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PBX SYSTEMS NO. 552A, 552B, 552E, 556A, 605A OR 608A MANUAL CONFERENCE CIRCUIT ARRANGED FOR A MAXIMUM OF 4 OR 5 SIMULTANEOUS CONNECTIONS

CHANGES

B. Changes in Apparatus

B.1 ADDED

A diode 446F, Fig. 1, H option

B diode 446F, Fig. B, H option

D. Description of Changes

D.1 The following changes are made to provide connections to the Intra-PBX Protection of Service Circuit, SD-1E031-01:

(a) Fig. 1

(1) H option wiring, from terminals 4 and 7 (A), (B), and (C) transformers to the Intra-PBX Protection of Service Circuit, is added.

(2) The A diode is added at 3 RT (S4) relay.

(b) Fig. B

(1) The B diode is added at 3RT (S5) relay.

F. Changes in Description of Operation

F.1 Under 4. CONNECTING CIRCUIT, Add:

4.3 Intra-PBX Protection of Service - SD-1E031-01.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5332-WFH-GES

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MANUAL CONFERENCE CIRCUIT ARRANGED FOR A MAXIMUM OF 4 OR 5 SIMULTANEOUS CONNECTIONS

CHANGES

D. DESCRIPTION OF CHANGES

D.1 Cabling Figures 51, 58 and 59 are revised to change reference for 701C to read 701PK.

D.2 Cabling Figure 59 is revised to delete reference to 552B, 552E and 605A switchboards.

BELL TELEPHONE LABORATORIES, INCORPORATED

DEPT. 5336-JJH-EvdL-RL

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CHANGES

D. DESCRIPTION OF CHANGES

D.1 Cabling Figures 51 and 58 are revised to include reference for 701C PBX System.

D.2 Cabling Figure 59 is added.

D.3 Equipment Note 206 is added.

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CHANGES

B. CHANGES IN APPARATUS

B.1 Added

Res SL1, SL2 & SL3	Res D,E & F
3790ω ±1% Type 145A	500ω Type 18AC

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Connecting information for Fig. 1 revised.

D.2 Sleeve resistance of 3790Ω added in Fig. 1.

D.3 "J" option is designated and "K" option is added.

D.4 Circuit Note 109 is added.

D.5 Fig. 58 is added and Fig. 51 is changed to show connection to 608A JK circuit.

D.6 The title formerly included the 700C and 701A PBXs but did not include the 608A PBX.

DEVELOPMENT

1. PURPOSE OF CIRCUIT

1.1 This is a manual conference circuit for use with PBX switchboard cords and provides means for a conference between a maximum of five stations, four stations and one central office trunk or tie trunk three stations and two central office trunks or tie trunks or three stations and one central office trunk and one tie trunk.

2. WORKING LIMITS

2.1 The rated external sleeve resistance for the (S1), (S2) and (S3) relays when used in the 552A, 601A or 701A PBX is 495 ohms and when used in the 700C PBX is 670 ohms.

OPERATION

3. FUNCTIONS

3.1 Provides talking battery to PBX stations connected jacks A, B and C.

3.2 Provides for extinguishing the supervisory lamps in the cord circuits connected to jacks D and E.

4. CONNECTING CIRCUITS

4.1 Cord Circuits.

4.2 No.552A, 552B, 552D, 552E, 605A, 607A, 607B or 608A Jack Circuit - Sd-65778-01.

DETAILED DESCRIPTION

5. METHOD OF CONNECTION

The "station" jacks are used for connecting three local stations together. The "station or trunk" jacks are used when four or five local stations are required in the conference or for either trunk or tie trunk connections. The front ends of the required number of cords are inserted into the jacks of the conference lines. The rear ends of the cords are then used to call the subscribers required in the conference.

6. OPERATION

When a front cord is inserted in a "station" jack the associated sleeve relay operates and removes the short-circuit or the (A), (B) or (C) resistance shunt from the 1-2, 5-6 windings of the associated repeating coil. Talking battery and ground are supplied from this circuit to those stations connected to the "Station Jacks" thru the connecting cord circuits. If no tie trunks, central office trunks or other PBX stations are to be added necessitating the use of the "station or trunk" jacks, the D and E retardation coils perform no function and a short circuit is maintained across the tip and ring of these "station or trunk" jacks to complete the talking circuit for the PBX station connected to the "station jacks". When tie trunks, central office trunks or other PBX stations are added to the three stations already in series, the associated (S4) and (S5) relays operate when the cords are inserted into the jacks which remove the short-circuit thus placing the stations, or trunks in multiple with three series PBX stations. The retardation coil is furnished to prevent the supervisory

lamps in the cord circuits from lighting. When jacks "D" and "E" are used for station connections, battery is supplied to these stations from the cord circuits.

7. DISCONNECTION

When the receivers are replaced on the switchhooks at all stations, the attendant is furnished disconnect signals on the PBX cords which connect the stations to the conference circuit. On trunk and tie trunk connections, no supervision will be provided. The attendant then removes the cords from the jacks thus releasing all operated relays and restoring the circuit to normal.

8. BUSY TEST

When multiple jacks are used, it is necessary for the attendant to test this circuit for busy in the usual manner.

9. PREVENTION OF BATTERY NOISES

The (A), (B) and (C) retardation coils in series with the talking battery and ground leads are used to prevent battery noises from interfering with the conversation.

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