

Western Electric Co., Incorporated,
Engineering Dept.,
New York.

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Issue 2 - BT-431465.
Replacing all previous issues.
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METHOD OF OPERATION
TRUNK CIRCUIT

Tie Line Between Desks - Trouble Desk and Chief Switchman's Desk - Full Mechanical Power Driven System.

GENERAL DESCRIPTION

1. This circuit is used as a means of communication between the trouble desk positions, the chief switchman's desk and other desks. Calls incoming from the zero operator or other desks are indicated by a flashing lamp at the called desk. The call is answered by the operation of a talking key which changes the lamp from a flash to a steady light thus furnishing a busy signal at the various positions in which the line appears. The operation of the key also connects the answering telephone circuit across the trunk.
2. On an outgoing call the talking key is operated, flashing the called desk lamp and displaying a steady lamp at the calling desk as a busy signal.

DETAILED DESCRIPTION

3. The operation of a talking key at any desk or position, operates the L relay. The operation of the L relay connects interrupted battery through the break contact of the CO relay, flashing the desk lamp. The call is answered by operating the talking key which operates the CO relay and connects the answering telephone set across the tip, and ring of the trunk circuit. The operation of the CO relay disconnects the desk lamp from interrupted battery and connects it to steady battery, thus furnishing a steady lamp busy signal; it also releases the L relay and locks to ground on lead 3.
4. On an outgoing connection, the operation of the talking key bridges the telephone circuit across the tip and ring of the trunk, and operates the CO relay. The operation of the CO relay closes a circuit through the L relay at the called desk and causes the lamp associated with the calling desk to burn steadily. The operation of the L relay, flashes the lamp at the called desk.
5. On a disconnect, ground from the key holds the CO relay at the distant desk operated until the key at the other desk is restored.

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CIRCUIT REQUIREMENTS

OPERATE

NON-OPERATE

RELEASE

E206 Test .023 amp.
(L) Readj. .016 amp.

Test .0028 amp.
Readj. .003 amp.

E540 Test .021 amp.
(CO) Readj. .017 amp.
Windings
in
series
aiding

Test .010 amp.
Readj. .011 amp.

440
24.00

ENG-IWB-TB.
8/22/21.

CHK'D - RAP-CWP.

APPROVED - C.L.SLUYTER, G.M.L.