

**CENTRAL OFFICE AUDIBLE AND VISUAL
MAINTENANCE ALARM EQUIPMENT NS-01046-01**

TESTS

1. GENERAL

PAGE

1.01 This section describes a method of testing the central office audible and visual maintenance alarm equipment NS-01046-01.

F. Office Building Alarms: This test checks the operation of audible and visual office building alarms. **4**

1.02 This section is reissued to revise Tests A and F to include provisions for testing circuits which have been revised by the addition of new equipment codes. This reissue does not affect the Equipment Test List.

1.04 All tests should be made during light traffic to avoid interference with legitimate alarms.

Caution: *If during these tests a regular alarm should originate, the tests should immediately be discontinued so that the alarm will be activated in the normal manner. Notify maintenance personnel that a regular alarm is present.*

1.03 The tests covered are:

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A. Lamp Displays: This test checks the operation of the lamp display relays in the master office bay and the lighting of all lamps in the lamp display panels. **2**

1.05 Office records should be consulted with respect to location of equipment, location of alarm zones, and grouping arrangements of alarms.

B. Pilot Lamps: This test checks the lighting of the visual pilot and main aisle pilot lamps. **2**

1.06 Lettered Steps: A letter, a, b, c, etc, added to a step number in Part 3 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.

C. Audible Alarms: This test checks the operation of the minor, major, service, and power failure audible alarms. **3**

D. Alarm Battery: This test checks the operation of the audible alarm battery signals. **3**

2. APPARATUS

E. Automatic and Manual Grouping Control: This test checks the alarm grouping functions of the grouping relays under automatic and manual control. **3**

2.01 The apparatus required consists of a 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), and two KS-6278 connecting clips.

SECTION 201-620-501

3. METHOD

STEP	ACTION	VERIFICATION
A. Lamp Displays		
1a	◆ If circuit is equipped per NJ-01046AC-1— At lamp display panel (equipped with relays LD-1-LD-20) in master office alarm bay— Momentarily apply ground to terminal strip A punchings in this order: B2, B3, A3 through A19, and B20.	At all lamp display panels— Equipped lamps momentarily lighted in sequence from 1 upwards.
2b	If circuit is equipped per NJ-01046AC-2— At lamp display panel (equipped with relays LD-1-LD-20) in master office alarm bay— Momentarily apply ground to terminal strip A and B punchings in this order: A.TS 6, 14, 22, 30, 38, 46, 54, 62, 70, and 78 B.TS 6, 14, 22, 30, 38, 46, 54, 62, 70, and 78.	At all lamp display panels— Equipped lamps momentarily lighted in sequence from 1 upwards.
3c	If more than 20 lamps are equipped at lamp display panel locations— Repeat Steps 1a or 2b at relay panel equipped with relays LD-21-LD-40.	At all lamp display panels— Equipped lamps momentarily lighted in sequence from 21 upwards.
4	At other lamp display panels in same zone or floor served by same relay panel— Momentarily operate LP TEST switch. <i>Note:</i> Switch may be operated by a pullstick from the floor.	10 lamps momentarily lighted.
5	At other zones or floors served by same relay panel— Repeat Steps 1a or 2b, 3c (when required) and 4.	
6	Repeat Steps 1a or 2b, 3c (when required), 4, and 5 for all equipped lamp display relay panels.◆	
B. Pilot Lamps		
1	At aisle terminal strip— Connect one end of patching cord to terminal 178.	
2	Momentarily apply other end of patching cord to terminals 37, 38, and 39 in sequence.	Equipped R, A, and G pilot lamps momentarily lighted. Associated MR, MA, and MG main aisle pilot lamps momentarily lighted.

