

DESCRIPTION AND USE

W. E. Co. J94714-B Current Flow Test Set
(35-F)

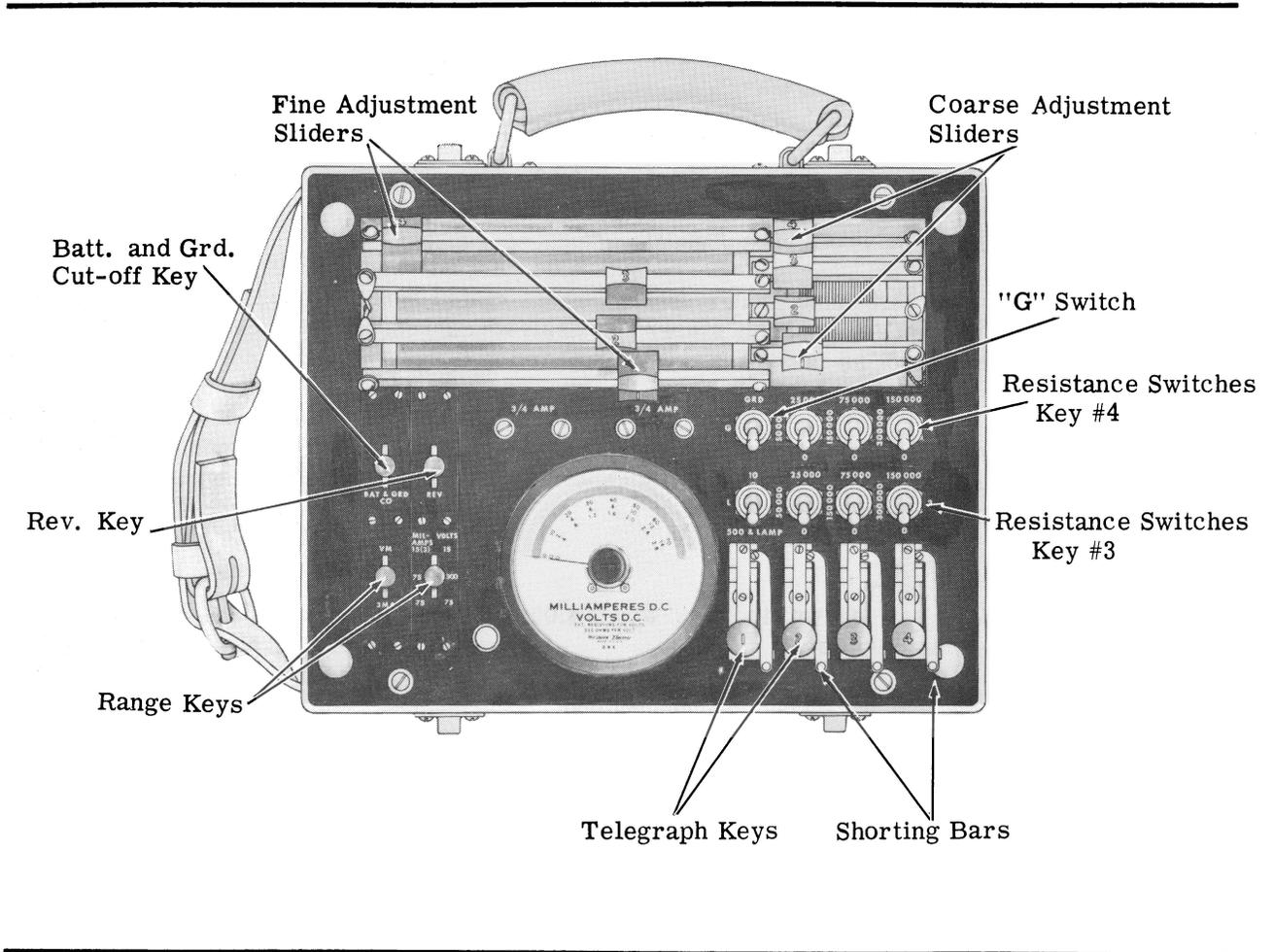


Fig. 1. Orientation View of 35-F Test Set

1. GENERAL

- 1.01 This Practice covers the use of the 35-F test set by field personnel.
- 1.02 The 35-F set is primarily used as an aid in adjusting relays, or other apparatus, for which current flow requirements are specified.

2. DESCRIPTION

- 2.01 The 35-F is basically a millammeter in series with an adjustable resistance for regulating the current flow to an external circuit. By operation of various keys and switches, several different test circuits may be set up.

2.02 Four telegraph type keys (see Fig. 1) allow up to four preset current values to be applied to the external apparatus under test. Two rheostats connected in series are used as the variable resistance. The smaller rheostat is equipped with four red sliders, one for each of the telegraph keys. These are used to adjust the current flow to the approximate value desired (coarse adjustment). The larger rheostat has four black sliders, one for each of the telegraph keys, and these are used to adjust current to exact value desired.

(A) Additional resistance, up to 500,000 ohms may be cut into the circuits of keys 3 and 4, by means of the resistance toggle switches. (See Fig. 1)

2.03 Operation of the left hand range key (see Fig. 1) to the VM position allows the 35-F set to be used as a volt meter.

