

## ALARM RECEIVING CIRCUIT SD-95418-01

### TESTS

#### 1. GENERAL

1.01 This section describes a method of testing alarm receiving circuits SD-95418-01. This section also covers the purpose of each test.

1.02 The tests covered are:

(A) Test of Alarm Indications

(B) Test of the Tone Path

1.03 An assistant is required at the office from which alarms are transmitted to assist in performing the tests.

1.04 In this section, the alarm receiving circuit is referred to as the receiving circuit and the alarm sending circuit as the sending circuit.

1.05 The sending circuits under alarm conditions send to the receiving circuit, combinations of battery and tone. The receiving circuit receives these indications, and by means of lighted lamps indicates the group classification of the trouble, such as a group covering master timing circuits, recorders, markers and transverters. The tone indicates the particular subgroup of circuits in the group such as the master timer frame (even or odd master timing circuit).

#### 2. PREPARATION

2.01 Establish a talking circuit between each appearance of the key and lamp panel of the receiving circuit and the sending circuit at the distant office.

2.02 During the tests specified herein, the alarms should not be transferred to the receiving circuit. With the receiver at the panel, check that tone is absent. If tone is heard, it is an indication that the alarms have been transferred to the receiving circuit. In this case, check the position of the TR/NTR key. If the key is in the TR position, operate the key to the NTR position and then operate the RS key. If the key is in the NTR position, operate the RS key.

2.03 Either of two receiving centers may be served by the same sending circuit. When the first receiving center is serving the sending circuit and tests

are to be made at the second receiving center, have the TR relay blocked non-operated at the first receiving center. This will connect the receiving circuit under test to the sending circuit.

#### 3. METHOD

##### (A) Test of Alarm Indications

3.01 This test checks the receiving circuit for visual and audible alarm indications. It also checks the alarm release and alarm cut-off features.

3.02 Request the assistant at the sending circuit to block operated the A and AA relays to prevent the transfer of alarms from that office.

3.03 Request the assistant to block non-operated the FA relay of the sending circuit. Observe that the A7 lamp and aisle pilot lamps light and the major alarm sounds.

3.04 Operate the AR key for a few seconds and observe that the lamps are extinguished and the alarm is silenced while the key is operated. The A7 lamp will light when the AR key is released, and the alarm may or may not sound again.

3.05 Request the assistant to remove the blocking tools from the FA relay of the sending circuit. Observe that the A7 lamp is extinguished. If the major alarm continues when the AR key is released, observe that it is silenced when the A7 lamp is extinguished.

3.06 Request the assistant to block operated the A6 relay of the sending circuit. Observe that only the A6 lamp lights and the minor alarm sounds.

3.07 Momentarily operate the ACO key. Observe that the A6 lamp remains lighted and that the minor alarm is silenced.

3.08 Operate the AR key and observe that the A6 lamp is extinguished.

3.09 Release the AR key and observe that the A6 lamp lights and that the minor alarm sounds again.

3.10 Test the other alarms as indicated in step Nos. 1 to 12 of Table A.

**SECTION 201-615-501**

3.11 Request the assistant to remove the blocking tool from the A6 relay of the sending circuit.

3.12 Momentarily operate the ACO key to silence the minor alarm and extinguish the A6 lamp.

**TABLE A**

Step No.	Momentarily Operate Sending Circuit Relay	Momentarily Operate the AR Key	Observe that the	
			Lamps Light	Alarm Sounds
1	A5	-	A5 and A6	Major
2	-	✓	A6	Minor
3	A4	-	A4 and A6	Major
4	-	✓	A6	Minor
5	A3	-	A3 and A6	Major
6	-	✓	A6	Minor
7	A2	-	A2 and A6	Major
8	-	✓	A6	Minor
9	A1	-	A1 and A6	Major
10	-	✓	A6	Minor
11	A0	-	A0 and A6	Major
12	-	✓	A6	Minor

✓Indicates key operated momentarily

3.13 Receiving Circuit not Arranged to Transfer the Alarms to the Operating Room (TR1 Relay not Provided): Repeat 3.03 to 3.12 inclusive, at each location of the key and lamp panels.

3.14 Receiving Circuit Arranged to Transfer the Alarms to the Operating Room (TR1 Relay Provided): Repeat 3.03 to 3.12 inclusive, at each location of the key and lamp panel. When checking key and lamp panel appearances in the operating room, first insulate the 4T contact of the L01 relay.

3.15 If the L01 relay was insulated in 3.14 remove the insulators.

3.16 Request the assistant to remove the blocking tools from the A and AA relays of the sending circuit.

3.17 If test (B) is not to be performed and the TR relay was blocked non-operated for this test at another receiving center, have the blocking tool removed.

(B) Test of the Tone Path

3.18 This test checks the continuity of the tone path. It also checks that the receiving circuit can cause the sending circuit to transfer the alarms to the receiving circuit.

3.19 When there are no alarms at the distant office, operate the AK key for at least ten seconds and then release it. Observe that continuous low tone is received.

3.20 Request the assistant to momentarily operate the RS key. Observe that low tone has been removed.

3.21 Repeat 3.19 and 3.20 at each location of the key and lamp panels.

3.22 If the TR relay was blocked non-operated in the receiving circuit at another alarm receiving center, have the blocking tool removed.

**4. REPORTS**

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