

SUPERVISOR'S TELEPHONE CIRCUITS

1. GENERAL:

- 1.1 This section outlines the methods to be used in performing routine tests of Supervisor's telephone circuit equipment.
- 1.2 Ordinarily trouble which occurs in supervisor's telephone circuits is detected by the traffic employees, but the tests outlined herein are considered necessary to insure proper operation under all operating conditions.
- 1.3 Part "a" of this section covers "A" supervisor's telephone circuits, and part "b" covers "B" supervisor's telephone circuits.
- 1.4 The testing of telephone sets is covered in a separate section.

2. APPARATUS:

- 2.1 Operator's telephone set.
- 2.2 Balance test set.

3. METHOD:

(a) "A" Supervisor's Telephone Circuits:

1. These circuits should be tested for the following:
2. **Lamp Signals:** Test the lamp signals associated with "A" supervisor's telephone circuits by inserting the calling cord of any regular cord circuit in the supervisor's jack in the outgoing trunk multiple. The Division (red) pilot lamp should light. Remove the plug and insert the calling cord of any regular cord circuit in the answering jack of each section which is wired to the division circuit under test. The section (white) pilot lamp should light. Remove the plug. While making this test observe that the lamps light to the proper brilliancy.
3. **Audible Signals:** To test the audible signals, insert the calling cord of any regular cord circuit in any of the jacks associated with the supervisors' division under test and ring on this cord. The bell in the supervisor's telephone circuit should ring.
4. **Continuity:** In order to test the supervisors' circuit for continuity, insert an answering cord of any regular cord circuit in jack "A" of the balance test circuit and another plug having tip and sleeve shorted, with the ring open, in jack "B" of the test circuit, thus placing an unbal-

ance on the test circuit. Place the calling cord of this pair in one of the jacks associated with the supervisors' division under test. This will place a tone on the supervisors' circuit.

5. Insert the plug of the operators' set in one of the supervisors' jacks in the division. A tone should be heard in the receiver. Remove the operators' set from the supervisors' jacks and plug into an operators' position. Insert a calling cord in the section jack of the supervisors' circuit and open the associated key. The tone should be heard in the receiver. Repeat the above test at each section of the switchboard in the supervisors' division under test. Remove the cord and plugs.
6. **Supervision:** To test for supervision insert the calling cord of a regular cord circuit pair in the outgoing trunk jack associated with the supervisors' division under test. The supervisory lamp of the cord should remain lighted.
7. Insert the plug of the operators' telephone set in the supervisors' jacks at the first section of the division under test. The supervisory lamp associated with the cord circuit should be extinguished. Repeat this test at each section in the division.
8. Test all jacks associated with the supervisors' telephone set for loose connection or cutout using the balance test set and minimum plug as outlined elsewhere.
9. Remove all testing equipment, thus restoring the circuit to normal.

(b) "B" Supervisors' Telephone Circuits:

1. **Lamp Signal:** Insert any trunk cord in the outgoing trunk multiple jack of the supervisors' division circuit to be tested. The division (red) lamp should light. Remove this plug from the outgoing trunk jack and insert it in the section supervisors' jack. The section (white) lamp should light. Remove the plug. Repeat the test at each section associated with the division under test. Check the lamps for proper brilliancy during test.
2. **Audible Signal:** Have a plug inserted in the distant end of one of the trunks. This plug should remain in the trunk during the test. Insert this trunk in one of the supervisors' jacks. The division bell should ring.

3. **Tripping Machine Ringing:** When testing the newer type of supervisors' telephone circuits, all that is necessary to trip the machine ringing is to plug an operators' set into the supervisors' jacks at one of the sections. The tripping feature should be tested on both the ringing and the silent intervals. Replug the trunk in order to start the ringing after tripping.
4. When testing the older types of circuits insert the plug of the operators' set in one of the section jacks and press the key button used to trip the ringing. The ringing should trip immediately. Test for tripping on each, the ringing and silent periods.
5. **Continuity:** To test for circuit continuity have the balance test patched to the distant end of the trunk mentioned above by inserting an answering cord and a tip sleeve short plug in jacks "A" and "B" at the distant office as outlined under paragraph (a)-4. Plug the trunk in each of the jacks associated with the supervisors' telephone circuit and listen for the tone at each section.
6. Ground the sleeve of the cord used for outgoing supervisors' calls. Note that the tone stops, indicating that the cutoff feature of the circuit is working properly.

7. With the trunk connected to one of the supervisors' jacks operate the key used for flashing. The operation of this key should be heard in the receiver of the operators' set.
8. Plug a test receiver in jack "C" of the balance test circuit at the trunk switchboard. Plug the supervisors' cord in jack "A" of the balance test circuit and test for noise or cutout in the cord.
9. Press the ringing key associated with the supervisors' cord and note ring in test receiver. Release key slowly and the ringing should stop before inside key springs "make." This will be readily determined by the change in tone in the test receiver.
10. Inspect keys, clean and readjust, if required, in accordance with the "X" specification.
11. Test multiple jacks associated with supervisors' circuit for cutout and loose connection, using the minimum test plug as outlined elsewhere.

4. REPORTS:

- 4.1 Defects found on test should be recorded on proper form.