

**TRUNKS**  
**CONTINUITY AND POLARITY TEST FROM SELECTOR LEVELS**  
**702A PBX**

**1. GENERAL**

1.01 This section describes a method of testing the continuity and polarity of trunks outgoing from selector levels and the all paths busy tone feature of selectors, by means of the dial hand test set.

1.02 These tests should be performed during hours of light traffic and on all levels of the switch.

1.03 This routine should be performed from one selector in each multiple bank division. A different selector should be used each time, so that all trunks will eventually be tested from all selectors.

1.04 When a test of trunks or tie lines from selector levels is scheduled, this routine may be omitted on the levels involved.

1.05 Any trunk on which a failure is encountered when making this routine should be made busy until the trouble is cleared.

**2. APPARATUS**

2.01 Dial Hand Test Set equipped with a No. 2-CB Dial and a No. 240-F Plug equipped with a No. 2-T Lamp connected to the tip and ground contacts.

**3. METHOD**

**Regular Selectors**

3.01 Note that the switch to be tested is idle. Remove the switch cover and insert the No. 240-F plug of the dial hand test set into the test jack of the selector.

3.02 Operate the C button and observe that the lamp on the plug lights dimly. Dial the selector to the level to be tested and observe that the switch stops on the first idle trunk without chattering and that the lamp is still dimly lighted.

3.03 Step the selector to successive contacts until the 11th rotary step is reached, by rapidly opening and closing the off-normal springs. Observe that the selector advances and stops on each idle trunk without chattering and that the lamp lights dimly as at the start of the test. Decreased illumination usually indicates a grounded tip or ring. Chattering usu-

ally indicates an open ring or sleeve in the trunk. If the lamp lights brightly (except for a momentary flash between steps) an open tip, a tip or ring crossed with battery, or a reversed trunk is usually indicated.

Note: A reversed trunk is also indicated by failure of the selector to release when the C button is released.

3.04 Release the C button to restore the selector to normal.

3.05 Repeat the operations described in 3.02 to 3.04 on each level. Check on at least one level (preferably the 10th) for all paths busy tone in the receiver before releasing from the 11th rotary position.

3.06 Replace the switch cover and disconnect the dial hand test set.

**Two-Digit Rotary Hunting Selectors**

3.07 Insert the No. 240-F plug of the dial hand test set into the test jack of the selector.

3.08 Operate the C button and observe that the lamp on the plug lights dimly.

3.09 Dial the required two digits to direct the switch to the first trunk of the level to be tested and observe that it steps to the first idle trunk without chattering and that the lamp is still dimly lighted. Decreased illumination usually indicates a grounded tip or ring. Chattering usually indicates an open ring or sleeve in the trunk. If the lamp lights brightly an open tip, a tip or ring crossed with battery or a reversed trunk is usually indicated.

Note: A reversed trunk is also indicated by failure of the selector to release when the C button is released.

3.10 Release the C button and when the switch has returned to normal dial the two digits required to select the next higher numbered trunk on the same level. Test this trunk in accordance with 3.09.

3.11 Test each succeeding trunk on the level by releasing the switch and dialing the proper two digits to select the trunk, then proceed as in 3.09.

3.12 Disconnect the dial hand test set.

**4. REPORTS**

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