

Electric Actuator (800360) Field Replacement for Dampers

Application Note LC-132

Tools required:

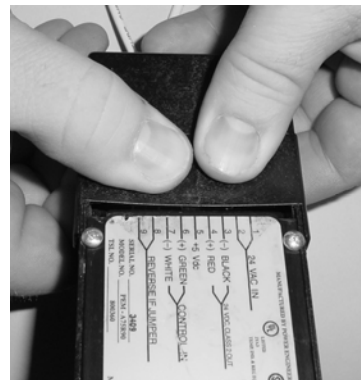
- 11/32" wrench
- 7/16" wrench
- #1 Phillips screwdriver
- Small bladed screwdriver
- Electrical tape
- Pliers or channel locks

Notes: To replace a defective actuator in the field, it is not necessary to remove the control damper from the ductwork.

Disconnect the wiring before removing the actuator from the control device. Make note of the wiring connections before disconnecting from the terminal strip.

Removal

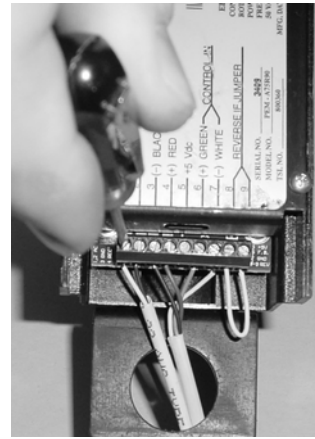
1. Remove terminal cover on the actuator by pressing down and sliding back.



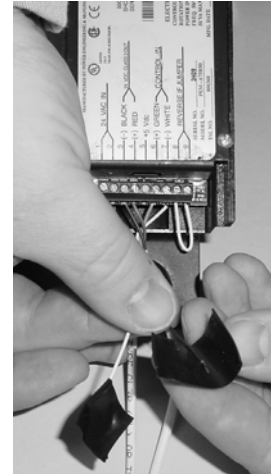
2. Disconnect the 24 VAC input to the actuator first. If the 24 VAC from the transformer can be turned off using a switch, do so now. If not, then:



- Remove terminal 1 wire from the terminal strip and wrap a piece of electrical tape around the exposed wire to prevent any chance of shorting to the ductwork, actuator body, or other type of conductive material.



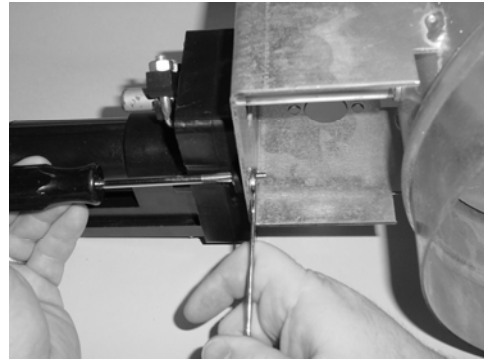
- Remove terminal 2 wire from the terminal strip and wrap a piece of electrical tape around the exposed wire to prevent any chance of shorting to the ductwork, actuator body, or other type of conductive material.



- Disconnect terminal 3 from the actuator terminal strip.
- Disconnect terminal 4 from the actuator terminal strip.
- Disconnect terminal 6 from the actuator terminal strip.
- Disconnect terminal 7 from the actuator terminal strip.
- Remove jumper wire across terminals 8 and 9 if present.
- Using a 7/16" wrench, loosen the two nuts on the actuator shaft bracket. The shaft may rotate depending on the amount of flow.



9. Use a #1 Phillips screwdriver and 11/32" wrench to remove the mounting screw and nut on both sides of the actuator that are used to attach the actuator to the damper.



10. Remove actuator. Note position of shaft and mounting bracket.

Installation

Installation is the reverse procedure; refer to above photos for reference.

1. Loosen the two nuts on the actuator shaft bracket and slip over the damper shaft. Do not tighten.
2. Connect the actuator mounting screws and nuts to the damper and tighten.
3. Re-install the jumper across terminals 8 and 9 if applicable.
4. Connect terminal 7 to the actuator terminal strip.
5. Connect terminal 6 to the actuator terminal strip.
6. Connect terminal 4 to the actuator terminal strip.
7. Connect terminal 3 to the actuator terminal strip.
8. Connect terminal 2 to the actuator terminal strip.
9. Connect terminal 1 to the actuator terminal strip.
10. Once the new actuator is connected to the control device and wired, modulate the actuator via the fume hood or room controller to full open position. Using a pair of pliers or channel locks, rotate the damper shaft to full open position and then lock it into place by tightening the two shaft bracket mounting nuts.



11. Verify proper operation by modulating the damper actuator via the damper control output function on the fume hood or room controller to ensure the damper and actuator rotate freely full open or full closed.
12. Replace terminal cover on the actuator.

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