322  0 60200 0 01400          SLW TIFGO               123 FROM ABOVE INTO COMMENT
       01323 -0 50000 0 01350          CAL COMA
       01324  0 77100 0 00022          ARS 18
       01325  0 56000 0 01400          LDQ TIFGO
       01326 -0 76300 0 00022          LGL 18
       01327  0 60200 0 01350          SLW COMA
       01330 -0 76300 0 00022          LGL 18                 45 FROM ABOVE INTO REST OF COMMENT
       01331  0 56000 0 01351          LDQ COMB
       01332 -0 77300 0 00022          RQL 18                 SHIFT 2 CHARACTERS OUT OF MQ
       01333 -0 76300 0 00022          LGL 18
       01334  0 60200 0 01351          SLW COMB
       01335  0 07400 4 00740          TSX PRINT,4
       01336  0 01377 0 01341          HTR PR,0,PR+30
       01337  0 02000 0 00221          TRA DIGRTN
       01340  0 00000 0 00000 A
       01341  606060606060     PR     BCD 2
       01342  606060606060
       01343  633025603126            BCD 5THE IF OR GO TO STATEMENT NUMB
       01344  604651602746
       01345  606346606263
       01346  216325442545
       01347  636045644422
       01350  255160606060     COMA   BCD 1ER
       01351  606060603021     COMB   BCD 1    HA
       01352  626022252545            BCD  S BEEN ASSIGNED A CLASSIFICATION HIGHER THAN 6.
       01353  602162623127
       01354  452524602160
       01355  234321626231
       01356  263123216331
       01357  464560303127
       01360  302551606330
       01361  214560063360
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01362  606060606060
01363  606060606060
01364  606060606060          BCD 3
01365  606060606060
01366  606060606060
01367  633025604346          BCD 8THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01370  273123604626
01371  606330256047
01372  514627512144
01373  604421422562
01374  606330316260
01375  314447466262
01376  312243253360
01377  0 00000 0 03670 TIFZ   HTR 1976              3670 OCTAL
01400  0 00000 0 00000 TIFGO  HTR 0
01401  0 00000 0 00000 X
A                    00000    ..   END
```

```
1            ORG 154                    FORCE NEW RECORD
1                        00232            ORG 154                FORCE NEW RECORD
      00232  0 01303 0 01360              HTR X-1,0,LOCREC       CARD FOR DE
                         01303            ORG LOCREC
 TD   01303  3 00000 0 00232              TXH 154                5773  FT  51
      01304  0 07400 4 00740              TSX PRINT,4
      01305  0 01244 0 01237              HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740              TSX PRINT,4
      01307  0 01361 0 01311              HTR PR,0,PR+40
      01310  0 02000 0 00221              TRA DIGRTN
      01311  606060606060     PR          BCD 2
      01312  606060606060
      01313  234645632545                 BCD  CONTENTS OF DOIND (LOCATION 5230) DO NOT MATCH CONTENTS OF E
      01314  636260462660
      01315  244631452460
      01316  744346232163
      01317  314645600502
      01320  030034602446
      01321  604546636044
      01322  216323306023
      01323  464563254563
      01324  626046266025
      01325  316330255160                 BCD  ITHER TAG2+1,2  (LOCATION 3650),  TAG2+2,2  OR
      01326  632127022001
      01327  730260607443
      01330  462321633146
      01331  456003060500
      01332  347360606321
      01333  270220027302
      01334  606046516060
      01335  606060606060
      01336  606060606060
      01337  632127022003                 BCD  TAG2+3,2.· LOGIC OF PROGRAM MAKES THIS IMPOSSIBLE.  SUBROUTI
      01340  730233606043
      01341  462731236046
      01342  266047514627
      01343  512144604421
      01344  422562606330
      01345  316260314447
      01346  466262312243
      01347  253360606264
      01350  225146646331
      01351  452560663031                 BCD 8NE WHICH CANNOT FIND MATCH IS AT LOCATION 4204.
      01352  233060232145
      01353  454663602631
      01354  452460442163
      01355  233060316260
      01356  216360434623
      01357  216331464560
      01360  040200043360
      01361  0 00000 0 00000 X
A                        00000            END
```

```
1            ORG 155                    FORCE NEW RECORD
1                        00233            ORG 155                FORCE NEW RECORD
       00233  0 01303 0 01357            HTR X-1,0,LOCREC       CARD FOR DE
                        01303            ORG LOCREC
 TD    01303  3 00000 0 00233            TXH 155                6353  FT  51
       01304  0 07400 4 00740            TSX PRINT,4
       01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740            TSX PRINT,4
       01307  0 01360 0 01311            HTR PR,0,PR+39
       01310  0 02000 0 00221            TRA DIGRTN
       01311  606060606060     PR        BCD 2
       01312  606060606060
       01313  632122432560               BCD  TABLE SEARCH FAILURE.  LOGIC OF PROGRAM MAKES THIS IMPOSSIBL
       01314  622521512330
       01315  602621314364
       01316  512533606043
       01317  462731236046
       01320  266047514627
       01321  512144604421
       01322  422562606330
       01323  316260314447
       01324  466262312243
       01325  253360606264               BCD  E.  SUBROUTINE AT LOCATION 6277 COMPILES
       01326  225146646331
       01327  452560216360
       01330  434623216331
       01331  464560060207
       01332  076023464447
       01333  314325626060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  215127644425               BCD  ARGUMENT (LOCATION 5243) WHICH SUBROUTINE AT LOCATION 6354 I
       01340  456360744346
       01341  232163314645
       01342  600502040334
       01343  606630312330
       01344  606264225146
       01345  646331452560
       01346  216360434623
       01347  216331464560
       01350  060305046031
       01351  626064452122               BCD 7S UNABLE TO MATCH IN A BLOCK OF CONSTANTS.
       01352  432560634660
       01353  442163233060
       01354  314560216022
       01355  434623426046
       01356  266023464562
       01357  632145636233
       01360  0 00000 0 00000 X
A                        00000            END
```

```
1            ORG 156                  FORCE NEW RECORD
1                        00234          ORG 156                FORCE NEW RECORD
      00234   0 01303 0 01351          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00234          TXH 156                7110  FT  43
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01352 0 01311          HTR PR,0,PR+33
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   632122432560             BCD  TABLE BEGINNING AT LOCATION 6400 HAS BEEN ORDERED BY ROUTINE
      01314   222527314545
      01315   314527602163
      01316   604346232163
      01317   314645600604
      01320   000060302162
      01321   602225254560
      01322   465124255125
      01323   246022706051
      01324   466463314525
      01325   602163604346             BCD   AT LOCATION 7053.
      01326   232163314645
      01327   600700050333
      01330   606060606060
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   232162603145             BCD  CAS INSTRUCTION AT LOCATION 7105 SHOWS THAT TABLE IS OUT OF
      01340   626351642363
      01341   314645602163
      01342   604346232163
      01343   314645600701
      01344   000560623046
      01345   666260633021
      01346   636063212243
      01347   256031626046
      01350   646360462660
      01351   465124255133             BCD 1ORDER.
