IDENTIFICATION

PRODUCT CODE: MAINDEC-Ø8-DIDFC-A-D

                     REPLACES MAINDEC-Ø8-D5CG

PRODUCT NAME: DF32/DF32D DISK DATA MINI DISK,

                     INTERFACE ADDRESS, DATA TEST

DATE: MARCH 26, 1973

MAINTAINER: DIAGNOSTIC GROUP

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                     ED FORTMILLER

ADDENDUM

1. With an ASR 37 (15 CPS TTY) change following
   locations

   loc 5773 from 7635 to 7553
   loc 3155 from 4611 to 3133
   loc 3156 from 3200 to 4652

1. **ABSTRACT**

The DF32/DF32D Disk Data is a complete test of the disk system. Also included is a short processor test that is executed while waiting for interrupts, and during data breaks.

2. **REQUIREMENTS**

2.1 **Equipment**

PDP-8, PDP-8/S, PDP-8/I, PDP-8/L, or PDP-8/E

If PDP-8/S, DATA BREAK INTERFACE

DF32 or DF32D DISK LOGIC

1 to 4 disks.

2.2 **Storage**

2.2.1 **Program Storage** - The program uses most of memory-

C000 through 7400

7000 to 7177 is the out buffer storage.

7200 to 7377 is the in buffer storage.

3. **LOADING PROCEDURES**

3.1 **Method**

Procedures for normal binary tapes should be followed.

4. **STARTING PROCEDURES**

4.1 **Control Switch Settings**

For normal operation, all switches should be 0s ~~(down)~~

4.2 **Starting Address**

100 is the starting address for DF32/DF32D Disk Data,

the program will print an initial printout of

"RPM XXXX SYNC TIME = XXXX MICRO SECS", and upon

completion of a pass, "PCXX", then will loop to

start of program.

4.3   Program and/or Operation Action

Load Disk Data Test into memory.

Select EMO (All other units to OFF).

Write inhibit switches OFF.

Set the SWITCH REGISTER to 100.   (77 for the PDP-8/s)

Load Address.

Set the SWITCH REGISTER to all 0's or $\emptyset\emptyset\emptyset2$ for 50 cycle.

Press START

Program will run and loop upon completion.   The only

printout that should occur are "RPMXXXX SYNC TIME =

XXXX MICRO SECS" and "PCXX".

5.   OPERATING PROCEDURE

5.1   Operational Switch Settings

SW0   UP   Delete Printouts. *To left*

SW1   UP   Halt after error.

SW2   UP   Subtest scope loop.

SW3   UP   Do not exit section.

SW1$\emptyset$ UP   50 cycle.

SW11   UP   Trace (Type starting address of each TEST
                       as the program enters it).

5.1.1   Special Entrance Address

101   Address Test (slow).

102   Track Decode Test.
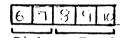
103   Track Error Ratio Test.

104   Data Break Test.

REMEMBER
TO TURN
THE PICKER
INTERFACE
TO MANUAL

or

turn power
'off' to
interface

5700

-2-

L.

105 Data Test.

106 Read Recovery Time Test. (NOT USED ON PDP-8/S)

107 Disk Write Current Saturation Test.

110 Random, Disk, Track, Address and Data Test.

5.1.2   Special Scope Loops

111 Scope loop for Data Failure, automatic setup.

112 Write one word - SR = Disk Address. (Address Test)

113 Read one word - SR = Disk Address. (Address Test)

114 Address loop with bell on error - SR = Disk Address.
(Address Test)

115 Data Test.

1st halt   SR 6 to 10 = disk and track selections.

6	7	8	9	10

Disk   Track

2nd halt   SR = Disk Address.

3rd halt   SR = Data with bell on error.

Routine will monitor SR for data.

5.1.3   Track Scope Loops

116 Writes track. Press START.

1st halt   Load data for out buffer in SR, press CONTINUE

2nd halt   Set SR 6 to 11 = disk and track selection,
press CONTINUE.

117 Read track - SR 6 to 11 = Disk and track selection,
SR 0 = 1 to inhibit Printouts

120 Write/Read track.

1st halt   Load data in SR. Press CONTINUE.

2nd halt   SR 6 to 11 = disk and track selection.