49476

CIRCUIT DESCRIPTION
SWITCHING SYSTEMS DEVELOPMENT DEPARTMENT

CD-21698-01
Issue 2-D
Appendix 1-D
Dwg. Issue 5-D

PANEL SYSTEM
SENDER MAKE BUSY FRAME
TEST TRUNK CIRCUIT
FROM LOCAL TEST DESK NO. 14
FOR USE IN CENTRAL OFFICES SERVED BY A
CENTRAL "A" SWITCHBOARD

CHANGES

B. CHANGES IN APPARATUS

B.1

Superseded	Superseded By
3P6B patching cord	3P7A patching cord
110 plug	310 plug
109 plug	309 plug

C. CHANGES IN CIRCUIT REQUIREMENTS OTHER THAN THOSE APPLYING TO ADDED OR REMOVED APPARATUS

C.1 Adjustment "A" is designated, rated "Mfr. Disc." and superseded by adjustment "B" to provide for operation over maximum trunk loop of 1500 ohms.

C.2 Test note 2 is added.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Working limits for adjustment "A" are designated and working limits for adjustment "B" are added.

2. WORKING LIMITS

2.1 Relay (D)

2.2 Min. Ins. Res. 60,000 ohms

2.3 Max. Ext. Ckt. Res.

	Earth Pot. ±15V	Earth Pot. 0 V
Adj."A"	800 ohms	1290 ohms
Adj."B"	1100 ohms	1880 ohms

All other headings, no change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3310-DR-RLL-J2

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CENTRAL "A" SWITCHBOARD

CHANGES

B. CHANGES IN APPARATUS

B.1 Added:

3 P12E Cord

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 The P3F cord is added to the drawing for use in crossbar offices. The assembly number for the P3E cord and designation "For Panel Office" is added.

D.2 Prior to issue 4-D the connecting information at the cords was as follows: "Patch to permanent signal trunk or coin control circuit jacks".

All other headings under "CHANGES", no change.

1. PURPOSE OF CIRCUIT

1.1 This circuit is used at the sender make busy frame to make connections from the test trunk at the local test desk to permanent signal holding trunk and coin control or supervisory jacks at the sender make busy frame.

2. WORKING LIMITS

2.1 (D) Relay

2.11 Maximum external circuit loop with ± 15 volts earth potential, 800 ohms.

2.12 Maximum external circuit loop without earth potential 1290 ohms.

3. FUNCTIONS

3.1 To close the sleeve lead towards the test desk when the cord is connected at the sender make busy frame.

3.2 To give a visible and audible indication at the sender make busy frame when the disconnect key in the test trunk at the test desk is operated.

4. CONNECTING CIRCUITS

4.1 Permanent Signal Holding Trunk Circuit.

4.2 Coin Control or Supervisory Circuit.

4.3 Sender Make Busy Frame, Auxiliary Signal Circuit.

4.4 Test Trunk Ringing Circuit, Local Test Desk No. 14.

4.5 Miscellaneous Circuit for Sender Make Busy Frame.

DESCRIPTION OF OPERATION

5. CIRCUIT OPERATION

5.1 Cord Put Up

When the test desk desires the test trunk to be connected for test, instruction is given over a talking trunk. The attendant at the sender make busy frame can originate a call by connecting the test trunk to a jack associated with a permanent signal holding trunk circuit or a jack associated with a coin control or supervisory circuit to be tested, by means of a patching cord. Relay (S) operates over the sleeve circuit to ground thru the winding of a relay in the associated circuit. Relay (S) operated, closes a circuit through the winding of relay (D) to lead "S" signaling the test desk. Relay (D) is marginal to this circuit and will not operate. The tip and ring of the cord are directly connected to the test trunk circuit in the test desk over which the necessary tests are made.

5.2 Disconnection

When the disconnect key in the test trunk circuit at the test desk is operated, relay (D) operates which in turn causes the operation of relay (D1). Relay (D1) operating lights the (TD) lamp and causes the auxiliary signal to function at the sender make busy frame as a disconnect signal. When the cord is taken down at the sender make busy frame, relay (S) releases, releasing relay (D). Relay (D) releasing causes relay (D1) to release. Relay (D1) released, extinguishes the (TD) lamp and silences the auxiliary signal.

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DEPT. 332

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