

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

1. GENERAL

- 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.

3. TESTS AND INSPECTIONS

3.01 Inspection of Terminals

<u>Item</u>	<u>Verify</u>
Terminal Box	Proper location—firmly mounted.
Connecting Blocks	Securely fastened.
Fanning Strips	Securely fastened—properly lettered and numbered.
Cable Conductors 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.
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General Appearance

Exterior	Not marred, damaged or scratched.
Interior	Clean—free from wire clippings, etc.—wiring neatly arranged.

Cable	Insulated from switchboard framework — beyond reach of cord weights—securely fastened—cable holes plugged.
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Cable Forms, Cable Conductors and 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.
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Relay Gate	Sufficient area available for working purposes—swings freely—thumbscrew holds.
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Relays and Relay Mounting Plates	Securely fastened—covers tightly in place—properly marked.
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<u>Item</u>	<u>Verify</u>
Framework Parts	Doors and panels in place and properly fitted—framework grounded, but no foreign grounds present.
Circuit Label	Pasted on back panel or on cord weight protective panel toward the wiring side.
Generator Lamp	Tightly in place—proper type.
Induction Coils, Condensers, Buzzers, etc.	Tightly in place—properly marked.
Face Equipment	
Instruction Card and Holder	Securely fastened in place—clean glass.
Trunk and Station Designation 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.
Keyshef	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 and Holder	Properly made out — securely in place.
Miscellaneous Items	
Night Key Locking Strip	One provided for each position—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.
Fuse Panel and Fuses	Where provided, proper type and capacity—firmly in place—spare fuses stocked—properly marked.
Hand Set Hanger	When provided, securely in place.
Battery (101A Power Plant)	When provided, properly installed. See Division Index 167-000-000.

4. RELAY TESTS

- 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.

SECTION 536-490-230

5. CIRCUIT OPERATION TESTS

5.01 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 P B X '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

5.02 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 P B X

<u>Step</u>	<u>Action</u>	<u>Verification</u>
1	Remove hand set from mounting at first station.	Line lamp lights.
2	Insert back plug of first cord into station jack.	Line lamp extinguished — front supervisory lamp lights.
3	Operate TALK and DIAL key.	Talking connection satisfactory.
4	Depress switchhook contacts.	Back supervisory lamp lights.
5	Operate back ringing key few seconds—then restore.	Station bell rings properly.
6	Restore switchhook contacts—advise tester.	Back supervisory lamp extinguished.
7	Restore equipment to normal.	—
8	Using a different cord pair each time, repeat Steps 1 to 7 above, until all stations have been tested.	—

5.03 Test of Dial Central Office P B X 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.

<u>Step</u>	<u>Action</u>	<u>Verification</u>
1	Operate TALK and DIAL key—insert front plug into first trunk jack.	Presence of dial tone.
2	Dial telephone number of this trunk.	Ringinduction heard—next higher numbered trunk lamp lights.
3	Remove front plug—insert same in trunk jack call has appeared.	Trunk lamp extinguished.
4	Remove and reinsert the front plug in the jack.	Presence of dial tone.
5	Dial telephone number of this trunk.	Ringinduction heard—next higher numbered trunk lamp lights.
6	Repeat Steps 3 to 5, testing to highest numbered trunk.	Busy signal, when highest numbered trunk is dialed.
7	Restore equipment to normal.	—
5.04 For those trunks assigned separate line numbers for incoming night service, perform the following operations:		
1	Operate TALK and DIAL key—insert front plug into first trunk jack.	Operator answers or presence of dial tone.
2	Call or dial night listed number.	Proper trunk lamp lights.
3	Remove front plug—insert same in trunk jack call has appeared.	Trunk lamp extinguished.
4	Restore equipment to normal.	—
5	Repeat Steps 1 to 4, testing all trunks assigned separate night listings.	—

6. REPORTS

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