MISCELLANEOUS CIRCUITS
POSITION GROUPING, NIGHT ALARM, PEG COUNT, SERVICE ASSISTANT TELEPHONE, TEST CORD, CALLING SIGNAL AND LAMP BATTERY CUTOFF OPERATION TESTS
607A AND 607B PBX

1. GENERAL

1.01 This section describes a method of testing the miscellaneous circuits of the Nos. 607A and 607B PBXs.

1.02 The tests and features tested are:

A. Position Grouping Key Circuit

This test checks that the POS GROUP key cuts through properly and that there are no cutouts or undue noises when the key is operated.

B. Night Alarm Circuit

This test checks the operation of the audible signal when this circuit is used with central office trunks, station lines, tie trunks, and interposition trunks.

C. Peg Count Circuit

This test checks the peg count registers for proper mechanical function.

D. Service Assistant's Telephone Circuit

This test checks the operation of the visual and audible signal when this circuit is seized and ringing is applied. It also checks that the tripping feature functions properly.

E. Test Cord Circuit

This test checks the operating features of this circuit when connected to a test desk through the plugging up line circuit.

F. Calling Signal Circuit

This test checks the operation of the flashing visual signal and the audible signal features in this circuit.

G. Lamp Battery Cutoff Circuit

This test checks the battery cutoff feature on a trunk signal lamp.

1.03 Where the service assistant's telephone circuit is connected to an outgoing trunk multiple which is multipled through several sections, the tests should be made from a different section on each routine so that eventually the circuit will have been tested from each multiple jack.

1.04 These tests should preferably be made during periods of light traffic to avoid interference with service.

1.05 **Lettered Steps:** The letters a, b, c, etc., are added to a step number to indicate that the steps cover an action which may or may not be required, depending on local conditions. The conditions under which a lettered step or series of steps should be made are given in the action column, and all steps governed by the same condition are designated by the same letter. Where a condition does not apply, the associated steps should be omitted.

2. APPARATUS

Tests A, B, D, E, G

2.01 PBX attendant's telephone set (52A head telephone set) (or equivalent).

Test B

2.02 No. 1011G dial hand test set equipped with a No. 2W37A cord assembly consisting of a W2DB cord, a No. 471A jack, and two No. 2 test clips per AT&T Co specification No. 6928 (or equivalent).

Test D

2.03 Service assistant's telephone set (52B head telephone set) (or equivalent).

2.04 Spare multiple or answering jack with ground through a 60-ohm resistor (No. 18BR) (or equivalent) on the sleeve, with the tip and ring strapped together.

3. METHOD

STEP	ACTION	VERIFICATION
	A. Position Grouping Key Circuit	
1	Operate POS GROUP key at position under test	
2	Insert attendant's telephone into telephone jacks of adjacent position	
3	Connect an idle front cord of position under test to central office trunk jack	Dial tone or operator heard satisfactorily
4	Remove cord from trunk jack and touch tip of this cord to sleeve of another idle cord of position under test	Distinct click heard in attendant's receiver
5	Using end of finger lightly tap key top of POS GROUP key	No cutouts or noise heard in attendant's receiver
6	Restore the POS GROUP key to normal	
7	Remove the attendant's telephone set from jacks	
	B. Night Alarm Circuit	
1	Check that NA (night alarm) key is in normal position (audible alarm effective)	
	Night Alarm on Interposition Trunks	
2	Insert idle front cord into interposition trunk MULT jack associated with night alarm circuit under test	TRK lamp is lighted Indicating lamp is extinguished Audible alarm sounds
3	Remove cord from trunk jack	TRK lamp is extinguished Indicating lamp is lighted Audible alarm is silenced
	Night Alarm on Central Office Trunks	
4	Check that lamp battery cutoff key is in normal position	
5	Insert attendant's telephone set into telephone jacks	
6	Insert idle front cord into MULT jack	
7a	If a manual area— Operate Talk and Dial key	Central office operator answers