STEP	ACTION	VERIFICATION
3	Repeat Steps 1 and 2 for all aisle terminal strips.	
C. Audible Alarms		
1	At aisle terminal strip— Connect terminal 178 to terminals 1 through 9.	For punchings which have AA relays assigned in miscellaneous alarm relay unit— Minor alarm sounds in area of aisle terminal strip tested.
2	Connect terminal 178 to terminals 10 through 18.	For punchings which have DA relays assigned in miscellaneous alarm relay unit— Major alarm sounds in area of aisle terminal strip tested.
3	Connect terminal 178 to terminals 19 through 27.	For punchings which have SV relays assigned in miscellaneous alarm relay unit— Service alarm sounds in area of aisle terminal strip tested.
4	Connect terminal 178 to terminals 28 through 36.	For punchings which have PF relays assigned in miscellaneous alarm relay unit— Power failure alarm sounds in area of aisle terminal strip tested.
D. Alarm Battery		
1	At any aisle which requires alarm battery connection AB lead— Apply ground from punching 178 to punching 40 of aisle terminal strip. <i>Note:</i> Consult office records, aisle terminal strip assignment chart, to determine which aisles require alarm battery connection to AB lead.	All alarm battery AB subsets on all floors sound.
2	Remove ground from punching 40.	AB alarms silenced.
3	Repeat Steps 1 and 2 for all aisles which require AB connection.	
E. Automatic and Manual Grouping Control		
1	At automatic and manual grouping control panel or at master office control panel— Operate manual control switch to DAY position.	DAY lamp lighted. PFG1, MJG1, MNG1, SVG1 relays operated.
2	At location of audible alarm circuit unit— Originate an alarm condition.	Alarm sounds in area affected.

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STEP	ACTION	VERIFICATION
	<i>Note:</i> Select a location and class (major, minor, etc) alarm which has three different grouping arrangements for day, evening, and night programs as shown by office records.	<i>Note:</i> Alarms may sound in other areas according to DAY grouping for class and area selected.
3	Clear the alarm condition.	Audible alarms silenced.
4	At automatic and manual grouping control panel or at master office control panel — Operate manual control switch to EVE position.	DAY lamp extinguished. EVE lamp lighted. PFG1, MJG1, MNG1, SVG1 relays released. PFG2, MJG2, MNG2, SVG2 relays operated.
5	Repeat Step 2.	Alarm sounds in area affected and other areas according to EVE grouping for class and area selected.
6	Clear the alarm condition.	Audible alarms silenced.
7	At automatic and manual grouping control panel or at master office control panel — Operate manual control switch to NIGHT position.	EVE lamp extinguished. NIGHT lamp lighted. All master grouping relays released.
8	Repeat Step 2.	Alarm sounds in area affected and other areas according to NIGHT grouping for class and area selected.
9	Clear the alarm condition.	Audible alarms silenced.
10	At automatic and manual grouping control panel or at master office control panel— Operate manual control switch to AUTO position.	AUTO lamp lighted.
11	Turn knob on face of timer unit counterclockwise through 168 hour, 7 day sequence.	DAY, EVE, or NIGHT lamp lighted according to specified 7-day program for system.
		<i>Note:</i> If time sequence is incorrect, adjust timer as outlined in Section 201-620-301.

F. Office Building Alarms

1a	If circuit is equipped per NJ-01046AC-1— Connect relay rack ground to punching B2 on TS.A.	Equipment pilot lamp lighted. Building alarm pilot lamp lighted. At lamp display units— Associated lamp lighted. At audible signal alarm panel— BA subset sounds.
2b	If circuit is equipped per NJ-01046AC-2— Connect relay rack ground to punching A6 on	Equipment pilot lamp lighted. Building alarm pilot lamp lighted.

STEP	ACTION	VERIFICATION
	TS.A.	At lamp display units— Associated lamp lighted. At audible signal alarm panel— BA subset sounds.
3	Operate building alarm ACO key.	ACO guard lamp lighted. At audible signal alarm panel— BA subset silenced.
4a	Disconnect relay rack ground from punching B2 on TS.A.	Equipment pilot lamp extinguished. At lamp display units— Associated lamp extinguished.
5b	Disconnect relay rack ground from punching A6 on TS.A.	Equipment pilot lamp extinguished. At lamp display units— Associated lamp extinguished.
6	Restore building alarm ACO key.	ACO guard lamp extinguished.
7	Repeat Steps 1a through 6 for all equipped building alarms, applying relay rack ground to terminals in turn as shown in Table A.	

TABLE A

NJ-01046AC-1	NJ-01046AC-2	
TS.A	TS.A & B	
PCHG	PCHG	
B3		6
A3		14
A4		22
A5		30
A6		38
A7		46
A8		54
A9		62
A10		70
A11		78
A12		
A13	14	
A14	22	
A15	30	
A16	38	
A17	46	
A18	54	
A19	62	
B20	70	
	78	