      01352   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 157                    FORCE NEW RECORD
1                        00235            ORG 157                FORCE NEW RECORD
      00235  0 01303 0 01414              HTR X-1,0,LOCREC       CARD FOR DE
                        01303              ORG LOCREC
 TD   01303  3 00000 0 00235              TXH 157                 354  FT  64
      01304  0 07400 4 00740              TSX PRINT,4
      01305  0 01244 0 01237              HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740              TSX PRINT,4
      01307  0 01415 0 01311              HTR PR,0,PR+68
      01310  0 02000 0 00221              TRA DIGRTN
      01311  606060606060      PR         BCD 2
      01312  606060606060
      01313  454660254563                 BCD  NO ENTRY IN TIFRED TABLE FOR A VARIABLE FROM AN ASSIGNED GO
      01314  517060314560
      01315  633126512524
      01316  606321224325
      01317  602646516021
      01320  606521513121
      01321  224325602651
      01322  464460214560
      01323  216262312745
      01324  252460274660
      01325  634660626321                 BCD  TO STATEMENT IN THE COMPILED INSTRUCTIONS.
      01326  632544254563
      01327  603145606330
      01330  256023464447
      01331  314325246031
      01332  456263516423
      01333  633146456233
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  434627312360                 BCD  LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.  STOP MAY BE DUE
      01340  462660633025
      01341  604751462751
      01342  214460442142
      01343  256260633031
      01344  626031444746
      01345  626231224325
      01346  336060626346
      01347  476044217060
      01350  222560246425
      01351  606346602551                 BCD   TO ERROR BY SUBROUTINE AT LOCATION 435 IN THE
      01352  514651602270
      01353  606264225146
      01354  646331452560
      01355  216360434623
      01356  216331464560
      01357  040305603145
      01360  606330256060
      01361  606060606060
      01362  606060606060
      01363  475125653146                 BCD  PREVIOUS FORTRAN RECORD, WHICH ACCUMULATES ASSIGNED GO TO EN
      01364  646260264651
```

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01365  635121456051
01366  252346512473
01367  606630312330
01370  602123236444
01371  644321632562
01372  602162623127
01373  452524602746
01374  606346602545
01375  635131256260          BCD  TRIES AS IT READS TAPE 2 AND WRITES
01376  216260316360
01377  512521246260
01400  632147256002
01401  602145246066
01402  513163256260
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  633025446021          BCD 6THEM AS THE TIFRED TABLE ON DRUM 1.
01410  626063302560
01411  633126512524
01412  606321224325
01413  604645602451
01414  644460013360
01415  0 00000 0 00000 X
A                    00000        END
```

```
1            ORG 158                    FORCE NEW RECORD
1                          00236          ORG 158                 FORCE NEW RECORD
        00236  0 01303 0 01360            HTR X-1,0,LOCREC        CARD FOR DE
                           01303          ORG LOCREC
 TD     01303  3 00000 0 00236            TXH 158                  711  FT  62
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740            TSX PRINT,4
        01307  0 01361 0 01311            HTR PR,0,PR+40
        01310  0 02000 0 00221            TRA DIGRTN
        01311  606060606060      PR       BCD 2
        01312  606060606060
        01313  443162234644               BCD  MISCOMPILED ENTRY IN FRET TABLE, TAPE 2, FILE 5, RECORD 12.
        01314  473143252460
        01315  254563517060
        01316  314560265125
        01317  636063212243
        01320  257360632147
        01321  256002736026
        01322  314325600573
        01323  605125234651
        01324  246001023360
        01325  604321626360               BCD   LAST WORD OF RECORD INTRODUCES
        01326  664651246046
        01327  266051252346
        01330  512460314563
        01331  514624642325
        01332  626060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  452566606263               BCD  NEW STATEMENT NUMBER, BUT NO ENTRIES FOLLOW WHICH WOULD GIVE
        01340  216325442545
        01341  636045644422
        01342  255173602264
        01343  636045466025
        01344  456351312562
        01345  602646434346
        01346  666066303123
        01347  306066466443
        01350  246027316525
        01351  602651255064               BCD 8 FREQUENCY INFORMATION ABOUT THE STATEMENT.
        01352  254523706031
        01353  452646514421
        01354  633146456021
        01355  224664636063
        01356  302560626321
        01357  632544254563
        01360  336060606060
        01361  0 00000 0 00000 X
 A                         00000          END
```

```
1            ORG 159                 FORCE NEW RECORD
1                        00237         ORG 159                FORCE NEW RECORD
      00237  0 01303 0 01370          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00237          TXH 159                 556  FT  64
      01304  0 07400 4 00740          TSX PRINT,4
      01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740          TSX PRINT,4
      01307  0 01371 0 01311          HTR PR,0,PR+48
      01310  0 02000 0 00221          TRA DIGRTN
      01311  606060606060     PR      BCD 2
      01312  606060606060
      01313  443162234644             BCD  MISCOMPILED ENTRY IN CIT TABLE.  THE TYPE OF STATEMENT A IF
      01314  473143252460
      01315  254563517060
      01316  314560233163
      01317  606321224325
      01320  336060633025
      01321  606370472560
      01322  462660626321
      01323  632544254563
      01324  602160312660
      01325  742534604501             BCD  (E) N1, N2, N3
      01326  736045027360
      01327  450360606060
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  316260635121             BCD  IS TRANSLATED TO TZE, TPL AND TRA.  A TZE HAS BEEN FOUND IN
      01340  456243216325
      01341  246063466063
      01342  712573606347
      01343  436021452460
      01344  635121336060
      01345  216063712560
      01346  302162602225
      01347  254560264664
      01350  452460314560
      01351  632122432560             BCD  TABLE OF COMPILED INSTRUCTIONS,
      01352  462660234644
      01353  473143252460
      01354  314562635164
      01355  236331464562
      01356  736060606060
      01357  606060606060
      01360  606060606060
      01361  606060606060
      01362  606060606060
      01363  663031233060             BCD 6WHICH IS NOT IN THIS SEQUENCE.
      01364  316260454663
```

```
01365  603145606330
01366  316260622550
01367  642545232533
01370  606060606060
01371  0 00000 0 00000 X
A                 00000        END
```

```
1            ORG 160                 FORCE NEW RECORD
1                        00240         ORG 160                FORCE NEW RECORD
       00240  0 01303 0 01317         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00240         TXH 160                3001  FT  88
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01320 0 01311         HTR PR,0,PR+7
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  443162234644            BCD 5MISCOMPILED GO TO STATEMENT.
       01314  473143252460
       01315  274660634660
       01316  626321632544
       01317  254563336060
       01320  0 00000 0 00000 X
 A                      00000         END
```

```
1            ORG 161                  FORCE NEW RECORD
1                        00241          ORG 161                FORCE NEW RECORD
       00241  0 01303 0 01317          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00241          TXH 161                3253  FT  88
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01320 0 01311          HTR PR,0,PR+7
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  443162234644             BCD 5MISCOMPILED IF STATEMENT.
       01314  473143252460
       01315  312660626321
       01316  632544254563
       01317  336060606060
       01320  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 162                 FORCE NEW RECORD
1                        00242         ORG 162                 FORCE NEW RECORD
      00242  0 01303 0 01331           HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00242           TXH 162                  345  FT   5
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01332 0 01311           HTR PR,0,PR+17
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  443162234644              BCD  MISCOMPILED NAME.  IMPOSSIBLE BCD CHARACTER AS THE FIRST CHA
      01314  473143252460
      01315  452144253360
      01316  603144474662
      01317  623122432560
      01320  222324602330
      01321  215121236325
      01322  516021626063
      01323  302560263151
      01324  626360233021
      01325  512123632551              BCD 5RACTER IN A SYMBOLIC ADDRESS.