STEP	ACTION	VERIFICATION
8b	If a dial area— Operate Talk and Dial key, wait for dial tone, then dial "0" (zero) **Note:** When a reverting call circuit is available, dial the assigned number to obtain a ringback, instead of calling operator and disconnecting.	DSA operator answers
9	Request operator to ring back on trunk then disconnect front cord from trunk jack	
10	Central office operator rings on line	Associated trunk lamp is lighted Audible alarm sounds
11	Reinsert front cord into trunk jack	Audible alarm silenced Trunk lamp is extinguished
12	Request operator to disconnect, then remove plug from trunk jack	
	Night Alarm on Station Lines	
13	With switch in MON position connect dial hand test set across terminals of a station line circuit at the line relay rack	
14	If no conversation is heard on line, operate switch to TALK position	Associated line lamp is lighted Audible alarm sounds
15	Disconnect dial hand test set	Line lamp extinguished Audible alarm silenced
	Night Alarm on PBX Tie Trunks	
16	Insert front cord into tie trunk jack to call attendant at distant PBX	Attendant answers
17	Request attendant to call back on this tie trunk, then disconnect cord from tie trunk jack	Tie trunk lamp lighted Audible alarm sounds
18	Reinsert front cord into tie trunk jack	Tie trunk lamp extinguished Audible alarm silenced
19	Request attendant to disconnect, then disconnect cord from tie trunk jack and disconnect attendant's telephone set from telephone jack	
	C. Peg Count Circuit	
1	Depress peg count key associated with position under test five times	Register in peg count cabinet advances five times
2	Repeat the operation in step 1 on each position to be tested	Check that each register advances five times
	D. Service Assistant's Telephone Circuit	
1	Insert plug of PBX attendant's telephone set into telephone jacks of an idle regular position	
2	Insert idle back cord plug into short circuited jack per 2.04	
3	Insert front cord plug with listening key operated into service assistant's section jack S of circuit under test **Note:** On the 607B PBX, ringing must be applied by operating the RING FRONT key.	S lamp lighted Subset bell rings Front cord supervisory lamp is lighted
4	Insert plug of service assistant's telephone set into service assistant's telephone jacks. **Note:** With the 607A PBX, the telephone set should be inserted into the service assistant's jacks during the ringing period to verify that the retardation coil tripping bridge of the circuit functions properly.	S lamp extinguished Subset bell silenced Front cord supervisory lamp extinguished
5a	If the switch in service assistant's head telephone set is arranged for flashing the PBX operator— Operate and release switch several times	Front cord supervisory lamp flashes in unison
6	Remove service assistant's telephone set plug from telephone jacks	Front cord supervisory lamp lighted
7	Remove front cord plug from section jack	Front cord supervisory lamp extinguished
8	Insert front cord plug into division jack of service assistant's circuit under test	D lamp lighted Subset bell rings Front cord supervisory lamp lighted
9	Insert plug of service assistant's telephone set into service assistant's telephone jacks	D lamp extinguished Subset bell silenced Front cord supervisory lamp extinguished
10	Remove cord circuit plugs Disconnect telephone sets	
	E. Test Cord Circuit	
1	Insert attendant's telephone set into telephone jacks	
2	Set up talking circuit to test desk and inform attendant of tests	
3	Insert test cord circuit plug into TBL jack of plugging-up line circuit	BY lamp at test desk flashes
4	Test desk attendant connects test cord to jack of test trunk associated with test cord circuit under test	BY lamp is steadily lighted
5	Test desk attendant tests for battery on ring	Circuit tests clear of battery
6	Test desk attendant operates 3WO key and repeats step 5	Circuit test indicates battery on ring
7	Disconnect test cord from plugging-up line circuit and insert it in short circuited jack (per 2.04)	SUP lamp at test desk flashes
8	Remove cord from jack and insert into plugging-up line TBL jack	
9	Request test desk attendant to disconnect and operate DIS key	D lamp lighted in test cord circuit

STEP	ACTION	VERIFICATION
10	Disconnect test cord circuit cord from TBL jack	D lamp extinguished
11	Disconnect attendant's telephone set from telephone jacks	

F. Calling Signal Circuit

1	Insert idle cord circuit back plug into section jack of service assistant's telephone circuit	FL lamp of calling signal circuit flashes
2	Operate calling signal circuit SNA key	Subset bell rings
3	Disconnect cord from service assistant's section jack	FL lamp is extinguished Subset bell is silenced
4	Restore SNA key to normal	

G. Lamp Battery Cutoff Circuit

1	Repeat steps 4 through 10, Test B	
2	Operate BAT CO key	TRK lamp extinguished
3	Restore BAT CO key	TRK lamp lighted
4	Insert idle front cord into trunk jack Request operator to disconnect	TRK lamp extinguished
5	Remove cord from trunk jack and disconnect attendant's telephone from telephone jacks	