CUSTOMER ENGINEERING TESTS
FOR THE 1401 DATA PROCESSING SYSTEM

Block No. 1030A

RIPPLE PUNCH

Purpose of Test

To test the punching circuitry by punching every punchable character in every column of the card in ripple fashion.

Units Required

1401 Processing Unit
1402 Card Reader-Punch and/or 729 Tape Drive (Model C)
1403 Printer (optional)

Operations Used	Code
Clear	(/)
Set Word Marks	(,)
Clear Word Marks	(@)
Load	(L)
Move	(M)
Test Zone and Branch	(V------2)
Punch	(4)
Punch and Branch	(4---)
Stop	(.)
Compare	(C)
Add	(A)
Branch	(B)

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 (11-45)

NOTE: There are no detail cards in this test. The 60-character table is loaded from constant cards 42-44. The table consists of the following punchable characters:

Alphabet	26	
Numerals	10	
Special Characters	18	(includes 6 non-printable characters)
Blanks	6	
	60	

Two Sense Switches may be brought into play as follows:

Sense Switch B ON - permits scoping of the punching operation for one card as often as desired.
Sense Switch D ON - repeats the program for the entire test as often as desired.