CUSTOMER ENGINEERING TESTS
FOR THE 1401 DATA PROCESSING SYSTEM

INDEXING AND STORE STARS

Purpose of Test

To test the Indexing and Store A and B STAR circuitries by modifying the A and B addresses of an instruction by index factors punched in the detail cards and stored in Index Locations 1, 2, and 3. The program is designed for any storage size from 1.4K to 16K. Errors are detected by comparing a machine-developed result "STARS ARE" with a predetermined result "STARS SHOULD BE" punched in each detail card. For unequal conditions the machine either stops to permit console checking or prints the results depending upon the setting of Sense Switch E.

Units Required

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

Operations Used	Code
Clear	(/)
Set Word Marks	(,)
Test Character & Branch	(B------?)
Branch	(B)
Load	(L)
NOP (Indexing with A-Address Tagged)	(N-?----)
NOP (Indexing with B-Address Tagged)	(N----?-)
NOP (Indexing with A- and B-Addresses Tagged)	(N-?--?-)
Compare (Indexing with A- and B-Addr. Tagged)	(C-?--?-)
Move Characters to Record Mark (Indexing with A- and B-Addresses Tagged)	(P-?--?-)
Store A-Address Register	(Q---)
Store B-Address Register	(H---)
Compare	(C)
Test for Zone	(V------?)
Move	(M)
Print	(2)
Stop (error)	(.)

Method of Test

The complete test block consists of the following cards:

1. Title Card (0A)
2. Two Program Chaining Routine Cards (02-03)
3. Three Title and Headings Print Routine Cards (04-06)
4. Four special program cards to set up instructions that are effective only when tests are run from tape (07-10)
5. Program Instruction Cards (11-75)