2.04 Fig.2 contains a chart of the current and voltage ranges of the 35-F test set as well as a view of the meter face.

3. TEST CONNECTIONS

3.01 The connections as shown in Fig. 3 are the most commonly used.

4. OPERATION

Preparation

4.01 All sliders should be in the extreme right position. And all telegraph key shorting bars open.

4.02 Connect test set to apparatus under test, using appropriate connections as illustrated in Fig. 3 (A or B).

Procedure

4.03 Close shorting bar for telegraph key to be used.

4.04 Adjust the red and black sliders, associated with telegraph key selected, until desired current is indicated on meter. Open shorting bar.

(A) If more than one current value is given in the circuit requirement table (if hold, nonoperate, etc.), these may be set up on the remaining telegraph keys, using the associated sliders.

4.05 Depress telegraph key, and adjust apparatus according to the practice covering that particular piece of equipment.



Current

- 0-750 M.A. - Outer scale x 10
- 0-75 M.A. - Outer scale
- 0-15 M.A. - Middle scale
- 0-3* M.A. - Inner scale

Voltage

- 0-300V - Inner scale x 100
- 0-75V - Outer scale
- 0-15V - Middle scale

* When this range is desired the left hand function and range key is operated to the 3MA position. The right hand key must be in the 15(3) M.A. position.

Fig. 2. View of Meter Scale and Ranges of Test Set.

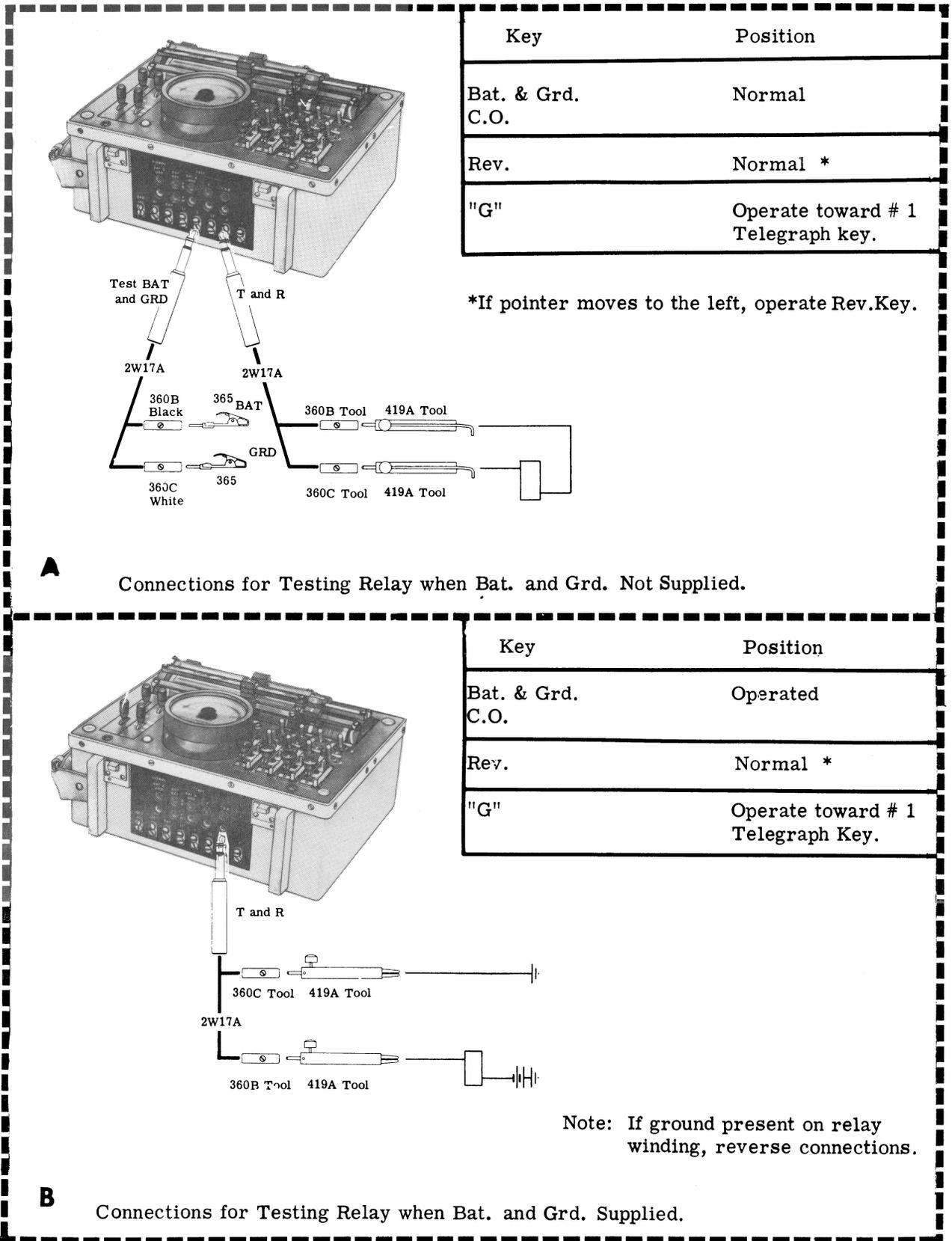


Fig. 3. Test Connections