PANEL SYSTEM LOCAL FRAME LINE CIRCUIT FOR TALKING BETWEEN FRAMES AND BETWEEN FRAMES AND "A" SWITCHBOARD

CHANGES

- D. DESCRIPTION OF CIRCUIT CHANGES
- D.1 This circuit is now rated "Mfr. Disc." and is replaced by SD-96379-01.

All other headings, No change.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 3340-JFD-FJS

CIRCUIT DESCRIPTION
SYSTEMS DEVELOPMENT DEPARTMENT
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PANEL SYSTEM LOCAL FRAME LINE CIRCUIT FOR TALKING BETWEEN FRAMES AND BETWEEN FRAMES AND "A" SWITCHBOARD

CHANGES

- A. CHANGED AND ADDED FUNCTIONS
 - A.1 Connection to jacks on relay racks is added.
- D. DESCRIPTION OF CIRCUIT CHANGES
- D.1 Prior to Issue 7-D the information at the "T", "Tl", "R" and "Rl" leads was: To misc. ckts. for frames. (Frame line jacks).
- D.2 The cross-connections have been changed.

All other headings under "Changes", no change.

- 1. PURPOSE OF CIRCUIT
 - 1.1 This circuit is used for communication between various frames, and relay racks and between the "A" switchboard and the frames or relay racks.
- 2. WORKING LIMITS
- 2.1 None.
- 3. FUNCTIONS
 - 3.1 Provides talking connection between frames and relay racks and between frames or relay racks and the "A" switchboard.
 - 3.2 Provides talking battery for the telephone set transmitter at the frames or relay racks.
- 3.3 Provides a condenser for blocking the flow of direct current from the "A" cord to the frame line circuit.

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4. CONNECTING CIRCUITS

- 4.1 Operator's telephone set at the frames or relay racks.
- 4.2 O.G.T. multiple jack circuit at the "A" switchboard.
- 4.3 Frame circuits.
- 4.4 Telephone circuit for sender make-busy frame.

DESCRIPTION OF OPERATION

5. Communication between frames or relay racks served by this frame line circuit may be established by plugging operator's telephone sets into the jacks at the different frames or relay racks. For communication between a frame or relay rack and the "A" switchboard, the operator's telephone set at the switchboard is attached to the frame line by means of a regular cord, which is plugged into the frame line jack appearing in the O.G.T. multiple. When the frame line appears on the sender make-busy frame, the telephone set of the latter frame is connected to the frame by means of a key.

The retardation coil supplies battery for the various telephone sets, except those at the "A" switchboard and the sender make-busy frame, which contain their own transmitter battery feed. The frame line has no means for signalling.

The resistance of the varistor becomes less as the voltage across its terminals is increased. This characteristic of the varistor when placed in multiple with the receiver reduces the volume of tone to the receiver to a greater extent when the volume is loud than when the volume is normal. In this way the intensity of clicks and loud volume are reduced without appreciably affecting the volume of normal transmission.

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