

CIRCUIT DESCRIPTION

CD-66035-01
Issue 5-D
Appendix 5-D
Dwg. Issue 20-D

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO P.B.X. ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 This circuit is rated Mfr. Disc. and
is replaced by SD-66717-01.

All other headings, no change.

BELL TELEPHONE LABORATORIES, INCORPORATED

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DEPT. 2725-WVS-HHA-F5

CIRCUIT DESCRIPTION
SWITCHING SYSTEMS DEVELOPMENT DEPARTMENT

CD-66035-01
Issue 5-D
Appendix 4-D
Dwg. Issue 19-D

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO P.B.X. ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

B. CHANGES IN APPARATUS

B.1 Superseded Superseded By
EA5 EA29
"T" Opt. "S" Opt.

by "S" option since the EA29 relay is more economical.

D.2 Note 114 is added.

D.3 Reference to option "S" is added to Note 110.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 The use of "T" option is rated Mfr. Disc. and superseded

All other headings, no change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3440-MRG-EWO-CN

CIRCUIT DESCRIPTION
SWITCHING SYSTEMS DEVELOPMENT DEPARTMENT

CD-66035-01
Issue 5-D
Appendix 3-D
Dwg. Issue 18-D

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO P.B.X. ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

B. CHANGES IN APPARATUS

B.1	Superseded	Superseded by
	Relay E1085	Relay E1613

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Note 113 is added.

D.2 The use of relay E1085 is rated "Mr.
Disc." to show realistic rating for
obsolescent apparatus.

All other headings, no change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3440-CMD-EWO-R2

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO P.B.X. ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

B. CHANGES IN APPARATUS

B.1 Superseded

(L) E1343 Relay,
Fig. 1 ("U"
Option)
(CH) 178AH Relay,
Fig. B
(A) 18BJ Resist-
ance, 1200 Ohms
(Fig. B)

Superseded By

(L) EA5 Relay,
Fig. 1 ("T"
Option)
(CH) Y187
Relay, Fig. C
(A) KS-8512,
L1A Resist-
ance, 1210
Ohms (Fig. C)

D.4 Reference to figures 2 and C,
and options T and U is added to
the options used table.

D.5 Circuit notes 109, 110, 111, and
112 are added.

D.6 Reference to circuit note 109 is
added to figure B.

D.7 Cross-connection figure N is
rated "Mfr. Disc." and figures
52, 53 and 54 are added.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Option T is added and option U
is designated.

D.2 Figure C is added.

D.3 Figure 2 is designated.

All other headings, no change.

BELL TELEPHONE LABORATORIES, INC.,

DEPT. 3310-RDW-RLL-ZO

TO BE USED AS AN ORIGINAL
BY THE HAWTHORNE PRINT SHOP

CIRCUIT DESCRIPTION
SYSTEMS DEVELOPMENT DEPARTMENT

CD-66035-01
Issue 5-D
Appendix 1-D
Dwg. Issue 16-D

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO PBX ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

D.1. Reference to (D) or (E) terminal
strip in figure N is changed to
(C).

D.2 The leads from punching T, R and S
of figure 51 to figure N are design-
ated.

All other headings, no change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3310-MHK-RLL-BM

P.B.X. SYSTEMS
NO. 701A OR 740E
TRUNK CIRCUIT
TO P.B.X. ATTENDANT
FROM SELECTOR LEVELS
FOR USE ON CALLS TO ATTENDANT
FROM DIAL STATIONS
OR FOR USE WITH ONE WAY
TOLL DIVERTING TRUNKS TO PANEL OFFICE

CHANGES

D. DESCRIPTION OF CIRCUIT CHANGES

- D.1 "W" wiring is designated and "V" wiring is added.
- D.2 Options Used Table and Note 108 is added.
- D.3 Main Fig. is designated Fig. 1, trunk circuit, and all references thereto are changed accordingly.
- D.4 Fig. N is revised.

All other headings under Changes, no change.

1. PURPOSE OF CIRCUIT

- 1.1 This circuit is used as a trunk to the attendant from dial stations.

2. WORKING LIMITS

- 2.1 Maximum external circuit loop 1000 ohms.
- 2.2 Minimum insulation resistance 20,000 ohms.

3. FUNCTIONS

- 3.1 Provides a means for lighting the line lamp on incoming calls.
- 3.2 Provides a means for holding the circuit busy until both the attendant and calling party disconnect.

4. CONNECTING CIRCUITS

When this circuit is listed on a key sheet, the connecting information thereon is to be followed:

- 4.1 No. 701A PBX cord circuit - SD-66198-01.
- 4.2 No. 701A or 740E PBX selectors or selector connectors - SD-65359-01, SD-65360-01, SD-65721-01, and SD-66002-01.
- 4.3 No. 701A PBX auxiliary signal or buzzer circuit - SD-66014-01.

- 4.4 No. 701A PBX all trunks busy register circuit - SD-66329-01.

- 4.5 Trunk circuit arranged for toll diversion - SD-65657-01.

- 4.6 No. 556A PBX cord circuit - SD-65658-01.

DESCRIPTION OF OPERATION

5. When this circuit is seized by a selector, a selector connector or by a trunk circuit arranged for toll diversion the (L) relay operates over the station loop. The operation of the (L) relay closes a circuit to light the line lamp and operates the (CH) relay. The operation of the (CH) relay places a holding ground on the "S" lead for the selector. In case a selector connector has seized this circuit the (CH) relay removes the 1200 ohm resistance which is connected to battery and substitutes direct ground on the "S" lead. The operation of the (CH) relay also removes the ground from the "K" lead of the all trunks busy register circuit. When all the (CH) relays in the group are operated the all trunks busy register is operated by the release of a relay in the register circuit.

When the attendant answers an incoming call the (CO) relay is operated by a ground on the contact of the jack. The operation of the (CO) relay removes the windings of the (L) relay from the tip and ring. The (CO) relay also places a ground on the sleeve of the jack and at the same time provides a holding ground for the (CH) relay.

When this circuit is used in a 740E PBX and incoming tie trunks terminate in a station line circuit, "V" wiring is used and therefore when zero is dialed and the attendant answers, battery and ground from the cord circuit is reversed with respect to the incoming tie trunk which therefore receives answer supervision. Under other conditions "W" wiring is used and there is no battery reversal.

When the attendant removes the plug of the cord from the trunk jack and the calling station has disconnected the (CO) relay releases releasing the (CH) relay and this circuit restores to normal permitting the selecting circuits to release. If the calling station has not disconnected the (CO) relay will

release when the plug is removed from the jack and the (L) relay will reoperate and hold the (CH) relay operated. The (CH) relay holds a ground on the (S) conductor to prevent the connection from releasing until the calling station hangs up when this circuit restores to normal.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3320-LAH-RCD-CO

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