



TROUBLE AND FUSE ALARMS

MISCELLANEOUS CIRCUITS

OPERATION TESTS

STEP-BY-STEP SYSTEMS

1. GENERAL

1.001 This addendum supplements Section 226-801-500, Issue 7. The attached pages must be inserted in the section in accordance with the filing instructions above.

1.002 This addendum is issued to include a test for the trouble and fuse alarms associated with ANI-type B outpulsers and ANI-type C outpulsers arranged for automatic identified outward dialing (AIOD).

1. GENERAL

The following change applies to Part 1 of the section.

- (a) 1.03, Test X — revised

4. METHOD

The following change applies to Part 4 of the section.

- (a) Test X — revised

Attached:

Page 3 dated November 1965, revised
Page 4 dated November 1965, reissued
Page 29 dated November 1965, revised
Page 30 dated November 1965, revised

X. Miscellaneous ANI Circuit—Trouble Alarms ↗
 (SD-95820-01, SD-95823-01 for ANI-Type B;
 SD-32381-01 for ANI-Type C): This test checks
 that the alarm circuits function when an open out-
 pulser preference chain is encountered and an
 outpulser alarm relay or any of several trouble
 ticketer alarm relays are activated. ↘

1.04 Whenever battery or ground is applied in
 the tests of this section, it should be applied
 through the use of a test receiver except in Tests
 A, B, and S where the W1AF cord is used.

1.05 A timed delay interval, between application
 of the test condition and receipt of audible
 and visual alarm indications, will be encountered
 in a majority of the tests covered in this section.
 Reference to a specified time interval in receiving
 these individual alarm indications is omitted, as
 the intervals will vary depending on circuit op-
 tions used, alarm speed-up features, etc. Accord-
 ingly, it will be necessary for the tester to famil-
 iarize himself with the particular time intervals
 applicable in his office on the various tests.

1.06 When performing Tests F, G, I, V, and W,
 opening and grounding of leads will inter-
 fere with service calls.

1.07 Tests P, Q, and U require action and verifi-
 cation at the distant office or switchboard
 and other locations within the same building.

1.08 Where duplicate relay circuits are pro-
 vided, as in Tests F, G, I, and T, the tests
 should be made of the duplicate or emergency
 circuits on alternate test periods.

1.09 Tests of the cable insulation alarm and
 permanent signal alarm circuit per
 SD-31912-01 are covered in Section 226-802-500.
 Tests of cable insulation alarm circuit per
 SD-96348-01 are covered in another section.

1.10 In some offices, instead of a major alarm as
 indicated herein, a minor alarm will result.

1.11 In the various tests where it is necessary
 to dial a connector terminal or communi-
 cate with an operator or another craftsman, either
 the office telephone or dial hand test set may be
 used for this purpose.

1.12 Lettered Steps: A letter a, b, c, etc, added
 to a step number in Part 3 or 4 of this
 section, indicates an action which may or may not
 be required, depending on local conditions. The
 condition under which a lettered step or a series
 of lettered steps should be made is given in the
 ACTION column, and all steps governed by the
 same condition are designated by the same letter
 within a test. Where a condition does not apply,
 all steps designated by that letter should be
 omitted.

2. APPARATUS

Tests A and B

2.01 Test receiver, 509 receiver attached to a
 W2AB cord, equipped with two 360A tools
 (2W21A cord), 411B tool, and 365A tool or
 KS-6278 connecting clip (for use in applying bat-
 tery or ground to 35R-type fuse).

2.02 Testing cord, W1AF cord, 8 feet 6 inches
 long, equipped with two 360A tools,
 KS-6278 connecting clip, and 411B tool (for use
 in connecting battery to alarm stud or where
 70-type fuses are used in circuits of 52 volts
 maximum).

2.03 266C tool (wire burnisher) held in a 265C
 tool (contact burnisher holder) (for use
 where 70-type fuses are used in dc circuits exceed-
 ing 52 volts or in ac circuits).

2.04 KS-14510 volt-ohm-milliammeter (or equiv-
 alent).

2.05 3-inch C screwdriver (or the replaced
 3-inch cabinet screwdriver).

Tests A, B, and I

2.06 720A tool to be used for connecting battery
 in offices with 70-type fuses where test
 battery is not provided.

Tests A, B, and S

2.07 Testing cord, W1AF cord, 8 feet 6 inches
 long, equipped with two 360A tools and
 two 411B tools (for use in applying battery or
 ground to apparatus as required).

