

**ALARMS**  
**OPERATION TESTS**

**PBX AUTOMATIC IDENTIFIED OUTWARD DIALING TYPE A1 EQUIPMENT**

**1. GENERAL**

**1.01** This section describes methods of testing major alarm, minor alarm, and fuse alarms for the automatic identified outward dialing type A1 (AIOD-A1) equipment not associated with a specific switching system.

**1.02** This section is reissued to include procedures for testing the remote alarm reset feature. This reissue does not affect the Equipment Test List.

**1.03** The tests covered are:

**A. Fuse Alarm:** This test checks the ability of the fuse alarm to function and actuate a major central office alarm when a fuse has operated. . . . . **2**

**B. Alarm Circuits:** This test checks that failures occurring in the SI frame will cause major alarms or, if equipped, will cause major or minor alarms. . . . . **2**

**C. Major Alarm Path Failure:** This test checks that a path failure in the major alarm circuit or major circuit alarm interface circuit will light the MAPF lamp on the display and test control panel, the MJCA lamp on the fuse alarm and miscellaneous unit, and actuate a major central office alarm. . . . . **3**

**1.04** To avoid disturbances to persons normally responsible for responding to these alarms,

notify all persons concerned before starting tests and again at completion. If during these tests a regular alarm should originate, the tests should be discontinued immediately. Notify the proper persons that a regular alarm is occurring.

**1.05** In Part 3, references to maintenance centers are as follows:

- (1) Crossbar No. 1—originating sender test frame
- (2) Crossbar No. 5—master test frame
- (3) Panel or SXS with ANI-B—outpulser identifier test frame
- (4) SXS with ANI-C—miscellaneous circuit, outpulser and test frame.¶

**2. APPARATUS**

**Test A**

**2.01** Testing cord, W1AF cord, 8 feet 6 inches long, equipped with two 360A tools; one KS-6278 connecting clip; and one 411B tool (for use in connecting fused test battery to fuse alarm bus bar.)

**2.02** Single conductor cord, 8 feet long, equipped with standard pin tip plugs (0.080") on each end.

**Note:** This cord should be modified by inserting a 5K resistor in series with the cord.

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**3. METHOD**

<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
<b>A. Fuse Alarm</b>		
1	At 48-volt fuse panel— Using W1AF cord, connect battery to fuse alarm bus bar associated with + VOLT FA, E, F, and G fuses.	FA lamp lighted. Major central office alarm operated.
2	Remove W1AF cord.	FA lamp extinguished. Major central office alarm retired.
3	At 48-volt fuse panel— Using W1AF cord, connect battery to fuse alarm bus bar associated with -48V SIG or -48V TALK fuses.	FA lamp lighted. Major central office alarm operated.
4	Remove W1AF cord.	FA lamp extinguished. Major central office alarm retired.
<b>B. Alarm Circuits</b>		
<b>Major Alarms Only—MNA Relay Not Furnished</b>		
1	At display and test control panel— Operate NT switch to TEST.	
2	Momentarily operate STST switch.	Major central office alarm operated. At fuse alarm and miscellaneous unit— MJCA lamp lighted. At tape printer unit— Printout <input type="checkbox"/> 69 <input type="checkbox"/> .
3	At fuse alarm and miscellaneous unit— Momentarily operate RS switch.	MJCA lamp extinguished. Major central office alarm retired.
<b>Major or Minor Alarms—MNA Relay Furnished</b>		
4	At display and test control panel— Operate NT switch to TEST.	
5	Momentarily operate STST switch.	Minor central office alarm operated. At maintenance center— MN-AIOD lamp lighted. At fuse alarm and miscellaneous unit— MNCA lamp lighted. At tape printer unit— Printout <input type="checkbox"/> 69 <input type="checkbox"/> .
6	At fuse alarm and miscellaneous unit— Momentarily operate ACO switch.	ACO lamp momentarily lighted. Minor audible central office alarm retired.

STEP	ACTION	VERIFICATION
7	Momentarily operate RS switch.	Minor visual central office alarm retired. At maintenance center— MN-AIOD lamp extinguished. At fuse alarm and miscellaneous unit— MNCA lamp extinguished.
8	◆Repeat Steps 5 and 6.	
9	At maintenance center— Momentarily operate RS-AIOD key.	Minor visual alarm retired. MN-AIOD lamp extinguished. At fuse alarm and miscellaneous unit— MNCA lamp extinguished.◆
10	At SI Test circuit SD-1C005-01, CP 81B, location 21 D10— Using modified cord, momentarily connect TP1 or terminal 11 to +12 test jack (red) at +12 volt dc converter.	Major central office alarm operated. At maintenance center— MJ-AIOD lamp lighted. At fuse alarm and miscellaneous unit— MJCA lamp lighted.
11	At fuse alarm and miscellaneous unit— Momentarily operate RS switch.	Major central office alarm retired. MJCA lamp extinguished. At maintenance center— MJ-AIOD lamp extinguished.
12	◆Repeat Step 10.	
13	At maintenance center— Momentarily operate RS-AIOD key.	Major alarm retired. MJ-AIOD lamp extinguished. At fuse alarm and miscellaneous unit— MJCA lamp extinguished.◆

### C. Major Alarm Path Failure

1	At SI Test circuit SD-1C005-01, CP 74-10, location 21 D01— Using modified cord, momentarily connect TP2 or terminal 7 to +12 test jack (red) at +12, volt dc converter.	Major central office alarm operated. At fuse alarm and miscellaneous unit— MJCA lamp lighted. At display and test control panel— MAPF lamp lighted.
2	At display and test control panel— Momentarily operate RMF key.	MAPF lamp extinguished.
3	At fuse alarm and miscellaneous unit— Momentarily operate RS key.	MJCA lamp extinguished. Major central office alarm retired.