

TRUNKS FROM SELECTOR LEVELS TO RECORDING POSITIONS
OPERATION TESTS
USING TRUNK TEST SET ES-30096-01
STEP-BY-STEP SYSTEMS

1. GENERAL:

- 1.1 This section describes a method of testing trunks from selector levels to toll recording positions, except recording-completing trunks from coin box trunk groups.
- 1.2 This routine should be made from one selector having direct access to the trunks to be tested. A different selector should be used each time this routine is performed, so that all trunks will eventually be tested from all selectors.
- 1.3 This routine should be made during a period of light traffic.
- 1.4 Any trunk on which a failure is encountered when making this routine, should be made busy until the trouble is cleared.

2. APPARATUS:

- 2.1 Selector Trunk Test Set—Wagon Type (ES-30096-01).
- 2.2 One No. 813 Cord equipped with one No. 110 Plug and one No. 240-A Plug.
- 2.3 One No. W3E Cord equipped with one No. 110 Plug, two No. 252 Tools, and one No. 59 Cord Tip.
- 2.4 One No. 728 Cord equipped with two No. 110 Plugs (used with battery supply jack).
- 2.5 One No. 875 Cord equipped with one No. 110 Plug, two No. 59 and two No. 90 Cord Tips (used when a battery supply jack is not available).
- 2.6 One No. 338 Tool (jack spring insulator).
- 2.7 One Operator's Telephone Set.
- 2.8 No. 375-A Make-busy Tools, as required.

3. TEST SET PREPARATION:

- 3.1 Locate the test set near the selector from which the test is to be made and temporarily make the selector busy, by means of a No. 375-A make-busy tool. By means of the No. 728 cord, connect jack

B of the test set to the BAT jack on the selector frame.

Note: If a BAT jack is not available on the selector frame, insert the plug of the No. 875 cord into jack B of the test set. Connect the **white** conductor of this cord to a spare fuse or the equipment end of a battery fuse in service and the **red** conductor to ground. In no case should the fuse selected, exceed 5 amperes.

- 3.2 Connect the No. 110 plug of the No. W3E cord to jack C of the test set. Connect the **white** conductor (No. 59 cord tip) of this cord to the rotary interrupter spring No. 2, the **blue** conductor (No. 252 tool) to spring No. 4 of the selector E relay and the **red** conductor (No. 252 tool) to No. 2 cam spring.

- 3.3 By means of the No. 338 tool, insulate the rotary interrupter springs.

- 3.4 Connect the operator's telephone set to the test set jacks TEL.

4. METHOD:

- 4.1 Operate the TALK key. Remove the No. 375-A make-busy tool from the selector and connect jack TST of the test set to the test jack of the selector, by means of the No. 813 cord. Step the selector to the level upon which the trunks appear, by means of the dial. Operate the TALK-TRK key.

- 4.2 Operate the MON key in order to step the selector to the first contact on the level and to connect the receiver for monitoring. The BY lamp should light as the selector steps, and be extinguished when an idle trunk is reached.

Note: Where the test set is not equipped with a BY lamp, all reference to it in this section should be disregarded.

- 4.3 In case the first contact is not equipped, as indicated by the bank designation card, advance the selector to the first trunk by

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operating and releasing the PLS key, as required. Observe that the BY lamp remains lighted on each unequipped contact, indicating that the sleeve contacts are properly grounded.

- 4.4 When the first trunk is reached, observe that it is not busy. A busy trunk is indicated by conversation, audible ringing signal, or busy tone in the receiver and by a lighted BY lamp.
- 4.5 Operate the TALK key. Also operate the BDT key to place a tone on the sleeve, if the trunk is equipped for class of service tone. Observe that the BY lamp is lighted. Note that the audible ringing signal is heard in the receiver within a period of approximately four seconds and is removed when the operator answers.

Note: When the operator answers in less than four seconds, the audible ringing signal may not be heard.
- 4.6 **Trunks equipped for class of service tone:** The operator should hear the tone when she answers and it should be removed when she operates the tone key associated with the trunk. Check with the operator, that this feature functioned properly and that the tone is restored by the momentary removal of the plug from the trunk jack.
- 4.7 Restore the BDT key as soon as the above test is completed.
- 4.8 Request the operator to leave her plug in the trunk jack and observe the supervisory lamp.

- 4.9 Operate the MON key for about one second and observe that the BY lamp remains lighted, which indicates that the connection is held by the plug in the trunk jack. The supervisory lamp in the operator's cord circuit should be lighted while the MON key is operated.
- 4.10 Operate the TALK key and check with the operator that the supervisory lamp functioned properly.

Note: On some test sets, it is necessary to momentarily operate the AT key to remove the short-circuit from the receiver.

- 4.11 Operate the MON key and then advance the selector to the next trunk by operating and releasing the PLS key, as required.
- 4.12 Observe that the SU lamp is not lighted during the test of any trunk. A lighted SU lamp indicates a reversed trunk.
- 4.13 When the last trunk has been tested, restore the TALK-TRK key. The BY lamp should be extinguished. Release the selector by momentarily restoring the TALK key. Remove the No. 338 tool and attachments. Dial the selector to a working level and observe that it rotates properly to the first idle trunk. Remove the No. 240-A plug from the test jack and observe that the selector releases properly.

5. REPORTS:

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