      01326  603145602160
      01327  627044224643
      01330  312360212424
      01331  512562623360
      01332  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 163                    FORCE NEW RECORD
1                          00243          ORG 163                FORCE NEW RECORD
       00243  0 01303 0 01316             HTR X-1,0,LOCREC       CARD FOR DE
                           01303          ORG LOCREC
 TD    01303  3 00000 0 00243             TXH 163                 443  FT 103
                                              163                 520  FT 113
       01304  0 07400 4 00740             TSX PRINT,4
       01305  0 01244 0 01237             HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740             TSX PRINT,4
       01307  0 01317 0 01311             HTR PR,0,PR+6
       01310  0 02000 0 00221             TRA DIGRTN
       01311  606060606060      PR        BCD 2
       01312  606060606060
       01313  443162234644                BCD 4MISCOMPILED SYNONYM.
       01314  473143252460
       01315  627045464570
       01316  443360606060
       01317  0 00000 0 00000 X
 A                         00000          END
```

```
1            ORG 164                 FORCE NEW RECORD
1                        00244         ORG 164                 FORCE NEW RECORD
       00244  0 01303 0 01324         HTR X-1,0,LOCREC        CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00244         TXH 164                  252  FT 105
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01325 0 01311         HTR PR,0,PR+12
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  443162234644            BCD  MISCOMPILED NAME.  FORSUB ENTRY NOT IN SYMBOL TABLE.
       01314  473143252460
       01315  452144253360
       01316  602646516264
       01317  226025456351
       01320  706045466360
       01321  314560627044
       01322  224643606321
       01323  224325336060
       01324  606060606060
       01325  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 165                  FORCE NEW RECORD
1                        00245          ORG 165                FORCE NEW RECORD
       00245  0 01303 0 01323          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00245          TXH 165                 312  FT 113
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01324 0 01311          HTR PR,0,PR+11
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  443162234644             BCD 9MISCOMPILED NAME. VARIABLE NAME NOT IN SYMBOL TABLE.
       01314  473143252460
       01315  452144253360
       01316  652151312122
       01317  432560452144
       01320  256045466360
       01321  314560627044
       01322  224643606321
       01323  224325336060
       01324  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 166                 FORCE NEW RECORD
1                        00246         ORG 166                FORCE NEW RECORD
      00246  0 01303 0 01332           HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303  3 00000 0 00246           TXH 166                 661  FT  75
                                           166                1022  FT  75
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01333 0 01311           HTR PR,0,PR+18
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  314524256760              BCD  INDEX REGISTER FOR CURRENT TAG HAS NOT BEEN CHOSEN.  LOGIC 0
      01314  512527316263
      01315  255160264651
      01316  602364515125
      01317  456360632127
      01320  603021626045
      01321  466360222525
      01322  456023304662
      01323  254533606043
      01324  462731236046
      01325  266047514627              BCD 6F PROGRAM MAKES THIS IMPOSSIBLE.
      01326  512144604421
      01327  422562606330
      01330  316260314447
      01331  466262312243
      01332  253360606060
      01333  0 00000 0 00000 X
 A                       00000         END
```

```
1            ORG 167                  FORCE NEW RECORD
1                        00247          ORG 167                FORCE NEW RECORD
       00247  0 01303 0 01355          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00247          TXH 167                 301  FT  67
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01356 0 01311          HTR PR,0,PR+37
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  626422514664             BCD  SUBROUTINE AT LOCATION 276 HAS ATTEMPTED TO READ ANOTHER BUF
       01314  633145256021
       01315  636043462321
       01316  633146456002
       01317  070660302162
       01320  602163632544
       01321  476325246063
       01322  466051252124
       01323  602145466330
       01324  255160226426
       01325  262551604626             BCD  FER OF THE FRET TABLE ON DRUM 2.  A PREVIOUS
       01326  606330256026
       01327  512563606321
       01330  224325604645
       01331  602451644460
       01332  023360602160
       01333  475125653146
       01334  646260606060
       01335  606060606060
       01336  606060606060
       01337  472162626063             BCD  PASS THROUGH THIS ROUTINE HAS SET A SIGNAL TO SHOW THAT ALL
       01340  305146642730
       01341  606330316260
       01342  514664633145
       01343  256030216260
       01344  622563602160
       01345  623127452143
       01346  606346606230
       01347  466660633021
       01350  636021434360
       01351  265125636025             BCD 5FRET ENTRIES ARE IN CORE.
       01352  456351312562
       01353  602151256031
       01354  456023465125
       01355  336060606060
       01356  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 168                  FORCE NEW RECORD
1                        00250          ORG 168                FORCE NEW RECORD
       00250  0 01303 0 01357          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00250          TXH 168                3064  FT  64
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01360 0 01311          HTR PR,0,PR+39
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  626422514664             BCD  SUBROUTINE AT LOCATION 3064 HAS ATTEMPTED TO READ ANOTHER BU
       01314  633145256021
       01315  636043462321
       01316  633146456003
       01317  000604603021
       01320  626021636325
       01321  444763252460
       01322  634660512521
       01323  246021454663
       01324  302551602264
       01325  262625516046             BCD  FFER OF THE TIFRD TABLE FROM DRUM 1.
       01326  266063302560
       01327  633126512460
       01330  632122432560
       01331  265146446024
       01332  516444600133
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  216047512565             BCD  A PREVIOUS PASS THROUGH THIS ROUTINE HAS SET A SIGNAL TO SHO
       01340  314664626047
       01341  216262606330
       01342  514664273060
       01343  633031626051
       01344  466463314525
       01345  603021626062
       01346  256360216062
       01347  312745214360
       01350  634660623046
       01351  666063302163             BCD 7W THAT ALL TIFRD ENTRIES ARE IN CORE.
       01352  602143436063
       01353  312651246025
       01354  456351312562
       01355  602151256031
       01356  456023465125
       01357  336060606060
       01360  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 169                  FORCE NEW RECORD
1                        00251          ORG 169                FORCE NEW RECORD
       00251  0 01303 0 01327          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00251          TXH 169                 762  FT  75
                                           169                1634  FT  75
                                           169                1777  FT  75
                                           169                4031  FT  75
                                           169                4303  FT  75
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01330 0 01311          HTR PR,0,PR+15
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  472551446463             BCD  PERMUTATION NUMBER MATCH NOT FOUND.  LOGIC OF PROGRAM MAKES
       01314  216331464560
       01315  456444222551
       01316  604421632330
       01317  604546636026
       01320  466445243360
       01321  604346273123
       01322  604626604751
       01323  462751214460
       01324  442142256260
       01325  633031626031             BCD 3THIS IMPOSSIBLE.
