

TESTS AND INSPECTIONS AT TIME OF INSTALLATION **505B, 505C, 506A AND 506B PBX**

I. GENERAL

1.01 This section covers tests and inspections that are required when No. 505-B, No. 505-C, No. 506-A and No. 506-B PBX's are installed.

1.02 The completed installation should be checked in accordance with the verification requirements forming a part of the general installation practices for those sections which apply to the installation work.

1.03 The assistance of a test deskman or a central office operator is required in making tests under (C).

2. TOOLS

2.01 All tools required for the tests in this section are specified in the practices covering tests of No. 505-B, No. 505-C, No. 506-A and No. 506-B PBX's.

3. INSPECTION OF CROSS-CONNECTING TERMINAL

- 3.01 The box should be firmly mounted.
- 3.02 Connecting blocks and fanning strips should be firmly mounted and properly lettered and numbered.
- 3.03 Cable extending to the PBX should be properly terminated.
- 3.04 Cross-connections and wires to stations should be neatly dressed and firmly fastened to the connecting block terminals.

4. INSPECTION OF CABLE BETWEEN CROSS-CONNECTING TERMINAL AND PBX

4.01 The cable should be in place in accordance with the requirements covered in the sections on placing and fastening wire and cable in buildings and on desks and tables of the Bell System Practices.

5. INSPECTION OF PBX

5.01 The interior of the PBX should be clean and free from wire clippings, etc., and the exterior should present a neat appearance without scratches or other defects.

5.02 Sufficient slack should have been left in the entering cable so that there is no strain on the skimmers. The cable and cable form should be securely fastened by means of cable clamps and waxed flax twine.

5.03 On 506 type PBX's the cable should be fastened so as not to interfere with the opening and closing of the front panel.

5.04 The individual cable conductors for each row of terminal punchings should be properly terminated. The punchings should be free from wire clippings and loose bits of solder.

5.05 All relay covers should be in place.

5.06 See that the attendant's telephone instrument is properly connected and equipped with a dial when required.

5.07 If a hand generator is furnished see that the generator resistance lamp and the hand generator handle are in place.

5.08 If a hand generator is not furnished with the PBX see that the generator ringing key has been strapped so that regardless of the position of the key, ringing current will be connected to the station line ringing keys. The hole drilled in the end panel for the generator handle should be

covered by an escutcheon plate on 506 type boards or have an apparatus blank inserted into it on 505 type boards.

5.09 See that a copy of the circuit label is in the cabinet.

5.10 See that the cover is in place and securely fastened by the lock screws. Where a 506 type PBX is installed in a location which does not permit easy access to the rear of the board, the lock screw in the bottom rail of the rear panel may be left loose.

6. RELAY TESTS

6.01 The relays, drops and signals 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 store-room for reconditioning. The testing and readjustment of individual relays, when necessary, should be conducted in accordance with the requirements for the particular type of relay involved.

7. CIRCUIT OPERATION TESTS

(A) Miscellaneous Circuit Tests

7.01 Make the following tests in accordance with Section 536-050-511.

- (a) Generator Feeder.
- (b) Battery Feeder.
- (c) Test of break contacts of extension and trunk keys.
- (d) Supervisory relay test.
- (e) Attendant's telephone set and dial circuit.
- (f) Battery cut-off and auxiliary signal circuit.

(B) Extension Line Circuit Operation Tests

7.02 Make the following tests in accordance with Section 536-050-511.

- (a) Operation test of the supervisory signal in connection with each extension connecting key.
- (b) Test of extension line signal and the continuity of the circuit through the extension connection key.
- (c) Test of extension ringing keys.

(C) Trunk Circuit Tests

7.03 Make the following tests in accordance with Section 536-050-511.

- (a) Trunk polarity test.
- (b) Test of trunk drop and trunk drop buzzer contacts.
- (c) Trunk holding and talking test.

(D) Dial Tone Tests

7.04 When the PBX is connected to a dial central office, test for dial tone by operating a trunk connecting key and then operating an attendant's telephone key to the corresponding position and note the presence of dial tone in the attendant's receiver. Repeat this test on each trunk.

(E) Test of Dial Central Office PBX Hunting Feature

7.05 Operate the first trunk key and associated talking key. When dial tone is heard, dial the number of the first trunk. Ringing induction should be heard and the call should come in on the second trunk operating the trunk drop.

7.06 Restore the first trunk key and then the second trunk drop and after several seconds, operate the second trunk key associated with the same talking key used in 7.05. When

SECTION 536-050-230

dial tone is heard on the second trunk, dial the number of the second trunk. Ringing induction should be heard and the call should come in on the third trunk operating the trunk drop.

7.07 Restore the second trunk key and then the third trunk drop and after several seconds, operate the third trunk key associated with the same talking key used in 7.05. When dial tone is heard on the third trunk, dial the number of the third trunk and if the P B X is equipped with more than three trunks the call will come in on the next higher trunk otherwise the busy signal should be heard in the receiver.

Note: The restoring of the trunk key associated with the trunk over which the call is dialed and the short delay before operating the trunk key associated with the trunk upon which the call has appeared is neces-

sary to permit the central office equipment to restore to normal so that registration of calls will not take place.

7.08 Proceed as outlined in 7.07 until all trunks have been tested and the busy signal is received on the highest numbered trunk.

7.09 Restore all keys and drops to normal.

7.10 Operate any one of the trunk keys except the first and the associated talking key. When dial tone is heard, dial the number of the first trunk. Ringing induction should be heard and the call should come in on the first trunk operating the trunk drop.

7.11 Restore all keys and drops to normal.