CASS3 Testprogram.

Purpose: To test the magnetic tape cassette drive + controller and/or the magnetic tape cassette itself.

Method: after loading the program and starting it a message will be typed. The operator is then supposed to change all, some or none of the parameters as given in the mentioned message. The program is preset to do Test nr. 1, with a blocklength of 200 characters. The data used is alternating 11110000 and 10101010. The device address is 5 this may be changed to /15 or /25 or any other non-standard address.

During the tests certain messages will appear on the ASR. If everything is o.k. only the passcount will be printed. Error messages are preceded by a two digit number that refers to the listing. Also, in most cases the blocknumber of the block in which the error occurred will be given. (After a Search this number will be invalid)
The instruction that failed will also be printed, but for more detailed information it is necessary to refer to the listing of the program.

Description of the tests:
(the two digit number is the one mentioned above.)

TEST 1
0A REWIND
0B WRITE
0C REWIND
0D READ

TEST 4
40 REWIND
WRITE
REWIND
UNLOCK (Just Re-load)
REWIND
READ
REWIND
UNLOCK (Now it's allowed to turn or change the cassette.)

TEST 3
30 REWIND
31 WRITE up to E.O.T.
32 UNLOCK (operator should turn cassette)
REWIND
33 WRITE up to E.O.T.
34 UNLOCK (See above)
35 READ all blocks written-1
36 UNLOCK (See above)
37 READ
38 UNLOCK
This write/reads the complete tape. The test takes about 1/2 hour.

TEST 1 just tests if the drive works more or less.
TEST 2 is described on the next page. it tests most functions of the drive and the control (Not: E.O.T & Unlock)
TEST 3 is specially made to test the tape itself. It also prints how many blocks it could write (Almost 1000 is normal)

TEST 3 also checks the detection of E.O.T.
TEST 4 is a faster way to test Unlock

TEST 2

00 REWIND
01 WRITE 50 blocks (if this parameter was not changed)
02 WRITE TAPE MARK
03 WRITE one block
04 SEARCH T.M., backward
05 READ T.M.
06 REWIND
07 SEARCH T.M., forward
08 READ 1 block
09 BACKSPACE
10 READ 1 block
11 REWIND
12 READ 50 blocks.

After the completion of one test the updated pass-count is printed.
The test is then restarted with the same parameters.
In TEST 3 the blocklength is always maximum (256 characters)
Blocknumber and passcount are printed as decimal numbers, the status-word is hexadecimal.
If it is neccessary to test the data path between CPU and controller the parameter 'data' (in A4) should be changed to /55AA.
The predetermined pattern gives the best testing for phase encoded serial data but it does not check the parallel data path completely.

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