CUSTOMER ENGINEERING TESTS
FOR THE 1401 DATA PROCESSING SYSTEM

Block No. 9100C

CORE STORAGE WORST PATTERN

Purpose of Test

To create maximum ½ 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

Operations Used	Code
Clear	(/)
Set Word Marks	(,)
Clear Word Marks	(≠)
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:

Storage Capacity	Remove Cards Numbered
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