COMBINATION CENTRAL OFFICE TRUNKS RELAY, JACK AND LAMP CIRCUIT TESTS 700C PBX (MANUAL SWITCHBOARD)

1. GENERAL:

1.1 This section covers tests of the trunk relays, jacks for cut-outs, sleeve circuit, lamp jack frame for crosses and night service (if provided).

2. APPARATUS:

2.1 Test Receiver (No. 528 or equivalent) equipped with cords and clips, No. 760 Cord, and Test Plug (minimum size).

3. METHOD:

3.1 **Trunk Relay Operation Test:** Operate the talk and dial key of an idle cord circuit and insert the front plug into a jack of the trunk under test. The busy signals should operate. If the board is connected to a manual central office, the operator should answer. If the board is connected to a dial system central office, dial tone should be heard. Dial zero and the operator should answer. This tests the outgoing call relay operation.

3.2 Request the operator to ring on the trunk and disconnect the cord from the jack. Note that the busy signals should remain operated while the trunk is held by the central office operator before ringing, although the P B X switchboard cord has been disconnected from the trunk jack.

3.3 When the central office operator rings on the trunk, the associated lamp or lamps should light and the busy signals should remain operated. This tests the ringing circuit.

3.4 Insert an idle front plug into a jack of the trunk. The associated lamp or lamps should go out and the busy signals should remain operated. Disconnect the plug from the jack. Note that the busy signals remain operated until the trunk is released at the central office.

3.5 Insert the test plug into any associated jacks of the trunk under test. The busy signals should operate. This tests the make contact of the trunk jack. Disconnect the test plug.

3.6 **Trunk Jack Cut-out Test:** Connect the test receiver across the tip and ring terminals of the test plug. Insert the test plug into a jack of the trunk under test and manipulate the plug to determine whether the jack cuts out. This should be done by grasping the plug at the cord end and while applying a sideward pressure (that is away from the centre of rotation), move the plug through a complete circle. Disconnect the plug from the jack and repeat the test at any multiple jack appearances.

3.7 **Trunk Jack Sleeve Circuit Test:** To test that the sleeve battery contact is open, make a busy test on the sleeve of a jack of the trunk under test. No click should be heard.

3.8 **Test of the Lamp Jack Frame for Crosses:** Connect one clip of the test receiver to the sleeve of an idle back plug. Touch the other clip of the test receiver to the metal frame of the trunk lamp cap. No click should be heard. Disconnect the test receiver.

3.9 **Night Service Test:** If night jacks are provided, make the following test: Operate the night and dial key of an idle cord circuit. Connect the front plug to the night jack of the trunk under test and the back plug to the jack of a nearby idle extension. Call the central office from this extension in the regular way. Call should go through satisfactorily. Obtain a ring on the trunk from the central office. Bell of the extension should ring satisfactorily. Note that busy signals and line lamp or lamps should not operate on this connection. Restore the cord circuit to normal.

Note: Great care should be exercised by the maintenance man in placing calls over trunks in dial system message rate areas to see that non-registering code numbers are used.

4. REPORTS:

4.1 The required record of these tests should be entered on the proper form.