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Tests A, C, H, I, J, K, L, T, V, and W

2.08 Test receiver, 716C receiver (or equivalent) attached to a W2AB cord, equipped with two 360A tools (2W21A cord), 365 tool, and 411B tool (for use in checking the presence or absence of battery or ground and for applying battery or ground to apparatus as required).

Tests C, F, G, I, J, K, M, N, O, P, R, T, and W

2.09 Blocking and insulating tools as required. Use tools and apply as covered in Section 069-020-801.

Tests O, P, Q, and U

2.10 1011G dial hand test set (handset) equipped with a W2CL cord, 471A jack, and 240A plug (2W39A cord).

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

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|-----|--|---|
| 1a. | If provided —
Operate LO, EXT CO, TR, TRNS, AUD ALM, SW, SWBD, or MULT keys to a position in which alarms are not transmitted to a distant office, switchboard, or other alarm location, except when testing extension or grouping of alarms. | If alarms are not extended —
Guard lamp, if provided, lighted. |
| 2b | If office is not equipped with key to prevent signaling distant office —
Follow local instructions relative to disabling signaling features. | |

Tests C, D, and F Through X

- 3 In offices where equipment has been provided to speed up common timing circuit, when desired for testing purposes, short interval timing shall be used. Whenever this feature is used, it shall be restored to normal at conclusion of tests.

4. METHOD

STEP	ACTION	VERIFICATION
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A. Miscellaneous Relay Rack Fuse Alarms

Note 1: If the fuse alarm circuit being tested is associated with 70-type fuses in dc circuits of 52 volts maximum, to test the alarm feature of the fuse block, establish the test connection by inserting the tip of the 411B tool (attached to the W1AF cord) into the aperture of the fuse block cap and touch the alarm lead ring, thus causing a plant alarm.

STEP	ACTION	VERIFICATION
6d	If ALA relay is provided — Block nonoperated N, PKU relays.	ALA relay operated. OP, aisle pilot lamps lighted. Audible alarm occurred.
7d	Remove blocking tools from N, PKU relays.	
8d	Momentarily operate RL key.	ALA relay released. OP, aisle pilot lamps extinguished. Audible alarm retired.
9d	Block nonoperated PKU relay.	ALA relay operated. OP, aisle pilot lamps lighted. Audible alarm occurred.
10d	Remove blocking tool from PKU relay.	
11d	Momentarily operate RL key.	ALA relay released. OP, aisle pilot lamps extinguished. Audible alarm retired.
12d	Repeat Steps 6d through 11d on each INT, PKU lead check circuit.	
13c	If P or I relays are provided — Remove blocking tool from ST relay.	
↳	X. Miscellaneous ANI Circuit — Trouble Alarms (SD-95820-01, SD-95823-01 for ANI-Type B; SD-32381-01 for ANI-Type C)	
	<i>Note:</i> This test shall be made while relay circuit is normal. If it should move off normal, defer testing.	
4	At outpulser miscellaneous circuit — Momentarily operate CH relay.	At outpulser miscellaneous circuit — CH lamp lighted. Frame pilot, aisle pilot lamps lighted. Audible alarm occurred.
5	Momentarily operate AR key.	CH lamp extinguished. Frame pilot, aisle pilot lamps extinguished. Audible alarm retired.
6c	If office is equipped with ANI-type B — At trouble ticketer frame — Operate MN relay.	At trouble ticketer frame — TTR lamp lighted. Frame pilot, aisle pilot lamps lighted. Minor alarm occurred.
↳ 7c	Momentarily operate AR key.	TTR lamp extinguished. Frame pilot, aisle pilot lamps extinguished. Minor alarm retired.

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STEP	ACTION	VERIFICATION
↗ 8c	Operate MJ relay.	TTR lamp lighted. Frame pilot, aisle pilot lamps lighted. Major alarm occurred.
9c	Momentarily operate AR key.	TTR lamp extinguished. Frame pilot, aisle pilot lamps extinguished. Major alarm retired.
10d	If office is equipped with ANI-type C — At outputser — Operate EOTM relay.	At outputser miscellaneous circuit — TA lamp lighted. Frame pilot, aisle pilot lamps lighted. Minor alarm occurred.
11d	At outputser miscellaneous circuit — Momentarily operate AR key.	TA lamp extinguished. Frame pilot, aisle pilot lamps extinguished. Minor alarm retired.
12e	If ANI-type C outputser is arranged for AIOD class of service — At outputser circuit — Operate FTM relay.	IODF lamp lighted. Frame pilot, aisle pilot lamps lighted. Minor alarm occurred.
↘ 13e	At outputser miscellaneous circuit — Momentarily operate AR key.	IODF lamp extinguished. Frame pilot, aisle pilot lamps extinguished. Minor alarm retired.