Verify

# TESTS AND INSPECTIONS AT TIME OF INSTALLATION 550 - AND 551 - TYPE PBX

Item

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|---|---|----|----|---|----|----|
|   |   |    |    |   |    |    |

1.01 This section covers the tests and inspections that are required when Nos. 550-B, 550-C, 550-SC, 551-A and 551-B PBX's are installed.

1.02 This section is reissued to change the method of presenting the items for inspection, to provide additional inspection features and to change the method of making the tests of the dial central office PBX hunting feature and night service. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 When making tests which require the use of a hand test set or test receiver, keep the receiver slightly away from the ear so that clicks which occur during testing will not act directly on the ear.

1.04 An assistant is required for making the extension line circuit operation tests under 5.02. Also the assistance of a test deskman may be required in making tests under 5.03.

#### 2. APPARATUS

2.01 The apparatus for performing the tests required in this section may be found in Bell System Practices covering each specific test.

Verify

ing purposes - swings freely -

Securely fastened—covers tightly in

thumbscrew holds.

place-properly marked.

# 3. TESTS AND INSPECTIONS

### 3.01 Inspection of Terminals

Item

Relays and Relay Mounting Plates

| Terminal Box  | Proper location—firmly mounted.  |  |  |  |  |
|---|--|--|--|--|--|
| Connecting Blocks                                   | Securely fastened.   |  |  |  |  |
| Fanning Strips                                      | Securely fastened—properly lettered and numbered.  |  |  |  |  |
| Cable Conductors<br>and Wires                       | Neatly dressed — properly terminated—battery feeders strapped.   |  |  |  |  |
| 3.02 Inspection of Cables                           |  |  |  |  |  |
| ' Cables  | Neatly run—protected with tape, where required   |  |  |  |  |
| Fasteners   | Securely applied—proper type.  |  |  |  |  |
| 3.03 Inspection of PBX                              |  |  |  |  |  |
| Location  | Convenient—accessible—not subject to service hazards—stands level.   |  |  |  |  |
| General Appearance                                  |  |  |  |  |  |
| Exterior  | Not marred, damaged or scratched.  |  |  |  |  |
| Interior  | Clean — free from wire clippings, etc.—wiring neatly arranged.   |  |  |  |  |
| Cable   | Insulated from switchboard frame-<br>work — beyond reach of cord<br>weights—securely fastened—cable<br>holes plugged.  |  |  |  |  |
| Cable Forms, Cable<br>Conductors and<br>Jack Wiring | Securely fastened—neatly dressed—protected from sharp edges or moving parts—cable pins placed, where required—fanning holes used—properly terminated—no worn or frayed insulation. |  |  |  |  |
| Relay Gate  | Sufficient area available for work-  |  |  |  |  |

| Framework Parts                                    | Doors and panels in place and prop-<br>erly fitted—framework grounded,<br>but no foreign grounds present.   |  |  |
|--|---|--|--|
| Circuit Label                                      | Pasted on back panel or on cord<br>weight protective panel toward<br>the wiring side.   |  |  |
| Generator Lamp                                     | Tightly in place-proper type.   |  |  |
| Induction Coils, Con-<br>densers, Buzzers,<br>etc. | Tightly in place-properly marked.   |  |  |
| Face Equipment                                     |   |  |  |
| Instruction Card<br>and Holder                     | Securely fastened in place—clean glass.   |  |  |
| Trunk and Station<br>Designation<br>Strips         | Properly made out—firmly in place—clean protective strips.  |  |  |
| Lamp Caps  | Clean — proper type and color — firmly in place.  |  |  |
| Apparatus Blanks                                   | Firmly in place.  |  |  |
| Cords  | Long enough to reach all jacks—cord weights do not strike floor, or roof of toe hole—strain cords properly hooked at cord shelf terminals—conductors properly terminated. |  |  |
| Plugs  | Clean—shells not broken—screws not loose or missing.  |  |  |
| Keyshelf   | Operates freely and latches—returns, when unlatched—clean key pan — keyshelf lock operates properly.  |  |  |
| Keys   | No missing, loose or broken parts, such as handles, key tops, screws, etc.—tight in mounting.   |  |  |
| Dial   | Proper speed dial furnished.  |  |  |
| Dial Number Card<br>and Holder                     | Properly made out — securely in place.  |  |  |
| Miscellaneous Items                                |   |  |  |
| Night Key Lock-<br>ing Strip                       | One provided for each position—<br>attendant instructed.  |  |  |
| Operators' Chairs                                  | Where furnished, satisfactory condition of finish—all screws and bolts tight.   |  |  |
| Foot Rail  | When provided, all screws or parts tight—not grounded.  |  |  |
| Platforms  | When provided, all bolts and screws tight—where practicable, fastened to floor.   |  |  |

