

STATION LINE CIRCUITS

OPERATION TESTS

608A PBX

1. GENERAL

1.01 This section describes a method for testing station line circuits of the 608A PBX switchboard as follows:

- (a) At the time of installation to verify the station circuit wiring.
- (b) As a maintenance aid in locating a reported trouble condition.

1.02 The tests covered are:

A. Dial Station Line Circuit — Cross-Connection Location to PBX: This test checks the operation and release of the line and cutoff relays and the continuity of the talking connection between the PBX and the cross-connection location.

B. Dial Station Line Circuit — Station to PBX: This test checks the operation and release of the line and cutoff relays and the continuity of the talking connection between the PBX and the station location.

C. Manual Station Line Circuit or Dial Station Line Circuit Converted to Manual — Cross-Connection Location to PBX: This test checks the operation and release of the line and cutoff relays, if provided, and the continuity of the talking connection between the PBX and the cross-connection location.

D. Manual Station Line Circuit or Dial Station Line Circuit Converted to Manual — Station to PBX: This test checks the operation

and release of the line and cutoff relays, if provided, and the continuity of the talking connection between the PBX and the station location.

E. Sleeve Continuity — Multiple Dial or Manual PBX: This test checks the sleeve circuit for continuity at all multiple appearances.

1.03 Tests A and C provide a method for pre-testing the PBX station line circuits when the station to PBX, Tests B and D, cannot be performed prior to cutover.

1.04 Tests A and C require actions and verifications at the distributing frame or cross connecting terminal and PBX switchboard. In the test method, the locations are referred to as distributing frame and PBX.

1.05 Tests B and D require actions and verifications from the station to the PBX.

2. APPARATUS

All Tests

2.01 Attendant telephone set connected to PBX telephone jacks.

Tests A and C

2.02 Handset (dial hand test set) equipped with connecting clips.

3. METHOD

STEP	ACTION	VERIFICATION
------	--------	--------------

A. Dial Station Line Circuit — Cross-Connection Location to PBX

1	At distributing frame — Operate hand test set key to MON, connect to tip and ring of station line.	
2	At PBX — Operate TALK key.	At PBX — TALK lamp lights.
3	Insert plug of front cord into station jack.	At distributing frame — Machine ringing heard.
4	At distributing frame — Operate hand test set key to TALK.	Machine ringing removed. Conversation satisfactory.
5	At PBX — Remove cord, make busy test on station line.	At PBX — Click heard. At distributing frame — Dial tone heard.
6	At distributing frame — Operate hand test set key to MON.	Dial tone removed.
7	Disconnect hand test set.	
8	At PBX — Operate RLS key.	TALK lamp extinguished.

B. Dial Station Line Circuit — Station to PBX

1	At station — Remove handset, dial attendant.	At PBX — Attendant trunk lamp lights.
2	At PBX — Operate TALK key.	TALK lamp lights.
3	Insert plug of back cord into jack of attendant trunk.	Trunk lamp extinguished. Conversation satisfactory.
4	Identify station, make busy test on station jack with front cord.	Click heard.
5	Request disconnect, disconnect cord.	
6	Insert plug of front cord into jack of station line.	At station — Ringer sounds.
7	At station — Acknowledge call, restore handset.	

STEP	ACTION	VERIFICATION
8	At PBX — Disconnect cord.	
9	Operate RLS key.	TALK lamp extinguished.

**C. Manual Station Line Circuit or Dial Station Line Circuit
Converted to Manual — Cross-Connection Location to PBX**

1	At distributing frame — Operate hand test set key to MON, connect to tip and ring of station line.	
2	Operate hand test set key to TALK, then to MON ending at MON.	At PBX — Line lamp flashes.
3	At PBX — Operate TALK key.	TALK lamp lights.
4	Insert plug of front cord into jack of station line.	At distributing frame — Machine ringing heard.
5	At distributing frame — Operate hand test set key to TALK.	Machine ringing removed. Conversation satisfactory.
6	Operate hand test set key to MON, disconnect from station line.	
7	At PBX — Disconnect front cord.	
8	Operate RLS key.	TALK lamp extinguished.

**D. Manual Station Line Circuit or Dial Station Line Circuit
Converted to Manual — Station to PBX**

1	At station — Remove handset from switchhook.	At PBX — Line lamp lights.
2	At PBX — Operate TALK key.	TALK lamp lights.
3	Insert plug of back cord in station jack.	Line lamp extinguished. Conversation satisfactory.
4	At station — Replace handset.	

SECTION 538-080-660

STEP	ACTION	VERIFICATION
5	At PBX — Operate momentarily RING BACK key.	At station — Ringer sounds.
6	At station — Acknowledge call, restore handset.	
7	At PBX — Disconnect cord.	
8	Operate RLS key.	TALK lamp extinguished.

E. Sleeve Continuity — Multiple Dial or Manual PBX

1	Insert plug of back cord into station jack at last multiple appearance (highest numbered position).	
2	Make busy test at multiple appearances.	Click heard.
3	Restore equipment to normal.	