

RING-UP RELAY TESTS USING THE KI-1500 TEST SET
UNIVERSAL CORD CIRCUITS - NO. 10 OFFICE

1. GENERAL

1.01 This section provides for an alternating current (A-C.) flow test of the ring-up relays using the KI-1500 test set, in the universal cord circuits in No. 10 manual offices.

1.02 This issue, which replaces Issue A, is reissued to cover a cross-reference to the information for the electrical requirements of the involved relays and to delete the non-operate tests previously specified.

1.03 The electrical requirements for the No.89 type relays are covered in Section A460.012.

1.04 The tests are to be made on a one-man basis from the front of the switchboard, and should be performed during periods of light load so as not to cause interference with service.

1.05 A description of the KI-1500 test set is outlined in Division A700.

2. APPARATUS

2.01 One KI-1500 test set, or equivalent.

2.02 One L-3441 cord which is equipped with a No. 247-A plug.

3. TEST SET PREPARATION

3.01 Before using the KI-1500 test set care should be taken to see that the Ward Leonard resistance (300 ohms) is in the generator supply leads. This may be either in a generator supply circuit per Drawing KI-1501, Fig. 3, or in case generator and generator ground supply is obtained from the switchboard ringling mains, the resistance in the set may be cut in by turning the switch designated RES to the terminal marked IN. When the supply is obtained from the circuit KI-1501, Fig.3 this switch should be on the terminal marked OUT.

3.02 Battery and ground may be obtained from a

battery supply jack wired per Fig. 3 of Drawing KI-1501 by means of the L-3441 cord or from the battery and ground bus bars in the section. In the latter case a 1-1/3 ampere fuse should be placed in the circuit. A spare fuse post in the rear of the section may be used for this purpose.

3.03 Set the switch designated SHUNT on the shunt indicated in the section of Division A400 covering No. 89 type relays. This section also gives the A-C. current values to be set up on the KI-1500 test set.

Note: The current values should be set up before connecting the set to the circuit to be tested.

3.04 Operate the key marked CORD which places ground through resistance on the sleeve of the TEST jack to operate the sleeve relays in the cord circuit under test.

3.05 Leave the TEST key operated, change the other key from the NON to OPR position; set up the A-C. "operate" value for the relay to be tested by means of the slider marked OPR and release the TEST key.

4. METHOD

4.01 Insert the cord to be tested in the TEST jack of the test set and operate the key to position OPR.

4.02 Dial the digit 0, which by means of relays in the test circuit, applies the A-C. "operate" values to the No.89 type relay for a period of approximately one second. The cord supervisory lamp should light and remain lighted until the plug is removed from the TEST jack or the cord circuit listening key is operated depending upon the type of cord circuit being tested.

5. REPORTS

5.01 The required record of this routine should be entered on the proper form.