

TEXT LISTING

068-000180-03

PROGRAM

NOVA FIXED HEAD DISK DIAG

TEXT TAPE

097-000180-03

ABSTRACT

TYPE 4019 DISK CONTROL DIAGNOSTIC IS A MAINTENANCE PROGRAM DESIGNED TO TEST THE TYPE 4019 DISK CONTROL. ALTHOUGH THE PROGRAM DOES NOT TEST THE DISK SURFACE. A DISK DRIVE SELECTED TO ZERO IS REQUIRED.

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0001 .MAIN      MACRO REV 06.30      09:29:50 02/16/79
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; NAME: FHD.TX
; PART NUMBER: 097-0001R0
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; DESCRIPTION: NOVA FIXED HEAD DISK DIAGNOSTIC
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; REVISION HISTORY:
;
; REV.          DATE
; 00           08/31/70
; 01           04/10/71
; 02           08/16/73
; 03           07/16/76
;
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; TYPE 4019 DISK CONTROL DIAGNOSTIC
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; ABSTRACT
;   TYPE 4019 DISK CONTROL DIAGNOSTIC IS A
;   MAINTENANCE PROGRAM DESIGNED TO TEST THE
;   TYPE 4019 DISK CONTROL. ALTHOUGH THE PRO-
;   GRAM DOES NOT TEST THE DISK SURFACE,
;   A DISK DRIVE SELECTED TO ZERO IS REQUIRED.
;
; MACHINE REQUIREMENTS
;   ANY NOVA/ECLIPSE PROCESSOR
;   4K READ/WRITE MEMORY
;   TYPE 4019 DISK CONTROL
;   TYPE 4019A-B-C FIXED HEAD DISK (DISK 0)
;   TELETYPE
;
; SWITCH SETTINGS
;   STARTING ADDRESS      =00002 OR 200 NO HIGH SPEED CHANNEL
;   STARTING ADDRESS      =00003 WITH HIGH SPEED CHANNEL
;   SWITCH 1(1)           =PROCEED FROM ERROR
;   SWITCH 2(1)           =INHIBIT PRINTOUT TO T10
;   SWITCH 3(1)           =PRINT FAILURE RATE
;   SWITCH 5(1)           =PRINT TO LPT
;
; OPERATING PROCEDURE
;   LOAD THE PROGRAM VIA THE BINARY LOADER OM DTOS
;   SET SWITCHES TO 00002 OR 200
;   PRESS RESET
;   PRESS START
;
; NOTE:  WHEN IT IS DESIRED TO START THE PROGRAM AT A GIVEN
;        ADDRESS AND ALSO HAVE A GIVEN CONFIGURATION OF DATA
;        SWITCHES SET UPON STARTING, DO THE FOLLOWING
;        ENTER STARTING ADDRESS IN DATA SWITCHES,PRESS "EXAMI
;        PRESS "CONTINUE"
;        RESET ALL DATA SWITCHES EXCEPT THOSE DESIRED TO BE 0
;
;   THE PROGRAM WILL REQUEST DISK DRIVES TO BE
;   WRITE LOCKED. SET THE DRIVE SWITCH TO LOCK ALL.
;   THE PROGRAM WILL REQUEST THE DISK DEVICE
;   CODE. TYPE 20 OR 60 TO INDICATE THE DISK
;   CONTROL TO BE TESTED.
;   THE PROGRAM WILL RUN UNTIL MANUALLY STOPPED
;   OR AN ERROR IS DETECTED. AT THE END OF EACH
;   PROGRAM PASS THE WORD "PASS" WILL BE PRINTED.
;   ALLOW THE PROGRAM TO COMPLETE SEVERAL PASSES.
;
; PROGRAM OUTPUT/ERROR DESCRIPTION
;   IF A MALFUNCTION IS DETECTED THE PROGRAM
;   WILL HALT AT LOCATION ERR1+1. AC3 WILL
;   CONTAIN THE LOCATION OF THE ERROR,+1
;   EXAMINE THE LISTING TO DETERMINE IF OTHER
;   AC CONTENTS ARE IMPORTANT. THE OPERATOR
;   MAY CHANGE SWITCH SETTINGS AT THIS TIME
;   IF DESIRED. IF SWITCHES 1 AND 2 ARE ZERO
;   PENDING CONTINUE WILL CAUSE A PRINTOUT
;   OF THE ERROR LOCATION. THE ROUTINE WILL
;   ENTER A LOOP SUITABLE FOR SCOPING.
;   WHEN THE PROGRAM IS IN A SCOPE LOOP SET-
;   ING SWITCH 3(1) WILL CAUSE THE FAILURE

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10003 .MAIN

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    RATE TO BE PRINTED. SETTING SWITCH 1(1)
    WILL CAUSE THE PROGRAM TO PROCEED TO THE
    TEST.
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16. PROGRAM DESCRIPTION/THEORY OF OPERATION
    ; THE DISK CONTROL HARDWARE PROVIDES STATUS
    ; BITS AND A POWERFUL MAINTENANCE MODE.
    ; WHEN THE CONTROL IS IN THE MAINTENANCE
    ; MODE CLOCK PULSES FROM THE DISK ARE
    ; INHIBITED. THE DIAGNOSTIC PROGRAM USES
    ; A (DIC 3,DSK) INSTRUCTION TO PRODUCE A
    ; SINGLE CLOCK PULSE. THE DIAGNOSTIC
    ; PROGRAM EXAMINES THE STATE OF THE CONTROL
    ; AFTER A GIVEN NUMBER OF CLOCK PULSES TO
    ; PERFORM A GATE BY GATE CHECK OF MOST
    ; CONTROL LOGIC.
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17. RESTRICTIONS/MISC

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17.1 WHEN THE DIAGNOSTIC IS RUNNING NO OTHER
    ; CONTROL MAY REQUEST THE DISK DRIVE.
17.2 THE DISK DRIVE LOGIC MUST RESPOND TO
    ; SELECTING OF DRIVE 0.
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.EOT

0004 .MAIN

\*\*00000 TOTAL ERRORS. 00000 PASS 1 ERRORS