

TRUNKS AND TIE LINES
OPERATION TESTS FROM SELECTOR LEVELS
700C AND 710C PBX
(DIAL EQUIPMENT)

1. GENERAL:

1.1 This section describes a method of testing the operating features of trunks and tie lines from selector levels, including the selector levels of selector-connectors. The tests covered are:

- (a) **Trunks and Tie Lines to Manual Offices and P B X 's:**
- (b) **Tie Lines to Incoming Selectors or Selector-Connectors:**
- (c) **Trunks to Machine Switching Offices:**

This section has been reissued to include the 710C PBX in the title and convert it to letter size.

1.2 This routine should be made from one selector or selector-connector having direct access to the trunks and tie lines to be tested. A different switch should be used each time, so that all trunks and tie lines will eventually be tested from all switches.

1.3 Any trunk or tie line on which a failure is encountered, should be made busy until the trouble is cleared.

2. APPARATUS:

2.1 One Dial Hand Test Set equipped with a No. 2-CB Dial and a No. 240-A Plug.

3. METHOD:

(a) **Trunks and Tie Lines to Manual Offices and P B X 's:**

3.1 Connect the dial hand test set to the test jack of an idle selector or selector-connector and operate the C button. Dial the switch to the required level and observe that it rotates to the first idle contact.

3.2 When the operator answers, check the trunk or tie line number and note that the transmission is satisfactory.

Rotate Selectors:

3.3 Rotate the selector to the next contact by momentarily operating the off-normal level. Observe that the selector rotates automatically over unequipped contacts. This will also occur on busy contacts.

3.4 When the last trunk or tie line on the level has been tested, release the C button and observe that the selector releases properly.

Rotate Selector-Connectors:

3.5 Block the release armature non-operated. Manually rotate the shaft to the next contact. The H and K relays should operate on an idle trunk and should remain normal if the contact is busy or unequipped.

3.6 If the H and K relays do not operate on an equipped contact, monitor on the connection to determine that the trunk or tie line is actually busy, by releasing the C button and then immediately operating the H and K relays, manually.

3.7 When the last trunk or tie line on the level has been tested, rotate the shaft to the 11th position and note that busy tone is heard in the receiver. Remove the block from the release armature and then remove the plug from the test jack. Observe that the selector-connector releases properly.

(b) **Tie Lines to Incoming Selectors or Selector-Connectors:**

3.8 Connect the dial hand test set to the test jack of an idle selector or selector-connector and operate the C button. Dial the switch to the required level and observe that it rotates to the first idle contact.

3.9 Dial the number of the dial station at the distant P B X for which arrangements have previously been made to have someone answer the necessary test calls. Note that the audible ringing signal is heard in the receiver.

3.10 When an answer is received, check the extension number and note that the transmission is satisfactory.

3.11 Rotate the selector or selector-connector to the next tie line as outlined in paragraphs 3.3 and 3.4 or 3.5 to 3.7.

3.12 If the tie lines are also multiplied to the manual positions at the distant P B X, proceed as outlined in paragraph 3.8. Dial zero. The incoming selector or selector-connector should step to the zero level, lock up a relay in the trunk circuit to light the trunk lamp, and then release.

3.13 When the attendant answers at the distant P B X, check the tie line number and note that the transmission is satisfactory.

3.14 Rotate the selector or selector-connector to the next tie line as outlined in paragraphs 3.3 and 3.4 or 3.5 to 3.7.

SECTION 541-003-666

(c) Trunks to Machine Switching Offices:

3.15 Connect the dial hand test set to the test jack of an idle selector or selector-connector and operate the C button. Dial the switch to the required level and observe that it rotates to the first idle contact.

3.16 Note that dial tone is received from the central office.

3.17 **To Panel Offices:** Dial the number of the permanently busy test line in the machine switching office. Note that the busy tone is heard in the receiver, indicating that the dialing and transmission features of the trunk are satisfactory.

3.18 **To Step-by-Step Offices:** Dial the test line number in a non-reverse battery connector group in the machine switching office. Note that a tone is heard in the receiver for approximately one second, followed by clicks in the receiver at the rate of 60 per minute. This indicates that the dialing and transmission features of the trunk are satisfactory.

3.19 Rotate the selector or selector-connector to the next contact as outlined in paragraphs 3.3 and 3.4 or 3.5 to 3.7.

4. REPORTS:

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