       01326  444746626231
       01327  224325336060
       01330  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 170                  FORCE NEW RECORD
1                          00252        ORG 170                FORCE NEW RECORD
       00252  0 01303 0 01416          HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD    01303  3 00000 0 00252          TXH 170                1307  FT  22
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01417 0 01311          HTR PR,0,PR+70
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  255151465160             BCD  ERROR IN COMPUTING CHECK SUM OF FLOCON TABLE.  THIS TABLE CO
       01314  314560234644
       01315  476463314527
       01316  602330252342
       01317  606264446046
       01320  266026434623
       01321  464560632122
       01322  432533606063
       01323  303162606321
       01324  224325602346
       01325  456231626362             BCD  NSISTS OF BLOCKS OF FIFTY WORDS, EACH BLOCK
       01326  604626602243
       01327  462342626046
       01330  266026312663
       01331  706066465124
       01332  627360252123
       01333  306022434623
       01334  426060606060
       01335  606060606060
       01336  606060606060
       01337  475125232524             BCD  PRECEDED BY ITS OWN CHECK SUM.  THE ACL INSTRUCTION AT LOCAT
       01340  252460227060
       01341  316362604666
       01342  456023302523
       01343  426062644433
       01344  606063302560
       01345  212343603145
       01346  626351642363
       01347  314645602163
       01350  604346232163
       01351  314645600102             BCD  ION 1261 HAS PICKED UP THE CHECK SUM OF
       01352  060160302162
       01353  604731234225
       01354  246064476063
       01355  302560233025
       01356  234260626444
       01357  604626606060
       01360  606060606060
       01361  606060606060
       01362  606060606060
       01363  633025604525             BCD  THE NEXT BLOCK AND THE TNX INSTRUCTION AT 1263 SHOWS THAT TH
       01364  676360224346
```

```
01365  234260214524
01366  606330256063
01367  456760314562
01370  635164236331
01371  464560216360
01372  010206036062
01373  304666626063
01374  302163606330
01375  255125602151          BCD  ERE ARE NO ENTRIES IN THE BLOCK.
01376  256045466025
01377  456351312562
01400  603145606330
01401  256022434623
01402  423360606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  633025604346          BCD 8THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01410  273123604626
01411  606330256047
01412  514627512144
01413  604421422562
01414  606330316260
01415  314447466262
01416  312243253360
01417  0 00000 0 00000 X
A                   00000        END
```

```
1            ORG 171                 FORCE NEW RECORD
1                          00253       ORG 171                 FORCE NEW RECORD
       00253  0 01303 0 01357          HTR X-1,0,LOCREC        CARD FOR DE
                           01303       ORG LOCREC
 TD    01303  3 00000 0 00253          TXH 171                 1076  FT  45
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01360 0 01311          HTR PR,0,PR+39
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE TRANSFER TO FIRST INSTRUCTION FOLLOWING CAS INSTR
       01314  312243256063
       01315  512145622625
       01316  516063466026
       01317  315162636031
       01320  456263516423
       01321  633146456026
       01322  464343466631
       01323  452760232162
       01324  603145626351
       01325  642363314645             BCD  UCTION AT LOCATION 1075.  TLQ INSTRUCTION
       01326  602163604346
       01327  232163314645
       01330  600100070533
       01331  606063435060
       01332  314562635164
       01333  236331464560
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  216360434623             BCD  AT LOCATION 1073 HAS JUST PROVED THAT WORD FROM LOCATION 140
       01340  216331464560
       01341  010007036030
       01342  216260416462
       01343  636047514665
       01344  252460633021
       01345  636066465124
       01346  602651464460
       01347  434623216331
       01350  464560010400
       01351  066031626043             BCD 76 IS LESS THAN WORD IN LOCATION 1410.
       01352  256262606330
       01353  214560664651
       01354  246031456043
       01355  462321633146
       01356  456001040100
       01357  336060606060
       01360  0 00000 0 00000 X
A                          00000       END
```

```
1            ORG 172                  FORCE NEW RECORD
1                          00254        ORG 172                FORCE NEW RECORD
       00254  0 01303 0 01357          HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD    01303  3 00000 0 00254          TXH 172                4623  FT  51
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01360 0 01311          HTR PR,0,PR+39
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE TRANSFER TO FIRST INSTRUCTION FOLLOWING CAS INSTR
       01314  312243256063
       01315  512145622625
       01316  516063466026
       01317  315162636031
       01320  456263516423
       01321  633146456026
       01322  464343466631
       01323  452760232162
       01324  603145626351
       01325  642363314645             BCD  UCTION AT LOCATION 4622.  TLQ INSTRUCTION
       01326  602163604346
       01327  232163314645
       01330  600406020233
       01331  606063435060
       01332  314562635164
       01333  236331464560
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  216360434623             BCD  AT LOCATION 4620 HAS JUST PROVED THAT WORD FROM LOCATION 524
       01340  216331464560
       01341  040602006030
       01342  216260416462
       01343  636047514665
       01344  252460633021
       01345  636066465124
       01346  602651464460
       01347  434623216331
       01350  464560050204
       01351  036031626043             BCD 73 IS LESS THAN WORD IN LOCATION 5246.
       01352  256262606330
       01353  214560664651
       01354  246031456043
       01355  462321633146
       01356  456005020406
       01357  336060606060
       01360  0 00000 0 00000 X
A                          00000        END
```

```
1            ORG 173                 FORCE NEW RECORD
1                        00255         ORG 173                FORCE NEW RECORD
       00255  0 01303 0 01333          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00255          TXH 173                5232  FT  34
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01334 0 01311          HTR PR,0,PR+19
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE ERROR RETURN FROM SUBROUTINE AT LOCATION 5566.  L
       01314  312243256025
       01315  515146516051
       01316  256364514560
       01317  265146446062
       01320  642251466463
       01321  314525602163
       01322  604346232163
       01323  314645600505
       01324  060633606043
       01325  462731236046             BCD 7OGIC OF PROGRAM MAKES THIS IMPOSSIBLE.
