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PBX SYSTEMS
NO. 701A, 701B, 701PK OR 740E
ATTENDANT TRUNK CIRCUIT
FROM SELECTOR OR SELECTOR
CONNECTOR LEVELS

CHANGES

D. Description of Changes

D.1 On sheets 1, 2 and 3, connecting information for the 608D switchboard is added.

D.2 Option S which was rated MD on Issue 10D is rerated Standard on Issue 14D to be used when reverse battery supervision is not required.

D.3 CADS 1, 2, 3 and 7 are changed to add wiring options R and S.

F. Changes in CD Section

F.1 Under paragraph 3. CONNECTING CIRCUITS, add:

3.16 No. 608D Jack and Lamp Circuit - SD-65997-01.

BELL TELEPHONE LABORATORIES, INCORPORATED

(WECo 2120HW-RGB-JGW)
DEPT 5337-LAH

CIRCUIT DESCRIPTION

CD-66717-01
Issue 6D
Appendix 4D
Dwg. Issue 13D

PBX SYSTEMS NO. 701A, 701B, 701PK OR 740E ATTENDANT TRUNK CIRCUIT FROM SELECTOR OR SELECTOR CONNECTOR LEVELS

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Figure 1 and CAD1 are revised to add "W" option for connection to the Traffic Usage Recorder Circuit.

F. CHANGES IN CD SECTIONS

F.1 In Section 1I1, add "3.15 Traffic Usage Recorder Circuit SD-95738-01".

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5336-JJH-FNR-RR

PBX SYSTEMS
NO. 701A, 701B, 701PK OR 740E
ATTENDANT TRUNK CIRCUIT
FROM SELECTOR OR SELECTOR
CONNECTOR LEVELS

CHANGES

D. DESCRIPTION OF CHANGES

D.1 The title is revised to change the 701C to read 701PK.

D.2 CAD 10 is added to connect audible ringing tone in the 701PK.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5336-JJH-EvdL-RL

PBX SYSTEMS NO. 701A, 701B, 701C OR 740E ATTENDANT TRUNK CIRCUIT FROM SELECTOR OR SELECTOR CONNECTOR LEVELS

CHANGES

D. DESCRIPTION OF CHANGES

D.1 The title is revised to include the 701C PBX system.

D.2 CAD 1 is revised to include connections to the 701C PBX system.

D.3 CADs 7, 8, and 9 are added.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5336-JJH-EvdL-KB

PBX SYSTEMS
NO. 701A, 701B OR 740E
ATTENDANT TRUNK CIRCUIT
FROM SELECTOR OR SELECTOR
CONNECTOR LEVELS

CHANGES

D. DESCRIPTION OF CHANGES

D.1 S and R wiring options added to provide for reverse battery for supervision if required.

D.2 Circuit Note 102 and 104 changed to show S and R option.

D.3 CAD 1 and CAD 3 revised.

D.4 S wiring is rated Mfr. and R wiring is standard.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5336-AS-HFH-SJ

PBX SYSTEMS
NO. 701A, 701B OR 740E
ATTENDANT TRUNK CIRCUIT
FROM SELECTOR OR SELECTOR CONNECTOR LEVELS

TABLE OF CONTENTS

SECTION I - GENERAL DESCRIPTION

1. GENERAL METHOD OF OPERATION

1.1 When this circuit is seized by a selector, or selector connector, the line lamp is lighted at the switchboard, and the circuit functions to provide a holding ground for the switch train over the sleeve. The circuits supply audible ringing signal to calling line until the attendant answers.

When the attendant answers, the line lamp is extinguished, the line relay is disconnected and transmission battery is supplied from the switchboard cord circuit.

Disconnect is under control of the calling party in all cases.

The circuit is also arranged to operate a night alarm circuit in switchboards equipped with this feature.

2. GENERAL FUNCTIONS

1. To respond to seizure and supply a holding ground for the switch train.

2. To light the line lamp when seized.

3. To extinguish the line lamp and provide a transmission path when the attendant answers.

4. To release and return to normal when both the called line and the attendant have disconnected.

SECTION II - DETAILED DESCRIPTION

1. SEIZURE

1.1 When this trunk is seized, the calling station loop is extended through the switch train to the windings of relay L, and relay L operates. Audible ringing is supplied to the calling party through condenser A and a break contact of relay C.O. Relay L operated, supplies either battery or ground over lead L to light the trunk lamp and operates relay L1. Relay L operated also supplies ground over lead G to operate the night alarm or a No. 608A auxiliary signal, fuse alarm, battery cut-off and miscellaneous circuit when Option "Z" is provided. Relay L operated with T Option grounds lead MS to keep the TONE,

RING and INT circuit functioning in a 740E PBX. Relay L1 operated replaces the 1200-ohm battery on the sleeve with ground to hold the switch train and to make the trunk busy. Relay L1 operated also removes ground from the traffic register lead K or BR.

