

TEXT LISTING

068-000445-03

PROGRAM

6038/6039 FLOPPY DIAGNOSTIC

TEXT TAPE

097-000445-03

ABSTRACT

THIS IS THE FLOPPY DIAGNOSTIC FOR THE 6038/6039 FLOPPY DISK.

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? NAME: FPYDIA.TX      PART NUMBER: 097-000445
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? DESCRIPTION: 6038/6039 FLOPPY DIAGNOSTIC
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? REVISION HISTORY:
?   REV.      DATE
?   00      10/07/76
?   01      06/24/77
?   02      04/26/78
?   03      09/13/79
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? TITL FPYDIA
? THIS IS THE FLOPPY DIAGNOSTIC
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? FLOPPY CHECK OUT PROCEDURE
?
? 1. IN ORDER TO PROPERLY CHECKOUT THE FLOPPY THESE STEPS
? SHOULD BE FOLLOWED IN THE ORDER THAT THEY ARE LISTED
? BEFORE RUNNING THE DIAGNOSTIC.
?
? A) CHECK M5TICK (MASTER CLOCK) FOR 5MHZ CLOCK U36 PIN 3
? 250NS DURATION, 50NS LOW/200NS HIGH
?
? B) CHECK WRDATA- (WRITE DATA NOT) U18 PIN 1 FOR A HIGH
?
? C) WITH DISKETTE IN FLOPPY AND DOOR CLOSED CHECK INDEX
? U144 PIN 5
?
? D) CHECK R0UR (RIGHT DEVICE UNIT READY) AND LDUR
? (LEFT DEVICE UNIT READY) AT U36 PIN 8 AND 6 FOR A LOW.
?
? E) CHECK RDCP (READ DATA CLOCK PULSE) AND RDDP (READ DATA
? DATA PULSE) U91 PIN 3 AND 4
?
? F) CHECK THAT ALL COMMAND REGISTER LINES ARE LOW U85 AND U100
?
? G) CHECK R0EN (READ ENABLE) U61 PIN 6 FOR A LOW.
?
? H) FOR NOVA COMPUTERS INSURE THAT DATA LINES ARE HIGH BUT NOT
? AT +5 VOLTS.
?
? I) LOAD THE DIAGNOSTIC
?
? 2. HOW TO RUN THE DIAGNOSTIC
?
? 2.1) STARTING ADDRESS IS 200
?
? 2.2) AFTER MESSAGE ASKING FOR DEVICE # TYPE
? DEVICE CODE,DRIVE #, # OF DRIVES TO BE TESTED
?
? EXAMPLE: TYPE DEVICE # (CR) 33
? TYPE DRIVE # TO BE TESTED 0 (CR)
? TYPE # OF DRIVES TO BE TESTED 2 (CR)
?
? DEVICE CODE IS 33
? START WITH DRIVE 0
? TEST 2 DRIVES
?
? 2.3) IF FLOPPY IS RUNNING PROPERLY TEST NUMBERS WILL BE
? PRINTED FOLLOWED BY **END OF PASS **
?
? 2.3.1) TEST NUMBERS ARE FROM 1 TO 16 WITH TEST 14
? OMITTED ON FIRST PASS AND ONLY ONE DRIVE UNDER TEST
?
? 2.4) IF ERRORS ARE PRINTED THE TEST # WILL BE PRINTED AT
? THE END OF THE ERROR MESSAGE.
?
? 2.5) IN ORDER TO MAKE IT EASIER TO INTERPERET THE ERROR
? MESSAGES THERE IS DOCUMENTATION AT THE FRONT OF EACH TEST
? TO HELP IN THE UNDERSTANDING OF WHAT IS BEING DONE.
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? 5. HOW TO USE THE COMMAND STRING INTERPRETER
?
? 3.1) TYPE AN "I" ON THE TELETYPE WHILE THE PROGRAM IS
? RUNNING MESSAGE WILL BE PRINTED OUT:
?
? ENTER COMMAND STRING
? COMMAND,UNIT#,PATTERN,TRACK#,SECTOR#(CR)
?
? TYPE COMMAND AS (READ,OR SEAK,OR WRITE,)
? TYPE UNIT # AS (0,OR 1,)
? TYPE PATTERN AS (ANY COMBINATION OF NUMBERS FROM 0-177777.)
? TYPE TRACK # AS (ANY COMBINATION OF NUMBERS FROM 0-114,)
? TYPE SECTOR # AS (ANY COMBINATION OF NUMBERS FROM 0-7(CR) )
?
? IF YOU WANT TO RESTART THE PROGRAM TYPE "R
? ***USE ONLY AFTER THE COMPLETE COMMAND STRING HAS BEEN
? ENTERED.
?
? 4. HOW TO USE THE FUNCTION INTERPRETER
?
? 4.1) TYPE A "F" WHILE THE PROGRAM IS RUNNING
? MESSAGE WILL PRINT:
?
? TYPE DESIRED FUNCTION (FUNC(S OR C OR)(CR)
?
? TYPE FUNC=(DDA,DOB,DA,DIAB,DI)
? IF YOU WANT A START OR CLEAR PULSE WITH THE FUNCTION
? TYPE A S OR C WITH THE FUNCTION THEN A (CR)
?
? TO CONTINUE THE PROGRAM TYPE A "R TO RESTART
?
?
? FILENAME = SWPAK
?
? 5. SWITCH SETTINGS
?
? LOCATION "SWREG" IS USED TO SELECT THE PROGRAM OPTIONS
? (NOT SYSTEM CONFIGURATION). WHILE RUNNING UNDER DTOS,
? THIS LOCATION WILL BE LOADED BY THE MONITOR.
? HOWEVER UNDER STAND ALONE AND PROGRAM LOAD MODES THIS
? LOCATION WILL BE SET ACCORDING TO THE ANSWERS SUPPLIED
? BY THE OPERATOR. IN ANY CASE THE OPTIONS CAN BE CHANGED
? OR VERIFIED BY USING ONE OF THE COMMANDS GIVEN IN SEC.
? 5.2
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? 5.1 SWITCH OPTIONS AND THEIR INTERPRETATION AT LOCATION
? DIFFERENT BITS IS AS FOLLOWS:
?
? BIT OCTAL BINARY INERPRETATION
? VALUE VALUE
?
? 1 40000 1 LOOP ON ERROR
? 2 20000 0 SKIP LOOPING ON ERROR
? 3 10000 1 PRINT ON CONSOLE
? 4 04000 1 ABORT PRINT OUT TO CONSOLE
? 5 02000 1 PRINT DETAILED ERROR ON THE
? 6 01000 1 SELECTED DEVICE/DEVICES
? 7 00400 1 ONLY % FAILURE REQUIRED
?
? 8 00000 1 ALLOW END OF PASS PRINT OUT
? 9 00000 1 SUPPRESS END OF PASS PRINT OUT
?
? 10 00000 1 DO NOT PRINT ON THE LINE PRINTER
? 11 00000 1 PRINT ON THE LINE PRINTER
? 12 00000 1 DO NOT HALT ON ERROR
? 13 00000 1 HALT ON ERROR
? 14 00000 1 DO NOT PRINT PASSING OF
? 15 00000 1 EACH TEST ON PRINTING DEVICE
? 16 00000 1 PRINT PASSING OF EACH TEST
?
? 17 SWITCH COMMANDS
? 18 ONCE THE PROGRAM STARTS EXECUTING THE STATE OF ANY OF
? 19 THE BITS CAN BE CHANGED BY HITTING KEYS 1 THROUGH 6. THE
? 20 PROGRAM WILL CONTINUE RUNNING AFTER UPDATING THE OPTIONS
? 21 EACH KEY WILL COMPLEMENT THE STATE OF THE BIT AFFILIAT-
? 22 ED WITH IT. THUS BIT 4 CAN BE ALTERED BY HITTING KEY 4.
? 23 SETTING OF ANY BIT OF LOCATION "SWREG" WILL SET BIT 0.
? 24 (DEFAULT MODE IS DEFINED AS ALL BITS OF SWREG SET TO 0)
? 25 THE PROGRAM CAN BE LOCKED INTO SWITCH MODIFICATION MODE
? 26 BY TYPING A 0, IN WHICH CASE MORE THAN ONE BITS CAN BE
? 27 CHANGED BEFORE THE CONTROL IS ALLOWED TO RETURN TO THE
? 28 MAIN PROGRAM.
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?5-2.1 OTHER COMMANDS