### 4. RELAY TESTS

Fuse Panel and Fuses

Hand Set Hanger Battery (101A

Power Plant)

4.01 The relays should not require the application of a current flow test at the time of installation, except when a PBX is moved from one subscriber's premises to another without passing through the shop or storeroom for reconditioning. Test and readjust the individual relays, if required, in accordance with the requirements for the particular type of relay involved.

Where provided, proper type and capacity—firmly in place—spare fuses stocked—properly marked.

When provided, securely in place.

See Division Index 167-000-000.

When provided, properly installed.

### 5. CIRCUIT OPERATION TESTS

- Perform the following circuit operation tests in accordance with the Bell System Practices covering tests of Nos. 550-B, 550-C, 550-SC, 551-A and 551-B PBX's.
  - (A) Miscellaneous Circuit Tests
  - (B) Cord Circuit Tests
  - (C) Attendant's Telephone and Dial Circuit Tests
  - (D) Central Office and Trunk Circuit Tests
  - (E) Extension Line Circuit Tests

In continuation of the extension line circuit tests perform the following operations at each station with the aid of an assistant while observing the results at the PBX

front supervisory lamp

Talking connection satisfac-

Station bell rings properly.

Back supervisory lamp ex-

Back supervisory lamp

lights.

tory.

lights.

tinguished.

#### Verification Step

- Remove hand set from mount- Line lamp lights. ing at first station.
- Insert back plug of first cord Line lamp extinguished into station jack.
- Operate TALK and DIAL key.
- Depress switchhook contacts.
- Operate back ringing key few seconds—then restore.
- Restore switchhook contactsadvise tester.
- Restore equipment to normal.
- Using a different cord pair each time, repeat Steps 1 to 7 above, until all stations have been tested.
  - Test of Dial Central Office PBX Hunting Feature
    - Note: In some types of central offices, the trunks may not be selected in consecutive order. In such cases obtain the assistance of the test deskman in verifying that the trunks are connected in the correct order. If they are, and all trunks are used in the course of the test, disregard the order in which they are selected by the central office equipment.

#### Step Action

- Operate TALK and DIAL Presence of dial tone. key-insert front plug into first trunk jack.
- 2 Dial telephone number of this
- Remove front plug insert same in trunk jack call has
- appeared. Remove and reinsert the front Presence of dial tone. plug in the jack.
- Dial telephone number of this trunk.
- 6 Repeat Steps 3 to 5, testing to highest numbered trunk.
- Restore equipment to normal.
- For those trunks assigned separate line numbers for incoming night service, perform the following operations:
- Operate TALK and DIAL key-insert front plug into first trunk jack.
- Call or dial night listed number.
- Remove front plug insert Trunk lamp extinguished. same in trunk jack call has appeared.
- Restore equipment to normal.
- Repeat Steps 1 to 4, testing all trunks assigned separate night listings.

## Verification

- Ringing induction heardhigher numbered next trunk lamp lights.
- Trunk lamp extinguished.
- Ringing induction heardnext higher numbered trunk lamp lights.
- Busy signal, when highest numbered trunk is dialed.
- Operator answers or pres-
- ence of dial tone.
- Proper trunk lamp lights.

## 6. REPORTS

Enter the required record of these tests and inspections on the proper form.