2. ATTENDANT ANSWERS

When the attendant answers, relay CO is operated from ground on a jack spring over lead S2 from Fig. 3 or from ground on the cord sleeve over lead S2 from Fig. 2.

Relay CO operated disconnects the loop from relay L and relay L releases. Relay L1 however is held operated by relay CO. Relay L released removes either battery or ground from lead L to retire the trunk lamp and silences the night alarm if "Z" Option is used. Relay CO operated also removes audible ringing from the tip side of the trunk.

3. DISCONNECT

The calling party controls the disconnect because even if the attendant disconnects, releasing relay CO relay L will immediately reoperate from the calling station loop and L in reoperating will reestablish an operate path for relay L1 which is slow to release. Relay L1 held operated continues to hold the switch train over the sleeve and the trunk now signals an incoming call by lighting the trunk lamp.

4. MISCELLANEOUS

When a tie trunk terminated on a station line circuit has access to this circuit, the tie trunk may not supervise properly if the attendant extends the connection to a central office: therefore, it is suggested that SD-66716-01 be used.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.1 Lines - Max. Ext. Ckt. Loop 1000 ohms
Min. Insulation Res 20,000 ohms

1.2 Voltage Limit - 44-52 Volts DC

2. FUNCTIONS

1. To respond to seizure when dial selected.

2. To supply a holding ground over the sleeve when seized to hold the switch train.

3. To light the trunk lamp as an incoming call signal at the switchboard.

4. To cause the night alarm circuit to function in the associated switchboard.

5. To return audible ringing tone to the calling party until the attendant answers.

6. To extinguish the trunk lamp when the attendant answers.

7. To retain a holding ground on the sleeve when the attendant answers.

8. To remove audible ringing tone when the attendant answers.

9. To provide a busy condition on the jack sleeve when the trunk is off normal.

10. To provide a transmission path from the calling station to the attendant.

11. To hold under joint control of the calling station switchboard and the attendant.

12. To return to normal when both the calling party and the attendant have disconnected.

3. CONNECTING CIRCUITS

When this circuit is listed on a keysheet the connecting information thereon is to be followed.

3.01 First Selector Circuit - SD-66359-01*.

3.02 Incoming First Selector Circuit - SD-66360-01*.

3.03 Selector Connector Circuit - SD-65721-01.

3.04 Ringing Leads Circuit - SD-65771-01*.

3.05 740E Alarm Circuit - SD-65660-01.

3.06 Tone, Ringing and Interrupter Circuit - SD-65675-01.

3.07 552A or 552D Night Alarm Circuit - SD-66467-01*.

3.08 552A or 552D Buzzer Circuit - SD-66014-01*.

3.09 556A Buzzer Circuit - SD-65658-01.

3.10 605A Night Alarm Circuit - SD-66467-01.

3.11 607A or 607B Night Alarm Circuit - SD-66653-01.

3.12 Traffic Register Circuit - SD-65774-01.

3.13 No. 552A, 552B, 552D, 552E, 605A, 607A, 607B or 608A Jack Circuit - for Attendant Switchboard Positions - SD-65778-01.

3.14 No. 608A Auxiliary Signal, Fuse Alarm, Battery Cut-off and Miscellaneous Circuit - SD-66722-01.

*Typical

4. MANUFACTURING TEST REQUIREMENTS

4.1 The attendant trunk circuit shall be capable of performing all the service functions specified in this circuit description and meeting all the requirements of the Circuit Requirement Tables.

5. TAKING EQUIPMENT OUT OF SERVICE

5.1 On switchboard equipped per Fig. 3 insert a 258C or equivalent dummy plug in the switchboard jack associated with this trunk circuit.

On switchboards equipped per Fig. 2 insert the rear cord of an idle cord pair into the switchboard jack associated with the trunk circuit.

SECTION IV - REASONS FOR REISSUE

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Connecting information for Fig. 1 is revised.

D.2 Information Note 303 is revised.

D.3 CAD Fig. 1 is revised.

D.4 Reference to the 608A PBX is added to Note 102.

D.5 A Multiple Mark was added to the MS lead of Option T.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 2242-JFC-PWS-C10