TESTS AND INSPECTIONS AT TIME OF INSTALLATION

557A PBX

1. GENERAL

1.01 This section covers the tests and inspections that are required at the time of installation of the 557A PBX, when used as a manual PBX or as a switchboard for secretarial answering service.

1.02 This section replaces information formerly covered in Section 536-570-230 which is hereby canceled.

1.03 Performance of the tests in this section will require action and verification at the central office, switchboard, PBX station, and a distant PBX.

2. APPARATUS

2.01 The apparatus for performing the tests in Table A is specified in the Bell System Practices referred to in the table. A head telephone set or handset is required to perform the station line test covered in Part 5.

3. INSPECTION

Inspection of Cross-Connecting Apparatus

3.01 The cross-connections should be neatly dressed and all connections properly terminated.

3.02 The terminal lugs and terminal strips should be free from wire clippings and loose bits of solder. The conductors should be carried through the proper fanning holes.

3.03 Binding post chambers or connecting blocks and fanning strips should be firmly mounted and properly lettered and numbered.

3.04 Cross-connections should be run for central office and tie trunks.

3.05 The fuse alarm and other optional alarms should be properly cross-connected.

3.06 Connections and wires to stations should be neatly dressed and properly cross-connected.

3.07 All cables should be run and fastened in accordance with standard PBX installation practices.

3.08 When the 557A PBX is used with concentrator-identifier equipment, the secretarial lines should be cabled to the frame for cross-connection to the switchboard jack and lamp terminals. The secretarial lines may be numbered 0-99 or 1-100 at the switchboard.

> *Note:* Direct cabling is not recommended for connecting the switchboard jack and lamp terminals to the identifier equipment. If direct cabling is used, it will be necessary to change the jack and lamp assignment when repairing a terminal in trouble. Direct cabling will also cause a limitation in the assignment of rotary numbers, ringing codes, etc.

3.09 Ringing and power leads should be properly connected.

Inspection of PBX

3.10 The PBX should stand level, and each section should be fastened to the floor.

3.11 The interior of the PBX should be clean and free from foreign material and wire clippings. The exterior of the PBX should be without scratches and other defects.

3.12 All bolts used for fastening sections together should be tight.

3.13 The plugs and connectors of the cord units, secretarial line units, dial unit, and common equipment unit should be secure and in the sockets.

3.14 All relay and unit covers should be in place.

TABLE A

CIRCUIT OPERATION TESTS — 557A PBX

TEST PERFORMED	SECTION
Secretarial Lines	473-601-501
Manual Conference Circuit Operation Tests Overall Transmission Tests	 534-420-510 534-420-511
Attendant Telephone And Dial Circuit Test of Position-Splitting Feature Test of Cord-Splitting Feature Test of Monitoring Key Test of Dial Speed	536-490-507
Cord Circuit Night and Thru Dial Key	536-490-525
Miscellaneous Circuits Ringing Supply Battery Supply Battery Cutoff and Auxiliary Signal Circuit Two-Position Grouping Circuit Alarm Circuit	536-490-600
Central Office Trunk Circuit Test of Trunk Ringup Relay Operation	536-490-665
Outgoing Manual and Dial Repeating Tie Trunk Operation Test	536-490-666
Ringdown and Automatic Tie Trunk Operation Test	536-490-667

3.15 The circuit label should be secured to the inside of the rear panel of each section. The P number of the circuit label should match that stamped on the framework of the PBX.

3.16 Long cords should be provided in 2-position installations with the proper pulleys and cord weights.

3.17 The cable hole or holes in the end panel or in panels not used for entering cable should be covered with a fiber plate.

3.18 The proper fuses should be in place in each of the working circuits.

3.19 The front panel, underneath the writing shelf, and the rear panel should be in place and properly fitted.

3.20 The lamp caps and designation cards should be in place and of the proper color.

3.21 The cords should be free-running during the complete operation of withdrawal and retraction.

3.22 The cord pairs should be colored alternately red and slate, with the supervisory lamp caps red and white to correspond.

3.23 The designation strip windows and face strips should be of clear plastic and should not be marred or discolored.

3.24 The faces of the jack and lamp socket mountings should not be dented, chipped, or scratched.

3.25 There should be approximately 1/64-inch clearance between the 8-type buzzer knob and the front panel, when the knob is turned from the extreme clockwise position to the extreme counterclockwise position.

3.26 The buzzer knob of the 8-type buzzers should be securely fastened to the buzzer shaft.

3.27 The KS-16821 footswitch should be securely fastened to the floor.

4. TESTS

Relay Tests

4.01 No mechanical or electrical tests are required to be made on the relays in the PBX at the time of installation if no operating failures occur during performance of the circuit operation tests shown in Table A and the station line test in 4.03. If it is necessary to test or readjust any relays, the requirements for the particular relays involved shall be met.

Buzzer Volume

4.02 The sound output of the buzzer should reduce gradually from maximum to complete cutoff, when the adjusting knob is turned from the extreme clockwise position to the extreme counterclockwise position.

Circuit Operation Tests

4.03 Perform the circuit operation tests shown in Table A and the station line test which follows.

STEP	ACTION	VERIFICATION
Station Line Test		
1	At switchboard— Insert plug of headset into attendant telephone jacks located under right side of writing shelf.	
2	Operate BATT key to ON position.	
3	Operate BUZ key to ON position.	
4	At idle PBX station selected for test— Remove handset from switch hook.	At switchboard— Station line lamp associated with station under test lighted. Buzzer sounds.
5	At switchboard— Insert plug of STATION cord of first cord pair into station line jack associated with lighted line lamp.	Station line lamp extinguished. TRUNK AND STATION cord supervisory lamp lighted. Buzzer silenced.
6	Operate TALK AND DIAL key of first cord pair.	Conversation satisfactory between switchboard and PBX station.
7	At PBX station under test— Replace handset on switch hook.	At switchboard— STATION cord supervisory lamp lighted. Buzzer sounds.

STEP	ACTION	VERIFICATION
8	At switchboard— Momentarily operate STATION cord ringing key.	At switchboard— Ringing heard. At PBX station under test— Ringing heard.
9	At PBX station under test— Remove handset from switch hook.	At switchboard— Ringing silenced. At station— Ringing tripped. At switchboard— STATION cord supervisory lamp extinguished. Buzzer silenced.
10	At PBX station under test— Replace handset on switch hook.	At switchboard— STATION cord supervisory lamp lighted. Buzzer sounds.
11	At switchboard— Remove plug of STATION cord from station line jack.	STATION cord supervisory lamp extinguished. Buzzer silenced.
12	Using a different cord pair each time, repeat Steps 4 through 11 until all stations have been tested.	