STEP BY STEP SYSTEM
355A DIAL OFFICE
TRUNK CIRCUIT
VACANT LEVEL OR OVERFLOW
FOR LOCAL SELECTORS

1. PURPOSE OF CIRCUIT

1.1 This circuit is designed to provide a trunk from a vacant level of a local selector and when used as an overflow trunk provides a low tone to the calling subscriber.

2. WORKING LIMITS

2.1 This circuit will function over a maximum external circuit loop of 1000 ohms with a minimum insulation resistance of 15,000 ohms.

3. FUNCTIONS

3.1 To provide 60 IPM low tone to the subscriber when used as an overflow trunk.

3.2 To ground the sleeve of the selector to hold the preceding apparatus as long as the subscriber is connected to the trunk.

3.3 To provide means for starting and stopping the source of tone supply.

3.4 To operate a register each time this circuit is seized by a selector.

4. CONNECTING CIRCUITS

4.1 Local Selector Circuits

4.2 Power Ringing Circuit

4.3 Miscellaneous Alarm and register circuit

DESCRIPTION OF OPERATION

5. SEIZURE

5.1 When this circuit is seized by a selector the (A) relay operates over the loop. The tip of the trunk is connected thru one winding of the (A) relay directly to ground when "X" wiring is used, or to repeating coil ground in the power ringing circuit when "Y" wiring is

used. The (A) relay operated, operates (B). (B) relay operated, grounds the sleeve to hold the preceding switches; supplies ground over "MS" lead to start the source of tone supply and grounds the "OF" lead to operate a register each time this trunk is seized.

The (B) relay is slow to release to hold over pulses if the subscriber continues dialing.

5.2 If this trunk is used as a vacant level trunk, with "X" wiring, grounding the "MS" lead performs no useful function. No tone indication is given to the subscriber and after a reasonable interval he will replace the receiver on the switchhook.

5.3 If this trunk is used as an overflow trunk with "Y" wiring, grounding the "MS" lead will cause a low tone of 60 IPM to be connected to the "TB" lead. Upon hearing this tone the subscriber will immediately replace the receiver on the switchhook.

6. RELEASE

When the subscriber hangs up, relay (A) releases, releasing (B) which removes ground from the "S" lead and permits the preceding apparatus to restore to normal. With the (A) and (B) relays released, this trunk is restored to normal.

7. TEST JACK

Test jack springs 3 and 4 of (T) jack may be used to make this circuit busy to incoming calls when it is out of order. Test jack springs 1 and 2 may be used to operate the (A) and (B) relays and cause the circuit to function as described for regular operation. The make busy feature of the test jack is also duplicated by the removal of the switch from its jacks since jack springs 5 and 7, 6 and 8 and 17 and 19 are arranged to make contact and place ground "G" on the "S" lead upon the removal of the switch from its position.

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DEPT. 332

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