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**00000 TOTAL ERRORS, 00000 FIRST PASS ERRORS

"CR" A "RETURN" CAN BE TYPED TO CONTINUE THE PROGRAM
AFTER ITS LOCKED IN A SWITCH MODIFICATION MODE

"D THIS COMMAND GIVEN AT ANY TIME WILL RESET "SWREG"
TO DEFAULT MODE AND RESTART THE PROGRAM.

"R THIS COMMAND GIVEN AT ANY TIME WILL RESTART THE
PROGRAM. SWITCHES ARE LEFT WITH THE VALUES THEY
HAD BEFORE THE COMMAND WAS ISSUED.

M THIS COMMAND GIVEN AT ANY TIME WILL PRINT THE
CURRENT OPERATING MODES.

J LOOPING ON TEST

TO LOOP OR RUN ANY PARTICULAR TEST TYPE A
J WHILE THE PROGRAM IS RUNNING.

THE MESSAGE TEST # WILL PRINTOUT, AT THIS TIME ENTER
THE TEST NUMBER YOU WANT TO RUN(IF TEST 14 IS SELECTED
THE FLOPPY DISK WILL BE FORMATTED WITH THE CORRECT
PATTERNS AND THEN TEST 14 WILL BE STARTED)

IF ANY TEST OTHER THAN TEST 14 IS SELECTED THE DRIVE
WILL HAVE TO BE ENTERED.

ERROR MESSAGES

ERRORS ARE FIRST REPORTED WITH A MESSAGE INDICATING
WHAT THE PROBLEM IS. THEN THE ACCUMULATORS ARE PRINTED:

CRY AC0 AC1 AC2 AC3 PC

REFER TO THE ERROR PC IN THE LISTING FOR A DISCRPTION
OF WHATS IN THE ACCUMULATORS.

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