X1210

1

```
                                IDENT    DISCT1                                                ASM 02
                        *
                        *
                        * THIS PROGRAM FILLS A WHOLE DISC PACK
                        * WITH DATA AND CHECKS IT AFTERWARDS
                        * DISC CONTROL UNIT CONNECTED TO MULTIPLEX CHANNEL
                        * A1 GENERAL PURPOSE.
                        * A2 ADDRESS POINTER.
                        * A3 ADDRESS POINTER.
                        * A4 0 = WRITE ; 1 = READ.
                        * A5 WAIT FOR END OF ACTION.
                        * A6 REMAINING LENGTH
                        * A7 STATUSWORD
                        * A8 CYLINDER NUMBER
                        * A9 SECTOR NUMBER
                        * A10 READ ERROR SUPPRESS.
                        *        BEFORE THE PROGRAM IS STARTED A10 SHOULD BE A 1 IF READ ERROR SUPPRESS
                        *        IS WANTED, OR A 0 IF CHECKING OF READ-DATA IS WANTED.
                        *
                        *
                        *
                        DISC     EQU      /02
0000                    FILPAT   RES      200
0190                    FILINP   RES      200
0320                    STACK    RES      2
0324  87A0              START    LDKL     A15,STACK+2
0326  0322  R
0328  0500                       LDK      A5,0
032A  4500                       WIM      A5
032C  8120                       LDKL     A1,STATUS
032E  0000  F
0330  8141                       ST       A1,/4A
0332  004A
0334  0401                       LDK      A4,1          SET SWITCH FOR WRITE
0336  3401              SKTOZ    XRK      A4,1
0338  80A0                       LDKL     A8,0             RESET CYLINDER COUNT
033A  0000
033C  0603                       LDK      A6,3
033E  46C2                       CIO      A6,1,DISC  CIO SEEK TO ZERO
0340  2501                       ANK      A5,1
0342  5804                       RB(0)    *-2
0344  0500                       LDK      A5,0
0346  81A0              NXTCYL   LDKL     A9,0         RESET SECTOR COUNT
0348  0000
034A  8102              NXTWRT   LDR      A1,A8
034C  3945                       SLL      A1,5
034E  9106                       ADR      A1,A9
0350  8220                       LDKL     A2,FILPAT
0352  0000  R
0354  8129              FILL     STR      A1,A2
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X1210

DISCT1


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00044  0356  1202          ADK     A2,2
00045  0358  FA20          CWK     A2,FILINP
       035A  0190  R
00046  035C  5C0A          RB(4)   FILL
00047  035E  8120          LDKL    A1,-400
       0360  FE70
00048  0362  2401          ANK     A4,1
00049  0364  5100  F       RF(1)   READ
00050  0366  A120          ANKL    A1,/0FFF
       0368  0FFF
00051  036A  8141          ST      A1,/88    FILL 1ST M.C.W.
       036C  0088
00052  036E  8120          LDKL    A1,FILINP-2
       0370  018E  R
00053  0372  8141          ST      A1,/8A    FILL 2ND M.C.W.
       0374  008A
00054  0376  8606          LDR     A6,A9
00055  0378  3E42          SLL     A6,2
00056  037A  1601          ADK     A6,1
00057  037C  46C2          CIO     A6,1,DISC  CIO WRITE
00058  037E  2501          ANK     A5,1
00059  0380  5804          RB(0)   *-2
00060  0382  0500          LDK     A5,0
00061  0384  5700  F       RF      UPDATE
00062  0386  A120    READ  ANKL    A1,/4FFF
       0388  4FFF
00063  038A  8141          ST      A1,/88    FILL 1ST M.C.W.
       038C  0088
00064  038E  8120          LDKL    A1,STACK-2
       0390  031F  R
00065  0392  8141          ST      A1,/8A    FILL 2ND M.C.W.
       0394  008A
00066  0396  8606          LDR     A6,A9
00067  0398  3E42          SLL     A6,2
00068  039A  46C2          CIO     A6,1,DISC  CIO READ
00069  039C  2501          ANK     A5,1
00070  039E  5804          RB(0)   *-2
00071  03A0  0500          LDK     A5,0
00072  03A2  8220          LDKL    A2,FILINP
       03A4  0190  R
00073  03A6  8320          LDKL    A3,FILPAT
       03A8  0000  R
00074  03AA  828A    COMP  LDR     A10,A10
00075  03AC  5100  F       RF(1)   PROC
00076  03AE  8128          LDR*    A1,A2
00077  03B0  E92C          CWR*    A1,A3
00078  03B2  5000  F       RF(0)   PROC
00079  03B4  207F          HLT                DATA WRONG
00080  03B6  1202    PROC  ADK     A2,2
00081  03B8  1302          ADK     A3,2
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00082  03BA  EA20          CWK     AP,STACK
       03BC  0320  R
00083  03BE  5C16          RB(4)   COMP
00084  03C0  91A0  UPDATE  ADKL    A9,2
       03C2  0002
00085  03C4  F9A0          CWK     A9,31
       03C6  001F
00086  03C8  5A80          RB(2)   NXTWRT
00087  03CA  5006          RF(0)   *+8
00088  03CC  99A0          SUKL    A9,31
       03CE  001F
00089  03D0  5F88          RB      NXTWRT
00090  03D2  90A0          ADKL    A8,1        CYLINDER COUNT + 1
       03D4  0001
00091  03D6  E8A0          CWK     A8,203
       03D8  00CB
00092  03DA  58A6          RB(0)   SKTOZ
00093  03DC  060E          LDK     A6,/E
00094  03DF  46C2          CIO     A6,1,DISC   CIO SEEK + 1
00095  03E0  2501          ANK     A5,1
00096  03E2  5804          RB(0)   *+2
00097  03E4  0500          LDK     A5,0
00098  03E6  5FA2          RB      NXTCYL
00099                  *
00100                  * INTERRUPT SUBROUTINE (STATUS TEST)
00101                  *
00102  03E8  4FC2  STATUS  SST     A7,DISC
00103  03EA  8620          LDKL    A6,/021F
       03EC  021F
00104  03EE  A719          TM      A7,A6
00105  03F0  5100  F       RF(1)   ERROR
00106  03F2  0501          LDK     A5,1
00107  03F4  F03E          RTN     A15
00108  03F6  8640  ERROR   LD      A6,/88      FETCH REMAINING LENGTH
       03F8  0088
00109  03FA  207F          HLT                 STATUS(A7) INDICATES ERROR
00110                  *                   STATUS CONFIGURATION
00111                  *
00112                  * BIT 1: DISC UNIT BECOMES READY.
00113                  * BIT 5: SEEK COMPLETE.
00114                  * BIT 6:        SEEK ERROR.
00115                  * BIT 9: DISC UNIT 1.
00116                  * BIT11: PROGRAM ERROR.
00117                  * BIT12: INCORRECT LENGTH.
00118                  * BIT13: DATA FAULT.
00119                  * BIT14: THROUGHPUT ERROR.
00120                  * BIT15: NOT OPERABLE.
00121                          END     START
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