

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 (49-58)

Four Sense Switches may be brought into play as follows:

- Sense Switch B ON - permits scoping of the Complement Add 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.

The program is executed in the following manner:

In column 13 of the detail cards, an "S" indicates that a SUBTRACT OP code is used because of like signs; no "S" indicates that an ADD OP code is used because of unlike signs. This column is tested for the presence of "S".

Following this test, the program branches to the appropriate set of instructions and develops the difference by algebraically subtracting the A Field (columns 1-10) from the B Field (columns 21-30). The difference, including the sign position, is then compared to the Result Should Be Field. For unequal conditions the program branches to the Error Print Routine. The position of Sense Switch E then determines whether the machine stops to permit console checking or prints the result with an "ERROR" indication.

#### Checking Procedure

SENSE SWITCH E ON - Machine stops for errors.

1. Remove the last card in the stacker.
2. Visually check A Field, B Field, and Result Should Be Field with Locations 201-210, 221-230, and 241-250 respectively. Then check Locations 241-250 with Locations 261-270.
3. Check B  $\neq$  A logic light. Should be OUT if Result Should Be and Result Is Fields are the same; should be ON if not.

NOTE: In all cases, units position of Result Should Be and Result Is Fields (Locations 250 and 270) are always alphabetic due to positive or negative signs.

SENSE SWITCH E OFF - Machine prints error results. Examples of error print-out:

A Field	B Field	Result Should Be	Result Is	
0000000000	0123456789	012345678I	0123456789	ERROR
555544444E	567890123M	012345678R	0123456789	ERROR

SENSE SWITCH C ON - Machine prints correct results. Examples:

0000000000	0123456789	012345678I	012345678I
555544444E	567890123M	012345678R	012345678R