

NO-SUCH-NUMBER TONE SIGNAL CIRCUIT SD-25831-01
TESTS
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes the method of testing the no-such-number tone signal circuit, SD-25831-01, in No. 5. crossbar offices.

1.02 The tests covered are:

(A) Interrupted Low Tone and Manual Transfer.

(B) Alarm and Automatic Transfer.

1.03 The no-such-number tone signal circuit consists of one transfer and alarm circuit and two tone signal circuits. The tone signal circuit produces a distinctive tone for indicating to a subscriber or operator that dialing has resulted in a no-such-number indication to the switching mechanism. This tone is supplied to trunk circuits and originating register circuits for transmission to the calling party.

1.04 One no-such-number tone signal circuit is used to supply the entire office with no-such-number tone. The circuit is arranged so that either tone signal circuit may be the preferred circuit while the other is used on a standby basis.

1.05 If the preferred tone signal circuit fails, the transfer and alarm circuit will function to disconnect the preferred tone signal circuit from the supply leads and connect the standby tone signal circuit in its place. At this time an indicating lamp is lighted and the minor alarm sounds.

1.06 If test (B) indicates trouble in the timing network, check the timing interval as covered on the circuit requirement table.

2. APPARATUS

2.01 No. 893 cord, 6 feet long, equipped with two No. 360A tools (1W13B cord) and one KS-6278 tool and one No. 419A tool.

2.02 No. 716E or No. 528 receiver attached to a W2AB cord equipped with two No. 360A tools (2W21A cord), one KS-6278 tool and one No. 411A tool.

2.03 KS-3008 stop watch, or equivalent (test (B)).

3. METHOD

(A) Interrupted Low Tone and Manual Transfer

3.01 This test checks that the low tone is interrupted and that the preference of the tone signal circuit may be changed manually.

3.02 Using a No. 893 cord, connect ground to the 7T spring of the ATR relay. This ground simulates the ground supplied on the start lead by a trunk circuit or an originating register requiring no-such-number tone.

3.03 With the test receiver connected to ground, apply the No. 411A tool to the 4T spring of the ATR relay and observe that the tone heard follows the 60 or 120 I.P.M. interrupter and skips every third impulse.

3.04 Operate the TR (transfer) key to the other position (if on position 1 to 2 or if on position 2 to 1) to transfer to the standby tone signal circuit.

3.05 Repeat 3.03.

3.06 Disconnect the No. 893 cord from the 7T spring of the ATR relay. Operate the TR key to its original position.

(B) Alarm and Automatic Transfer

3.07 This test checks that if the start relay fails to operate or if a cycle of the tone signal circuit relays is not completed in its allotted time the minor alarm will sound and the automatic transfer circuit will function to transfer from the preferred tone signal circuit to the standby tone signal circuit.

3.08 If tone signal circuit No. 1 is not already serving the office, operate the TR key to the No. 1 position.

3.09 Block non-operated the ST relay of tone signal circuit No. 2.

3.10 Using a No. 893 cord connect ground to the 7T spring of the ATR relay. This ground simulates the ground supplied on the start lead by a trunk circuit or an originating register requiring no-such-number tone.

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- 3.11 Operate the TR key to the No. 2 position and observe that the TR (transfer) lamp lights and the minor alarm sounds.
- 3.12 Operate the ACO (alarm cut off) key to silence the alarm and observe that the GD (guard) lamp lights, indicating the operation of the ACO key.
- 3.13 With the test receiver connected to ground, apply the No. 411A tool to the 4T spring of the ATR relay and observe that no-such-number tone is heard.
- 3.14 Remove the blocking tool from the ST relay.
- 3.15 Momentarily operate the AR (alarm release) key and observe that the TR lamp is extinguished.
- 3.16 Restore the ACO key to normal and observe that the GD lamp is extinguished.
- 3.17 Operate the TR key to the No. 1 position.
- 3.18 Block non-operated the RC relay of tone signal circuit No. 2.
- 3.19 Operate the TR key to the No. 2 position and using the KS-3008 stop watch, observe that after approximately 3.5 to 8 seconds the TR lamp lights and the minor alarm sounds.
- 3.20 Remove the blocking tool from the RC relay.
- 3.21 Momentarily operate the AR key and observe that the TR lamp is extinguished and the minor alarm is silenced.
- 3.22 Operate the TR key to the No. 1 position.
- 3.23 Block operated the A relay of tone signal circuit No. 2.
- 3.24 Operate the TR key to the No. 2 position and observe that after approximately 3.5 to 8 seconds the TR lamp lights and the minor alarm sounds.
- 3.25 Remove the blocking tool from the A relay.
- 3.26 Momentarily operate the AR key and observe that the TR lamp is extinguished and the minor alarm is silenced.
- 3.27 Block non-operated the ST relay of tone signal circuit No. 1.
- 3.28 Operate the TR key to the No. 1 position and observe that the TR lamp lights and the minor alarm sounds.
- 3.29 With the test receiver connected to ground, apply the No. 411A tool to the 4T spring of the ATR relay and observe that no-such-number tone is heard.
- 3.30 Remove the blocking tool from the ST relay.
- 3.31 Momentarily operate the AR key and observe that the TR lamp is extinguished and the minor alarm is silenced.
- 3.32 Operate the TR key to the No. 2 position.
- 3.33 Block non-operated the RC relay of tone signal circuit No. 1.
- 3.34 Operate the TR key to the No. 1 position and observe that after approximately 3.5 to 8 seconds the TR lamp lights and the minor alarm sounds.
- 3.35 Remove the blocking tool from the RC relay.
- 3.36 Momentarily operate the AR key and observe that the TR lamp is extinguished and the minor alarm is silenced.
- 3.37 Operate the TR key to the No. 2 position.
- 3.38 Block operated the A relay of tone signal circuit No. 1.
- 3.39 Operate the TR key to the No. 1 position and observe that after approximately 3.5 to 8 seconds the TR lamp lights and the minor alarm sounds.
- 3.40 Remove the blocking tool from the A relay.
- 3.41 Momentarily operate the AR key and observe that the TR lamp is extinguished and the minor alarm is silenced.
- 3.42 Operate the TR key to the preferred position.

4. REPORTS

- 4.01 The required record of these tests should be entered on the proper form.