       01326  266047514627
       01327  512144604421
       01330  422562606330
       01331  316260314447
       01332  466262312243
       01333  253360606060
       01334  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 174                  FORCE NEW RECORD
1                        00256          ORG 174                FORCE NEW RECORD
      00256   0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00256          TXH 174                4124  FT  51
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01350 0 01311          HTR PR,0,PR+31
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
      01314   312243256025
      01315   506421433163
      01316   706023464524
      01317   316331464560
      01320   212663255160
      01321   232162603145
      01322   626351642363
      01323   314645602163
      01324   604346232163
      01325   314645600401             BCD  ION 4122 WHICH COMPARES
      01326   020260663031
      01327   233060234644
      01330   472151256260
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   314563255145             BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
      01340   214360264651
      01341   446443216045
      01342   644422255162
      01343   604626602431
      01344   262625512545
      01345   636062632163
      01346   254425456362
      01347   336060606060
      01350   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 175                  FORCE NEW RECORD
1                        00257          ORG 175                FORCE NEW RECORD
       00257  0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                        01303 ·        ORG LOCREC
 TD    01303  3 00000 0 00257          TXH 175                4157  FT  51
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01350 0 01311          HTR PR,0,PR+31
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
       01314  312243256025
       01315  506421433163
       01316  706023464524
       01317  316331464560
       01320  212663255160
       01321  232162603145
       01322  626351642363
       01323  314645602163
       01324  604346232163
       01325  314645600401             BCD  ION 4155 WHICH COMPARES
       01326  050560663031
       01327  233060234644
       01330  472151256260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314563255145             BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
       01340  214360264651
       01341  446443216045
       01342  644422255162
       01343  604626602431
       01344  262625512545
       01345  636062632163
       01346  254425456362
       01347  336060606060
       01350  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 176                 FORCE NEW RECORD
1                        00260         ORG 176                FORCE NEW RECORD
       00260  0 01303 0 01347         HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD    01303  3 00000 0 00260         TXH 176                4405  FT  34
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01350 0 01311         HTR PR,0,PR+31
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  314447466262            BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
       01314  312243256025
       01315  506421433163
       01316  706023464524
       01317  316331464560
       01320  212663255160
       01321  232162603145
       01322  626351642363
       01323  314645602163
       01324  604346232163
       01325  314645600404            BCD  ION 4403 WHICH COMPARES
       01326  000360663031
       01327  233060234644
       01330  472151256260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314563255145            BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
       01340  214360264651
       01341  446443216045
       01342  644422255162
       01343  604626602431
       01344  262625512545
       01345  636062632163
       01346  254425456362
       01347  336060606060
       01350  0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 177                  FORCE NEW RECORD
1                        00261          ORG 177                FORCE NEW RECORD
       00261  0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00261          TXH 177                4533  FT  51
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01350 0 01311          HTR PR,0,PR+31
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
       01314  312243256025
       01315  506421433163
       01316  706023464524
       01317  316331464560
       01320  212663255160
       01321  232162603145
       01322  626351642363
       01323  314645602163
       01324  604346232163
       01325  314645600405             BCD  ION 4531 WHICH COMPARES
       01326  030160663031
       01327  233060234644
       01330  472151256260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314563255145             BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
       01340  214360264651
       01341  446443216045
       01342  644422255162
       01343  604626602431
       01344  262625512545
       01345  636062632163
       01346  254425456362
       01347  336060606060
       01350  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 178                  FORCE NEW RECORD
1                        00262          ORG 178                FORCE NEW RECORD
      00262   0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD   01303   3 00000 0 00262          TXH 178                5721  FT  27
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01350 0 01311          HTR PR,0,PR+31
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
      01314   312243256025
      01315   506421433163
      01316   706023464524
      01317   316331464560
      01320   212663255160
      01321   232162603145
      01322   626351642363
      01323   314645602163
      01324   604346232163
      01325   314645600507             BCD  ION 5717 WHICH COMPARES
      01326   010760663031
      01327   233060234644
      01330   472151256260
      01331   606060606060
      01332   606060606060
      01333   606060606060
      01334   606060606060
      01335   606060606060
      01336   606060606060
      01337   314563255145             BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
      01340   214360264651
      01341   446443216045
      01342   644422255162
      01343   604626602431
      01344   262625512545
      01345   636062632163
      01346   254425456362
      01347   336060606060
      01350   0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 179                 FORCE NEW RECORD
1                        00263         ORG 179                FORCE NEW RECORD
      00263   0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                         01303         ORG LOCREC
 TD   01303   3 00000 0 00263          TXH 179                6253  FT  32
                                           179                6256  FT  32
      01304   0 07400 4 00740          TSX PRINT,4
      01305   0 01244 0 01237          HTR MACHIN,0,MACHIN+5
      01306   0 07400 4 00740          TSX PRINT,4
      01307   0 01350 0 01311          HTR PR,0,PR+31
      01310   0 02000 0 00221          TRA DIGRTN
      01311   606060606060     PR      BCD 2
      01312   606060606060
      01313   314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
      01314   312243256025
      01315   506421433163
      01316   706023464524
      01317   316331464560
      01320   212663255160
      01321   232162603145
      01322   626351642363
      01323   314645602163
      01324   604346232163
      01325   314645600602             BCD  ION 6251 OR 6254. ROUTINE ANALYSES DIFFERENT
      01326   050160465160
      01327   060205043360
      01330   514664633145
      01331   256021452143
      01332   706225626024
      01333   312626255125
      01334   456360606060
      01335   606060606060
      01336   606060606060
      01337   626422622351             BCD 9SUBSCRIPTS AFTER DUPLICATES HAVE BEEN ELIMINATED.
      01340   314763626021
      01341   266325516024
      01342   644743312321
      01343   632562603021
      01344   652560222525
      01345   456025433144
      01346   314521632524
      01347   336060606060
      01350   0 00000 0 00000 X
A                        00000         END
```

```
1            ORG 180                  FORCE NEW RECORD
1                        00264          ORG 180                FORCE NEW RECORD
       00264  0 01303 0 01347           HTR X-1,0,LOCREC       CARD FOR DE
                         01303          ORG LOCREC
 TD    01303  3 00000 0 00264           TXH 180                6635  FT  27
       01304  0 07400 4 00740           TSX PRINT,4
       01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740           TSX PRINT,4
       01307  0 01350 0 01311           HTR PR,0,PR+31
       01310  0 02000 0 00221           TRA DIGRTN
       01311  606060606060      PR      BCD 2
       01312  606060606060
       01313  314447466262              BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
       01314  312243256025
       01315  506421433163
       01316  706023464524
       01317  316331464560
       01320  212663255160
       01321  232162603145
       01322  626351642363
       01323  314645602163
       01324  604346232163
       01325  314645600606              BCD  ION 6633 WHICH COMPARES
       01326  030360663031
       01327  233060234644
       01330  472151256260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314563255145              BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
       01340  214360264651
       01341  446443216045
       01342  644422255162
       01343  604626602431
       01344  262625512545
       01345  636062632163
       01346  254425456362
       01347  336060606060
       01350  0 00000 0 00000 X
 A                       00000          END
```

```
1            ORG 181                  FORCE NEW RECORD
1                        00265          ORG 181                FORCE NEW RECORD
      00265  0 01303 0 01347           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00265           TXH 181                7023  FT  27
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01350 0 01311           HTR PR,0,PR+31
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  314447466262              BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
      01314  312243256025
      01315  506421433163
      01316  706023464524
      01317  316331464560
      01320  212663255160
      01321  232162603145
      01322  626351642363
      01323  314645602163
      01324  604346232163
      01325  314645600700              BCD  ION 7021 WHICH COMPARES
      01326  020160663031
      01327  233060234644
      01330  472151256260
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  314563255145              BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS
      01340  214360264651
      01341  446443216045
      01342  644422255162
      01343  604626602431
      01344  262625512545
      01345  636062632163
      01346  254425456362
      01347  606060606060
      01350  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 182                  FORCE NEW RECORD
1                        00266          ORG 182                FORCE NEW RECORD
       00266  0 01303 0 01347          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00266          TXH 182                7073  FT  39
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01350 0 01311          HTR PR,0,PR+31
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  314447466262             BCD  IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT
       01314  312243256025
       01315  506421433163
       01316  706023464524
       01317  316331464560
       01320  212663255160
       01321  232162603145
       01322  626351642363
       01323  314645602163
       01324  604346232163
       01325  314645600700             BCD  ION 7071 WHICH COMPARES
       01326  070160663031
       01327  233060234644
       01330  472151256260
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  314563255145             BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.
