Fire Marshal Form for Replacement Fire & Smoke Actuators

Most codes require leaving a record of repairs of life safety devices on the building premises.

The administrative section of codes state that all mechanical and electrical systems must be kept in working order and an individual section may state that all life safety devices and systems must be operable.

UL555S does not address replacement issues. Repair recommendations can be found in **NFPA 80** Standard for Fire Doors and Other Opening Protectives, 2007 Edition and **NFPA 105** Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives 2007 Edition.

Fire & smoke dampers are considered to be appliances and field replacement of defective parts is expected.

Consult local Authority Having Jurisdiction (Building Dept or Fire Marshal) for other details.

UL

In the "Marking & Application Guide, Dampers for Fire Barrier and Smoke Applications & Ceiling Dampers" April 2003 by Underwriters Laboratories Inc. ®, page 6, they state:

DAMPER ACTUATORS

"... field mounting or substitution of actuators is not covered within the scope of the UL certification of the product. However, this does not necessarily preclude replacement of actuators in the field. Like any appliance, field servicing of these products is not covered under the scope of the UL certification and factory follow-up service program. As with any part of the damper, it is expected that replacement of actuators in the field be done in accordance with the damper manufacture's normal field servicing program."

WARNING

In all cases, installation must comply with any and all local electrical and life safety codes. Operation of the system after installation must be performed to verify proper damper cycling. Final checkout requires verifying correct operation of damper for UL555S functions including sensors or fusible link.

In all cases, replacement actuator should be:

- A. UL Listed with the damper OEM.
- B. Equal in voltage
- C. Equal or better in torque
- D. Equal or better in speed
- E. Equal or lower in current draw
- F. Equal or better in temperature tolerance

Note NFPA 80 & 105 require damper check also. Not covered here.

Retain this portion of check list at premises for Fire Marshal inspection. See local Authority Having Jurisdiction or Fire Marshal for other information and requirements.
Test Checklist (Smoke dampers do not have sensors.)
 Single Sensor Combination Damper Open smoke detector or relay wire or contact to cut power. Damper springs closed.
□ Reconnect power. Damper drives open.
□ Open thermodisc using heat gun. Damper springs closed.
□ Press thermodisc manual reset. Damper drives open.
☐ Use heat gun to make thermodisc open.
□ Reset thermodisc. Damper drives open.
2. Reopenable Two Sensor Fire-Smoke Combination Damper (Since this system involves the Firefighters Smoke Control System, the fire department should be informed.) With FSCS switch in Auto position: a. Disconnect power from smoke detector or relay contacts. Actuator springs damper fully closed. b. Reconnect power. Actuator drives damper open. c. Trip thermal sensor. Actuator springs damper fully closed. d. Press manual reset. Actuator drives damper open. Test FSCS switch functions a. Move FSCS switch to Off position. Actuator springs damper fully closed. b. Move FSCS switch to Hand position. Actuator drives damper open. c. Trip secondary (higher temperature) thermal sensor. Actuator springs damper fully closed. d. Press manual reset of secondary sensor. Actuator drives damper open. Move FSCS switch back to Auto position: Actuator springs damper closed if Primary sensor is still open. Actuator stays open if Primary sensor has re-closed.
☐ When completed, ensure sensors are reset and smoke detector is in normal state and FSCS switch is in Auto. Damper is normally open; check sequence of operation.
Damper Number or Location Identifying Number
Date
Contractor
Service Technician (Print)
Service Technician (Signed)
Phone number ()
Notes