IDENTIFICATION

PRODUCT CODE: MAINDEC-08-DHCRA-A-D

FORMERLY: MAINDEC-8E-D2EB

PRODUCT NAME: CR8E/CR8F CARD READER TEST

DATE REVISED: MAY 22, 1972

MAINTAINED: DIAGNOSTIC GROUP

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1. ABSTRACT

THE PROGRAM TESTS THE CARD READER FOR CORRECT
ALPHANUMERIC AND BINARY OPERATIONS. IT ALSO TESTS CONTROL
INTERRUPT AND TIMING.

2. REQUIREMENTS

IF DF32 DISK IS PART OF THE SYSTEM, IT SHOULD BE IN THE OPERATE
MODE. WHEN DF32 DISK IS IN MAINTENANCE MODE IT SHARES DEVICE
CODES WITH THE CARD READER AND THEREFORE THE CARD READER
DIAGNOSTIC CANNOT BE VALIDLY RUN.
STATIC TESTS AND MANUAL INTERVENTION TESTS SHOULD OPERATE
CORRECTLY BEFORE ATTEMPTING TO OPERATE ALL OTHER TESTS.

2.1 EQUIPMENT

PDP8-E WITH EITHER ONE OF THE FOLLOWING CARD READERS:
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        A.CR03 G,D,I 100 MS CARD READER (CR8E)
        B.DOCUMATION M200 CARD READER (CR8F)
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CR03 ALPHANUMERIC CARD DECK
CR03 BINARY CARD DECK

3. LOADING PROCEDURE

THE PROGRAM TAPE IS IN BINARY FORMAT. LOAD THE PROGRAM INTO
CORE BY FOLLOWING THE INSTRUCTIONS PUBLISHED FOR THE PARTICULAR
BINARY FORMAT BEING USED.

4. STARTING PROCEDURE

4.1 CONTROL SWITCH SETTINGS

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SW0=0   TEST ALPHANUMERIC DECK
SW0=1   TEST BINARY DECK
SW1=0   PRINT DATA ERROR
SW1=1   SUPPRESS PRINT DATA ERROR
SW2=0   HALT AFTER DATA ERROR
SW2=1   SUPPRESS HALT AFTER DATA ERROR
SW3=0   HALT AT END OF TEST DECK
SW3=1   CONTINUE TO NEXT TEST DECK WITHOUT HALT.
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4.2 STARTING ADDRESSES OF CARD READER TESTS

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0200 =    ALPHA AND BINARY DATA RELIABILITY TESTS
0202 =    STATIC IOT TESTS
0204 =    MANUAL INTERVENTION TESTS
0206 =    COMPRESSED CODE DATA RELIABILITY TESTS
0210 =    VALIDITY BIT DATA RELIABILITY TESTS
2300 =    SCOPE LOOP
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4,3   PROGRAM AND/OR OPERATOR ACTION

        THE TESTS PROVIDED IN THIS DIAGNOSTIC SHOULD BE RUN IN THE
        FOLLOWING SEQUENCE,
        A,   REFERENCE 4,4 FOR CRØ3 G,D,I CARD READER
        B,   REFERENCE 4,4A FOR DOCUMATION M2ØØ CARD READER

4,4   CRØ3 G,D,I (CR8E) PROGRAM AND/OR OPERATOR ACTION

        STATIC IOT TESTS FOR CR8E CARD READER

        A,   PLACE A CARD DECK INTO INPUT HOPPER

        B,   TURN ON CARD READER POWER AND THEN DEPRESS MOTOR START

        C,   AT THIS POINT THE ONLY RED LIGHT TO BE ON SHOULD BE READ
             STOP,   REFERENCE G,D,I, MANUAL TO REMEDY OTHER RED LIGHT
             ERROR CONDITIONS,

        D,   LOAD ADDRESS Ø2Ø2

        E,   DEPRESS CLEAR AND THEN DEPRESS CONTINUE

        F,   PROGRAM WILL PRINT "IOTS OK" IF TEST RUNS,   PROGRAM WILL
             HALT IF TEST FAILS,   REFERENCE SYMBOLIC LISTING AND COMMENTS
             FOR APPROPRIATE ERROR DESCRIPTION,

        MANUAL INTERVENTION TESTS FOR CR8E CARD READER

        A,   PLACE ALPHANUMERIC OR BINARY TEST DECK IN LOWER HOPPER',

        B,   TURN ON CARD READER POWER

        C,   DEPRESS MOTOR START AND THEN DEPRESS READ START

             AT THIS POINT ALL RED LIGHTS SHOULD BE OFF,

        D,   LOAD ADDRESS Ø2Ø4

        E,   SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4,1),

        F,   DEPRESS CLEAR AND THEN DEPRESS CONTINUE

        G,   AT THIS POINT PROGRAM WILL ATTEMPT TO READ FOUR CARDS AND
             THEN ISSUE MESSAGE "OPERATOR MUST NOW PRESS READ STOP,"

        H,   AFTER READ STOP IS PRESSED PROGRAM WILL THEN ISSUE MESSAGE
             "OPERATOR MUST NOW PRESS READ START,"

        I,   PROGRAM WILL PRINT "MANUAL TESTS OK" IF TEST RUNS,   PROGRAM
             WILL HALT IF TEST FAILS,   REFERENCE SYMBOLIC LISTING AND
             COMMENTS FOR APPROPRIATE ERROR DESCRIPTION,

VALIDITY BIT DATA RELIABILITY TESTS FOR CR8E CARD READER
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STATIC IOT TESTS MUST OPERATE CORRECTLY BEFORE ATTEMPTING THIS TEST.

A. PLACE BINARY TEST DECK IN LOWER HOPPER

B. TURN ON CARD READER POWER

C. DEPRESS MOTOR START AND THEN DEPRESS READ START

AT THIS POINT ALL READ LIGHTS SHOULD BE OFF.

D. LOAD ADDRESS 0210

E. SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4,1)

F. DEPRESS CLEAR AND THEN DEPRESS CONTINUE

G. PROGRAM WILL RING BELL AND PRINT "*" WHEN FINISHED WITH AN 80 CARD TEST DECK.

H. IF MORE THAN 1 TEST DECK HAS BEEN LOADED, REPEAT STEP E AND PRESS CONTINUE.

COMPRESSED CODE DATA RELIABILITY TESTS FOR CR8E CARD READER
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STATIC IOT TEST MUST OPERATE CORRECTLY BEFORE ATTEMPTING THIS TEST.

A. PLACE ALPHANUMERIC TEST DECK IN LOWER HOPPER.

B. TURN ON CARD READER POWER,

C. DEPRESS MOTOR START AND THEN DEPRESS READ START

AT THIS POINT ALL RED LIGHTS SHOULD BE OFF,

D. LOAD ADDRESS 0206

E. SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4,1)

F. DEPRESS CLEAR THEN DEPRESS CONTINUE

G. PROGRAM WILL RING BELL AND PRINT "*" WHEN FINISHED WITH AN 80 CARD TEST DECK.

H. IF MORE THAN 1 TEST DECK HAS BEEN LOADED, REPEAT STEP E AND PRESS CONTINUE,