       01340  214360264651
       01341  446443216045
       01342  644422255162
       01343  604626602431
       01344  262625512545
       01345  636062632163
       01346  254425456362
       01347  336060606060
       01350  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 183                 FORCE NEW RECORD
1                        00267         ORG 183                FORCE NEW RECORD
       00267  0 01303 0 01346         HTR X-1,0,LOCREC       CARD FOR DE
                        01303         ORG LOCREC
 TD    01303  3 00000 0 00267         TXH 183                 425  FT  73
       01304  0 07400 4 00740         TSX PRINT,4
       01305  0 01244 0 01237         HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740         TSX PRINT,4
       01307  0 01347 0 01311         HTR PR,0,PR+30
       01310  0 02000 0 00221         TRA DIGRTN
       01311  606060606060     PR     BCD 2
       01312  606060606060
       01313  243165316231            BCD  DIVISION INSTRUCTIONS BEGINNING AT LOCATION 421 HAVE NOT BEE
       01314  464560314562
       01315  635164236331
       01316  464562602225
       01317  273145453145
       01320  276021636043
       01321  462321633146
       01322  456004020160
       01323  302165256045
       01324  466360222525
       01325  456025672523            BCD  N EXECUTED.
       01326  646325243360
       01327  606060606060
       01330  606060606060
       01331  606060606060
       01332  606060606060
       01333  606060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  434627312360            BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
       01340  462660633025
       01341  604751462751
       01342  214460442142
       01343  256260633031
       01344  626031444746
       01345  626231224325
       01346  336060606060
       01347  0 00000 0 00000 X
 A                      00000         END
```

```
1            ORG 184                  FORCE NEW RECORD
1                        00270          ORG 184                FORCE NEW RECORD
      00270  0 01303 0 01346           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00270           TXH 184                 510  FT  73
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01347 0 01311           HTR PR,0,PR+30
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  243165316231              BCD  DIVISION INSTRUCTIONS BEGINNING AT LOCATION 501 HAVE NOT BEE
      01314  464560314562
      01315  635164236331
      01316  464562602225
      01317  273145453145
      01320  276021636043
      01321  462321633146
      01322  456005000160
      01323  302165256045
      01324  466360222525
      01325  456025672523              BCD  N EXECUTED.
      01326  646325243360
      01327  606060606060
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  434627312360              BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
      01340  462660633025
      01341  604751462751
      01342  214460442142
      01343  256260633031
      01344  626031444746
      01345  626231224325
      01346  336060606060
      01347  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 185                  FORCE NEW RECORD
1                        00271          ORG 185                FORCE NEW RECORD
      00271  0 01303 0 01346           HTR X-1,0,LOCREC       CARD FOR DE
                       01303           ORG LOCREC
 TD   01303  3 00000 0 00271           TXH 185                1234  FT  62
      01304  0 07400 4 00740           TSX PRINT,4
      01305  0 01244 0 01237           HTR MACHIN,0,MACHIN+5
      01306  0 07400 4 00740           TSX PRINT,4
      01307  0 01347 0 01311           HTR PR,0,PR+30
      01310  0 02000 0 00221           TRA DIGRTN
      01311  606060606060     PR       BCD 2
      01312  606060606060
      01313  243165316231              BCD  DIVISION INSTRUCTIONS BEGINNING AT LOCATION 1226 HAVE NOT BE
      01314  464560314562
      01315  635164236331
      01316  464562602225
      01317  273145453145
      01320  276021636043
      01321  462321633146
      01322  456001020206
      01323  603021652560
      01324  454663602225
      01325  254560256725              BCD  EN EXECUTED.
      01326  236463252433
      01327  606060606060
      01330  606060606060
      01331  606060606060
      01332  606060606060
      01333  606060606060
      01334  606060606060
      01335  606060606060
      01336  606060606060
      01337  434627312360              BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
      01340  462660633025
      01341  604751462751
      01342  214460442142
      01343  256260633031
      01344  626031444746
      01345  626231224325
      01346  336060606060
      01347  0 00000 0 00000 X
A                        00000          END
```

```
1            ORG 186                    FORCE NEW RECORD
1                        00272            ORG 186                FORCE NEW RECORD
        00272  0 01303 0 01346            HTR X-1,0,LOCREC       CARD FOR DE
                         01303            ORG LOCREC
 TD     01303  3 00000 0 00272            TXH 186                1261  FT  62
        01304  0 07400 4 00740            TSX PRINT,4
        01305  0 01244 0 01237            HTR MACHIN,0,MACHIN+5
        01306  0 07400 4 00740            TSX PRINT,4
        01307  0 01347 0 01311            HTR PR,0,PR+30
        01310  0 02000 0 00221            TRA DIGRTN
        01311  606060606060      PR       BCD 2
        01312  606060606060
        01313  243165316231               BCD  DIVISION INSTRUCTIONS BEGINNING AT LOCATION 1253 HAVE NOT BE
        01314  464560314562
        01315  635164236331
        01316  464562602225
        01317  273145453145
        01320  276021636043
        01321  462321633146
        01322  456001020503
        01323  603021652560
        01324  454663602225
        01325  254560256725               BCD  EN EXECUTED.
        01326  236463252433
        01327  606060606060
        01330  606060606060
        01331  606060606060
        01332  606060606060
        01333  606060606060
        01334  606060606060
        01335  606060606060
        01336  606060606060
        01337  434627312360               BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
        01340  462660633025
        01341  604751462751
        01342  214460442142
        01343  256260633031
        01344  626031444746
        01345  626231224325
        01346  336060606060
        01347  0 00000 0 00000 X
 A                       00000            END
```

```
1            ORG 187                  FORCE NEW RECORD
1                        00273          ORG 187                FORCE NEW RECORD
       00273  0 01303 0 01325          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00273          TXH 187                2230  FT  75
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01326 0 01311          HTR PR,0,PR+13
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  243165312425             BCD  DIVIDE CHECK.  LOGIC OF PROGRAM IS SUCH THAT THIS IS IMPOSSI
       01314  602330252342
       01315  336060434627
       01316  312360462660
       01317  475146275121
       01320  446031626062
       01321  642330606330
       01322  216360633031
       01323  626031626031
       01324  444746626231
       01325  224325336060             BCD 1BLE.
       01326  0 00000 0 00000 X
 A                      00000          END
```

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1            ORG 188                  FORCE NEW RECORD
1                        00274          ORG 188                FORCE NEW RECORD
       00274  0 01303 0 01472          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00274          TXH 188                 377  FT  56
                                           188                 424  FT  56
                                           188                 613  FT  56
                                           188                 654  FT  56
                                           188                1000  FT  56
                                           188                1115  FT  56
                                           188                1320  FT  56
                                           188                1531  FT  56
                                           188                1767  FT  56
                                           188                7143  FT  56
                                           188                 132  FT  60
                                           188                 173  FT  60
                                           188                 227  FT  60
                                           188                 252  FT  60
                                           188                 334  FT  60
                                           188                 423  FT  60
                                           188                 442  FT  60
                                           188                 521  FT  60
                                           188                 544  FT  60
                                           188                 305  FT  60
                                           188                 363  FT  60
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01244 0 01237          HTR MACHIN,0,MACHIN+5
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01473 0 01311          HTR PR,0,PR+114
       01310  0 02000 0 00221          TRA DIGRTN
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  262131436451             BCD  FAILURE OF CAS INSTRUCTION OR INDEX REGISTERS IN EXAMINING 4
       01314  256046266023
       01315  216260314562
       01316  635164236331
       01317  464560465160
       01320  314524256760
       01321  512527316263
       01322  255162603145
       01323  602567214431
       01324  453145276004
       01325  606646512460             BCD   WORD ENTRY FROM ONE OF THE RECORDS LISTED.
