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METHOD OF OPERATION
TRUNK CIRCUIT
Incoming Automatic From O.G.T. Multiple - Outgoing to Answering Jack - Special Chief Operator's Desk - Machine Switching System.

GENERAL DESCRIPTION

1. This circuit is the desk end of an incoming automatic and outgoing automatic trunk circuit. At the outgoing end it terminates in an answering jack.

2. The operator inserts the plug of a cord in the outgoing end of this circuit, lighting the supervisory lamp, and the trunk lamps at the special chief operator's desk. The chief operator answers by operating the CIAF key associated with the trunk to the talking position. The trunk and the calling supervisory lamps are extinguished. When the chief operator desires to hold the connection the key is operated to the holding position which extinguishes the trunk and supervisory lamps but does not connect the telephone circuit to the trunk. In making an outgoing call the chief operator operates the key to the talking position thereby lighting the line lamp at the switchboard.

DETAILED DESCRIPTION

3. The operator inserts the plug of a cord in the outgoing end of this trunk lighting the cord supervisory lamp and operating the E380 relay, which lights the trunk lamps. When the chief operator answers by operating the associated CIAF key to the talking position, the E226 relay operates in turn operating the 178-AA relay, and connects battery and ground through the 54-D retardation coil across the tip and ring of the trunk extinguishing the supervisory lamp at the switchboard. The 178-AA relay is made slow to release so that when the key is operated from the talking position to the holding position the 47-A retardation coil will remain bridged across the trunk while the key is passing through its normal position. This prevents a false disconnect signal at the outgoing end. The operation of the 178-AA relay operates the E381 relay which allows the E380 relay to release, extinguishing the trunk lamps. When the chief operator restores the key to normal, the E226 relay is released, in turn releasing the 178-AA relay and disconnecting battery and ground from the trunk, lighting the supervisory lamp at the switchboard. When the switchboard operator disconnects, the E381 relay releases, restoring the circuit to normal. Should the chief operator desire to hold the connection, the CIAF key is operated to its holding position. The circuit functions as before and in addition the 47-A retardation coil is bridged across the tip and ring of the trunk. In this case the switchboard operator's supervisory lamp is extinguished.

4. In making an outgoing call the chief operator operates the CIAF key to the talking position. The circuit functions the same as when answering a call and the operation of the E381 relay will light the line lamp at the switchboard.

5. The cross connection between this circuit and the associated line circuit is made with the tip and ring reversed.

CIRCUIT REQUIREMENTS

	OPERATE	NON-OPERATE	RELEASE
178-AA	Test .032 amp. Readj. .030 amp.		Test .0038 amp. Readj. .004 amp.
E226	Test .028 amp. Readj. .015 amp.		Test .0015 amp. Readj. .003 amp.
E380	Test .014 amp. Readj. .009 amp.		Test .0005 amp. Readj. .001 amp.
E381	Test .018 amp. Readj. .011 amp.	Test .0066 amp. Readj. .007 amp.	

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CHK'D.--WJT-CWP.

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