

CUSTOMER ENGINEERING TESTS
 FOR THE 1401 DATA PROCESSING SYSTEM

Block No. 9100C

CORE STORAGE WORST PATTERN

Purpose of Test

To create maximum $\frac{1}{2}$ read-out noise by setting up a worst bit pattern in the area of storage from position 370 to the highest. In a prescribed pattern, W's (A42) are substituted for R's (B81) and vice versa. This will have the greatest effect in cancelling existing valid output bits or initiating extra bits as a result of noise.

Units Required

- 1401 Processing Unit (1.4K, 2K, 4K, 8K, 12K, or 16K)
- 1402 Card Reader or 729 Tape Drive (see procedure on page 3)
- 1403 Printer

<u>Operations Used</u>	<u>Code</u>
Clear	(/)
Set Word Marks	(,)
Clear Word Marks	(X)
Move	(M)
Load	(L)
Branch on Processing	
Check	(B---%)
Add	(A)
Modify Address	(#) for 8K, 12K and 16K
Compare	(C)
Read	(1)
Print and Branch	(2---)
Move Digit	(D)
Stop	(.)

Method of Test

The complete test block consists of the following cards:

1. Title Card (0A)
2. Set Word Marks Card for Loading Routine (02)
3. Program Instruction Cards for loading worst bit pattern (03-68)
4. Two special program cards to set up instructions that are effective only when tests are run from tape (69-70)
5. Special program instruction cards for selecting highest storage address (71-95)
6. Trailer Card (96)

NOTE: The highest storage address for a 16K machine is selected by card number 95 in item 5 above. If the machine to be tested is less than 16K, remove cards indicated below before loading the program:

<u>Storage Capacity</u>	<u>Remove Cards Numbered</u>
12K	95
8K	95 and 94
4K	95, 94 and 93
2K	95, 94, 93 and 92
1.4K	95, 94, 93, 92 and 91