

IDENTIFICATION

PRODUCT CODE: MAINDEC-08-DHTMD-A-D
PRODUCT NAME: TM8-E DATA RELIABILITY 9 TRACK
DATE CREATED: DECEMBER 4, 1972
MAINTAINER: DIAGNOSTIC GROUP
AUTHOR: LEONARD E. BEYERSDORFER

TMREL9

COPYRIGHT (C) 1972
DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASS. 01754

NOTE

THERE ARE SIX DIAGNOSTIC PROGRAMS ASSOCIATED WITH THE TM8-E DECMAGTAPE CONTROL AND ITS TRANSPORT SYSTEM, ALTHOUGH PHYSICALLY SEPARATE, THESE PROGRAMS MUST BE TREATED AS A LARGE INTEGRATED TEST, AND TO ENSURE PROPER SYSTEM OPERATION, THESE TESTS MUST BE EXECUTED IN THE ORDER DELINEATED BELOW:

IF A GIVEN TEST SHOULD FAIL AND IT APPEARS THAT A FIX HAS BEEN FOUND, ALL PROGRAMS MUST BE RUN, ONLY WHEN ALL TESTS HAVE RUN WITHOUT ANY UNACCEPTABLE ERRORS CAN THE TM8-E SYSTEM BE CONSIDERED UP.

TM8-E DIAGNOSTIC PROGRAMS' ORDER OF EXECUTION

1. TM8-E CONTROL TEST PART 1 (MAINDEC-08-DHTMA)
2. TM8-E CONTROL TEST PART 2 (MAINDEC-08-DHTMB)
3. TM8-E DRIVE FUNCTION TIMER (MAINDEC-08-DHTMC)
4. TM8-E DATA RELIABILITY 9 TRACK (MAINDEC-08-DHTMD)
5. TM8-E DATA RELIABILITY 7 TRACK (MAINDEC-08-DHTME)
6. TM8-E RANDOM EXERCISER (MAINDEC-08-DHTMF)

TABLE OF CONTENTS

1.	ABSTRACT
2.	REQUIREMENTS
2.1	HARDWARE
2.2	MEMORY
2.3	PRELIMINARY PROGRAMS
3.	PROGRAM LOADING PROCEDURE
4.	PROGRAM STARTING PROCEDURE
5.	STANDARD TEST PROCEDURE
5.1	DRIVE SELECTION
5.2	TEST SELECTION
5.2.1	TEST SEQUENCE SELECTION TABLE (TST)
5.2.2	DATA PATTERN SELECTION TABLE (PAT)
5.2.3	PARITY SELECTION (PAR)
5.2.4	DENSITY SELECTION (DEN)
5.2.5	RECORD LENGTH SEQUENCE SELECTION (RLS)
5.2.6	WRITE STOP MODE SELECTION (WMO)
5.2.7	READ STOP MODE SELECTION (RMO)
6.	SWITCH REGISTER CONTROLS
7.	ERROR REPORTS
7.1	ACCUMULATED WRITE ERRORS REPORT
7.2	WRITE STATUS ERROR REPORT
7.3	ACCUMULATED READ ERRORS REPORT
7.4	READ STATUS ERROR REPORT
8.	RESTRICTIONS
9.	PROGRAM DESCRIPTION
10.	LISTING

4
WARNING: ANY PROGRAM INTERRUPT THAT OCCURS FROM A DEVICE OTHER THAN
THE TMB-E IS A FATAL ERROR AND WILL RESULT IN A PROGRAM HALT.

1. ABSTRACT

THE TMB-E DATA RELIABILITY TEST (9 TRACK) IS PRIMARILY DESIGNED FOR THE COLLECTION OF STATISTICAL INFORMATION PERTAINING TO THE DATA RELIABILITY OF THE 9 TRACK TAPE DRIVES ASSOCIATED WITH THE TMB-E DECMAGTAPE CONTROL. THE PROGRAM IS ALSO DESIGNED TO BE USEABLE AS AN AID IN THE CHECKOUT AND MAINTENANCE OF THE TMB-E AND ASSOCIATED 9 TRACK DRIVES.

THIS PROGRAM MAY ALSO BE USED AS AN EXTENDED DATA RELIABILITY ACCEPTANCE TEST FOR 9 TRACK DRIVES.

ALL TAPE OPERATIONS ARE DONE IN 9 TRACK COMPATIBLE MODE.
CORE DUMP MODE IS NOT UTILIZED.

2. REQUIREMENTS

2.1 HARDWARE

PDP-8/E, 8/M, 8/F
TELETYPE OR COMPATIBLE DEVICE (TTY)
TMB-E DECMAGTAPE CONTROL
TU10 MASTER/SLAVE TRANSPORT SYSTEM WITH FROM ONE TO EIGHT
9 TRACK DRIVES.

2.2 MEMORY

THIS PROGRAM REQUIRES 4K OF MEMORY AND MAY RESIDE IN ANY MEMORY FIELD.

2.3 PRELIMINARY PROGRAMS

ALL PROCESSOR/MEMORY DIAGNOSTICS
TMB-E CONTROL TEST PART 1
TMB-E CONTROL TEST PART 2
TMB-E DRIVE FUNCTION TIMER