

## Maintenance Task

**PM No.**    **Title**  
**F45**      **FIRE ALARM CONTROL PANEL**

**Frequency**  
**SEMIANNUAL**  
**ANNUAL**  
**EVERY FIVE YRS**

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### MAINTENANCE TASK DESCRIPTION:

1. Clean and inspect fire alarm control battery (Semi-Annual).
2. Systems interface test (Annual).
3. Notification test (Annual).
4. Replace battery (5 Years).

### SPECIAL INSTRUCTIONS:

1. Follow site safety procedures and your supervisor's instructions.
2. Wear rubber gloves, eye protection, and long-sleeved clothing when working on battery.
3. Review the system specifications, wiring diagrams, floor plans and maintenance data/manuals and NFPA 72, Chapter 10, prior to beginning work.
4. Report any deficiencies noted during this maintenance task.
5. Notify occupants prior to maintenance and testing.
6. Notify occupants at conclusion of maintenance and testing.

### PROCEDURES (SEMI-ANNUAL)

1. Clean and inspect Fire Alarm Control Panel Battery
  - a. Remove dust and other contaminants from battery and cabinet.
  - b. Remove oxidation from battery posts and terminals.
  - c. Inspect battery for corrosion, damaged components, and frayed wiring.
  - d. Measure voltage output of battery for proper level.
2. Visually inspect transient voltage suppression equipment.
3. Verify no control unit trouble signals.
4. Check voice/alarm communications systems.
5. Inspect status of remote annunciators.
6. Perform a battery load voltage test.
7. Submit work orders on improperly operating units.

### TOOLS, MATERIALS, AND EQUIPMENT (SEMI-ANNUAL):

1. Controls tool set.
2. Vacuum cleaner.

### PROCEDURES (ANNUAL):

1. Operational Test Fire Alarm Control Panel.
  - a. Perform operational test on fire alarm control panel.
  - b. De-activate signal circuits on fire alarm control.
  - c. Simulate alarms on each zone - check system for proper operation including alarm bells, elevator capture, releasing of fire doors, notification of fire department, smoke control, etc.
  - d. Verify proper operation of all audible and visual devices.
  - d. Check that all sub panels and slave panels are working properly and are properly interfaced.
  - e. Perform lamp test. Replace defective lamps. Verify functionality of LEDs.
  - g. Restore signal circuits.
  - h. Verify proper operation of system trouble signals.
2. Verify proper fuse size.
3. Check disconnect switches for mechanical soundness.
4. Check ground fault circuits.
5. Inspect optical connections for defects.
6. Perform a battery charger test.
7. Perform a 30 minute battery discharge test.
8. Measure regulated power supply voltage. Adjust as required.
9. Submit work orders on improperly operating devices.

### TOOLS, MATERIALS, AND EQUIPMENT (ANNUAL):

## Maintenance Task

1. Controls tool set.
2. Vacuum cleaner.
3. Indicator Lamps.
4. Batteries.

### PROCEDURES (5 YEARS):

1. Replace batteries.

### TOOLS, MATERIALS, AND EQUIPMENT (5 YEARS):

1. Batteries.
2. Electrician's tool set.

### ENGINEER'S NOTE:

1. Record results on forms provided in Appendix D of the Reliability Centered Maintenance Manual.