       01326  254563517060
       01327  265146446046
       01330  452560462660
       01331  633025605125
       01332  234651246260
       01333  433162632524
       01334  336060606060
       01335  606060606060
       01336  606060606060
       01337  254563517060             BCD  ENTRY IS SHOWN TO BE GREATER THAN 4 WORDS.  LOGIC OF THE PRO
       01340  316260623046
```

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01341  664560634660
01342  222560275125
01343  216325516063
01344  302145600460
01345  664651246233
01346  606043462731
01347  236046266063
01350  302560475146
01351  275121446044          BCD  GRAM MAKES THIS IMPOSSIBLE.
01352  214225626063
01353  303162603144
01354  474662623122
01355  432533606060
01356  606060606060
01357  606060606060
01360  606060606060
01361  606060606060
01362  606060606060
01363  606060606060          BCD 2
01364  606060606060
01365  233163605125          BCD  CIT RECORD, TAPE 2, FILE 2
01366  234651247360
01367  632147256002
01370  736026314325
01371  600260606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  606060606060
01376  606060606060
01377  606060606060          BCD
01400  606060606060
01401  606060606060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  606060606060
01410  606060606060
01411  234644472446          BCD  COMPDO RECORD, TAPE 4, FILE 2
01412  605125234651
01413  247360632147
01414  256004736026
01415  314325600260
01416  606060606060
01417  606060606060
01420  606060606060
01421  606060606060
01422  606060606060
01423  606060606060          BCD
01424  606060606060
01425  606060606060
01426  606060606060
```

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01427  606060606060
01430  606060606060
01431  606060606060
01432  606060606060
01433  606060606060
01434  606060606060
01435  244626314322          BCD  DOFILB RECORD, TAPE 2, FILE 8
01436  605125234651
01437  247360632147
01440  256002736026
01441  314325601060
01442  606060606060
01443  606060606060
01444  606060606060
01445  606060606060
01446  606060606060
01447  606060606060          BCD
01450  606060606060
01451  606060606060
01452  606060606060
01453  606060606060
01454  606060606060
01455  606060606060
01456  606060606060
01457  606060606060
01460  606060606060
01461  442551272524          BCD  MERGED COMPAIL AND COMPDO RECORDS, TAPE 3, FILE 1
01462  602346444721
01463  314360214524
01464  602346444724
01465  466051252346
01466  512462736063
01467  214725600373
01470  602631432560
01471  016060606060
01472  606060606060
01473  0 00000 0 00000 X
A                00000         END
```

```
1            ORG 189                  FORCE NEW RECORD
1                        00275          ORG 189                FORCE NEW RECORD
      00275  0 01303 0 01420            HTR X-1,0,LOCREC       CARD FOR DE
                       01303            ORG LOCREC
 TD   01303  3 00000 0 00275            TXH 189                6063  FT  32
                                            189                6475  FT  32
                                            189                5273  FT  34
      01304  0 07400 4 00740            TSX PRINT,4
      01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
      01306  0 76200 0 00304            RDR 4
      01307  0 46000 0 01320            LDA A
      01310  0 70000 0 00527            CPY ALFBET
      01311  0 70000 0 00530            CPY SYM
      01312  0 07400 4 00740            TSX PRINT,4
      01313  0 01361 0 01321            HTR PR,0,PR+32
      01314  0 07400 4 00505            TSX FX4PR,4
      01315  0 07400 4 00740            TSX PRINT,4
      01316  0 01421 0 01361            HTR PR1,0,PR1+32
      01317  0 02000 0 00272            TRA SPEND
      01320  0 00000 0 00031 A          HTR831
      01321  606060606060    PR         BCD 2
      01322  606060606060
      01323  214560314563               BCD  AN INTERMEDIATE CORE TABLE IS FULL.  THE SUBSCRIPT COMBINATI
      01324  255144252431
      01325  216325602346
      01326  512560632122
      01327  432560316260
      01330  266443433360
      01331  606330256062
      01332  642262235131
      01333  476360234644
      01334  223145216331
      01335  464562602145               BCD  ONS AND FLOW STRUCTURE
      01336  246026434666
      01337  606263516423
      01340  636451256060
      01341  606060606060
      01342  606060606060
      01343  606060606060
      01344  606060606060
      01345  606060606060
      01346  606060606060
      01347  215125606346               BCD  ARE TOO COMPLEX WITHIN A DO NEST.  THE STATEMENT
      01350  466023464447
      01351  432567606631
      01352  633031456021
      01353  602446604525
      01354  626333606063
      01355  302560626321
      01356  632544254563
      01357  606060606060
      01360  606060606060
      01361  606060606060    PR1        BCD 2
      01362  606060606060
```

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01363  316260633025          BCD  IS THE OUTERMOST DO OF THE NEST WHICH HAS CAUSED THE OVERFLO
01364  604664632551
01365  444662636024
01366  466046266063
01367  302560452562
01370  636066303123
01371  306030216260
01372  232164622524
01373  606330256046
01374  652551264346
01375  663360605125          BCD  W.  REWRITE NEST AND SIMPLIFY
01376  665131632560
01377  452562636021
01400  452460623144
01401  474331267060
01402  606060606060
01403  606060606060
01404  606060606060
01405  606060606060
01406  606060606060
01407  626422622351          BCD  SUBSCRIPT COMBINATIONS OR FLOW STRUCTURE.
01410  314763602346
01411  442231452163
01412  314645626046
01413  516026434666
01414  606263516423
01415  636451253360
01416  606060606060
01417  606060606060
01420  606060606060
01421  0 00000 0 00000 X
A                00000         END
```

```
1            ORG 190                 FORCE.NEW RECORD
1                          00276        ORG 190                FORCE NEW RECORD
      00276  0 01303 0 01523            HTR X-1,0,LOCREC       CARD FOR DE
                           01303        ORG LOCREC
 TD   01303  3 00000 0 00276            TXH 190                7620  FT  21
      01304  0 07400 4 00740            TSX PRINT,4
      01305  0 01252 0 01244            HTR SOURCE,0,SOURCE+6
      01306  0 50000 0 01227            CLA ADDMSK             PUT AWAY TABLE IDENTIFICATION WORD
                           07513 IDWD   SYN87513               TABLE IDENTIFICATION AT LOC 7513
      01307 -0 32000 0 07513            ANA IDWD
      01310  0 60100 0 01257            STO ERAS
      01311  0 53400 1 01232            LXA ZERO,1
      01312  0 50000 1 01464 SEARCH     CLA TBLWD,1            TABLE SEARCH
      01313  0 40200 0 01257            SUB ERAS
      01314  0 10000 0 01441            TZE PACK
      01315  1 77776 1 01316            TXI A,1,-2
      01316  3 77740 1 01312 A          TXH SEARCH,1,-32
      01317  0 07400 4 00740            TSX PRINT,4
      01320  0 01441 0 01323            HTR ER,0,ER+78
      01321  0 00000 0 01322            HTR E
      01322  0 02000 0 00221 E          TRA DIGRTN
      01323  606060606060     ER        BCD 2
      01324  606060606060
      01325  216063212243               BCD  A TABLE COMPILED BY SECTION 1 PRIME HAS EXCEEDED THE BUFFER
      01326  256023464447
      01327  314325246022
      01330  706062252363
      01331  314645600160
      01332  475131442560
      01333  302162602567
      01334  232525242524
      01335  606330256022
      01336  642626255160
      01337  623171253360               BCD  SIZE.  THIS DIAGNOSTIC RECORD COMPARES
      01340  606330316260
      01341  243121274546
      01342  626331236051
      01343  252346512460
      01344  234644472151
      01345  256260606060
      01346  606060606060
      01347  606060606060
      01350  606060606060
      01351  633025606321               BCD  THE TABLE IDENTIFICATION WORD IN THE ADDRESS OF 7513 TO A LI
      01352  224325603124
      01353  254563312631
      01354  232163314645
      01355  606646512460
      01356  314560633025
      01357  602124245125
      01360  626260462660
      01361  070501036063
      01362  466021604331
      01363  626360462660               BCD  ST OF 16 POSSIBLE TABLES.
