

CUSTOMER ENGINEERING TESTS  
FOR THE 1401 DATA PROCESSING SYSTEM

Sheet 1 of 5  
E.C. 110378  
Part No. 451414  
Block No. 034QA

RESET SUBTRACT

Purpose of Test

To test the Reset Subtract circuitry by reset subtracting the A Field into an accumulator (B Field) and comparing the result with the Result Should Be Field. 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  
1402 Card Reader or 729 Tape Drive  
1403 Printer (optional)

<u>Operations Used</u>	<u>Code</u>
Clear	(/)
Set Word Marks	(,)
Load	(L)
Branch	(B)
Reset Subtract	(S)
Compare	(C)
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 (11-48)
6. Detail Cards to reset subtract a 5-position A Field into a 10-position accumulator (49-53)
7. Detail Cards to reset subtract a 1-position A Field into a 1-position accumulator (54-57)

Four Sense Switches may be brought into play as follows:

- Sense Switch B ON - permits scoping of the Reset Subtract operations as often as desired.
- Sense Switch C OFF - no printing for correct results.  
ON - prints for correct results.
- Sense Switch D ON - repeats the program for an individual card as often as desired.
- Sense Switch E OFF - prints for error results.  
ON - stops for error results.