```

```
01364  010660474662
01365  623122432560
01366  632122432562
01367  336060606060
01370  606060606060
01371  606060606060
01372  606060606060
01373  606060606060
01374  606060606060
01375  633025606225            BCD  THE SEARCH HAS FAILED.  THE ALLOWED TABLE IDENTIFICATION NUM
01376  215123306030
01377  216260262131
01400  432524336060
01401  633025602143
01402  434666252460
01403  632122432560
01404  312425456331
01405  263123216331
01406  464560456444
01407  222551626021            BCD  BERS ARE IN LOCATIONS 1464,
01410  512560314560
01411  434623216331
01412  464562600104
01413  060473606060
01414  606060606060
01415  606060606060
01416  606060606060
01417  606060606060
01420  606060606060
01421  010406046047            BCD  1464 PLUS 2, ETC.  PRESS START IF YOU WISH TO RESTORE MACHIN
01422  436462600273
01423  602563233360
01424  604751256262
01425  606263215163
01426  603126607046
01427  646066316230
01430  606346605125
01431  626346512560
01432  442123303145
01433  256063466062            BCD 6E TO STATE IN WHICH ERROR OCCURRED.
01434  632163256031
01435  456066303123
01436  306025515146
01437  516046232364
01440  515125243360
01441 -0 50000 1 01465 PACK    CAL TBLWD+1,1
01442  0 60200 0 01450         SLW PR1
01443  0 07400 4 00740         TSX PRINT,4
01444  0 01464 0 01446         HTR PR,0,PR+14
01445  0 02000 0 00272         TRA SPEND
01446  606060606060     PR     BCD 2
01447  606060606060
01450  606060606060     PR1    BCD 1
01451  606321224325            BCD   TABLE HAS EXCEEDED THE BUFFER SIZE.  REWRITE SOURCE PROGRAM
```

```
01452  603021626025
01453  672325252425
01454  246063302560
01455  226426262551
01456  606231712533
01457  606051256651
01460  316325606246
01461  645123256047
01462  514627512144
01463  336060606060            BCD 1.
01464  0 00000 0 00017 TBLWD   HTR 15
01465  636263464762            BCD 1TSTOPS
01466  0 00000 0 00016         HTR 14
01467  454645256723            BCD 1NONEXC
01470  0 00000 0 00015         HTR 13
01471  304643215127            BCD 1HOLARG
01472  0 00000 0 00014         HTR 12
01473  234644444645            BCD 1COMMON
01474  0 00000 0 00013         HTR 11
01475  626422215127            BCD 1SUBARG
01476  0 00000 0 00012         HTR 10
01477  264651442163            BCD 1FORMAT
01500  0 00000 0 00011         HTR 9
01501  234346626422            BCD 1CLOSUB
01502  0 00000 0 00010         HTR 8
01503  255064316360            BCD 1EQUIT
01504  0 00000 0 00007         HTR 7
01505  265125636060            BCD 1FRET
01506  0 00000 0 00006         HTR 6
01507  264651652143            BCD 1FORVAL
01510  0 00000 0 00005         HTR 5
01511  264651652151            BCD 1FORVAR
01512  0 00000 0 00004         HTR 4
01513  264651632127            BCD 1FORTAG
01514  0 00000 0 00003         HTR 3
01515  635121246060            BCD 1TRAD
01516  0 00000 0 00002         HTR 2
01517  633126274660            BCD 1TIFGO
01520  0 00000 0 00001         HTR 1
01521  632446606060            BCD 1TDO
01522  0 00000 0 00000         HTR 0
01523  632531264546            BCD 1TEIFNO
01524  0 00000 0 00000 X
A                     00000    END
```

```
1            ORG 191                  FORCE NEW RECORD
1                        00277          ORG 191                FORCE NEW RECORD
       00277  0 01303 0 01336          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00277          TXH 191                1160  FT  22
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01337 0 01311          HTR PR,0,PR+22
       01310  0 02000 0 00272          TRA SPEND
       01311  606060606060     PR      BCD 2
       01312  606060606060
       01313  454660314562             BCD  NO INSTRUCTIONS WERE COMPILED.  CORRECT SOURCE PROGRAM TO HA
       01314  635164236331
       01315  464562606625
       01316  512560234644
       01317  473143252433
       01320  606023465151
       01321  252363606246
       01322  645123256047
       01323  514627512144
       01324  606346603021
       01325  652560216360             BCD  VE AT LEAST ONE EXECUTABLE STATEMENT.
       01326  432521626360
       01327  464525602567
       01330  252364632122
       01331  432560626321
       01332  632544254563
       01333  336060606060
       01334  606060606060
       01335  606060606060
       01336  606060606060
       01337  0 00000 0 00000 X
 A                      00000          END
```

```
1            ORG 192                  FORCE NEW RECORD
1                        00300          ORG 192                FORCE NEW RECORD
       00300  0 01303 0 01326          HTR X-1,0,LOCREC       CARD FOR DE
                        01303          ORG LOCREC
 TD    01303  3 00000 0 00300          TXH 192                7751  FT  21
       01304  0 07400 4 00740          TSX PRINT,4
       01305  0 01252 0 01244          HTR SOURCE,0,SOURCE+6
       01306  0 07400 4 00740          TSX PRINT,4
       01307  0 01327 0 01311          HTR PR,0,PR+14
       01310  0 02000 0 00272          TRA SPEND
       01311  606060606060     PR      BCD Z
       01312  606060606060
       01313  633025512560             BCD  THERE ARE NO STATEMENT NUMBERS IN THE SOURCE PROGRAM.  CORRE
       01314  215125604546
       01315  606263216325
       01316  442545636045
       01317  644422255162
       01320  603145606330
       01321  256062466451
       01322  232560475146
       01323  275121443360
       01324  602346515125
       01325  236360475146             BCD 2CT PROGRAM.
       01326  275121443360
       01327  0 00000 0 00000 X
 A                      00000          END
```