

## Installation Guide

### Mounting

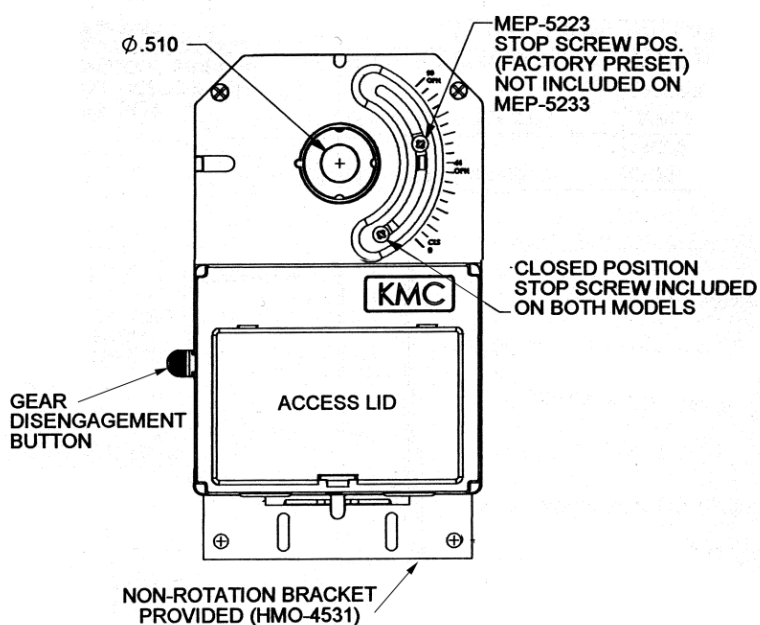
The MEP-5223 and MEP-5233 are replacement damper actuators designed for residential zone dampers. The MEP-5223 replaces series B and C actuators on round dampers with a fully closed blade angle of 45 degrees. The MEP-5233 replaces series B and C actuators on rectangular dampers with a fully closed blade angle of 90 degrees. The series B and C dampers use crank-arms to turn the damper shafts. The MEP units employ a direct-drive gear and mounting hub assembly to turn the damper shaft, eliminating the need for crankarm assemblies.

**CAUTION:** Operation problems will occur if the wrong actuator is applied to the wrong style damper. Use the MEP-5223 actuator **ONLY** on round dampers and the MEP-5233 actuator **ONLY** on rectangular dampers.

1. Turn power off.
2. Disconnect 24 VAC wiring to damper actuator.
3. Remove the old actuator or actuator assembly from the damper shaft and damper.

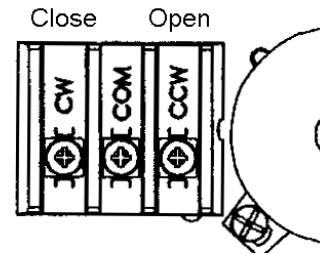
**NOTE:** After the actuator assembly is removed the damper shaft and blade should move freely. If the unit sticks or binds, repairs should be made before installing the new actuator.

4. Using a marker place a line on the end of the damper shaft to indicate the damper blade position.
5. Slide the new actuator unit directly on to the standard 1/2" diameter damper shaft.
6. Use the non-rotation bracket (provided) and 2 screws, to align the bottom of the actuator to the mounting plate. Most replacements will require 2 new holes to secure the bracket to the mounting plate.
7. Using the gear disengagement button, rotate the mounting hub counter clockwise to the fully open position.
10. Turn the shaft to ensure that the damper blade is in the fully open position.
11. Using a 5/32" hex/key wrench, firmly tighten the set screw to secure the damper shaft and the mounting hub.



## Wiring

1. Remove access cover to expose terminal block.
2. Route wires through the grommets in the cover.
3. Provide strain relief to prevent wires from pulling or snagging.
4. Connect stripped wires to appropriate terminals:
  - CW (clockwise to close)
  - COM (common)
  - CCW (counterclockwise to open)
5. Replace access cover.
6. Install or reposition any insulation (check local codes).  
In areas where excessive condensation may occur, carefully insulate over the actuator assembly. Make sure the insulation does not interfere with actuator operation.

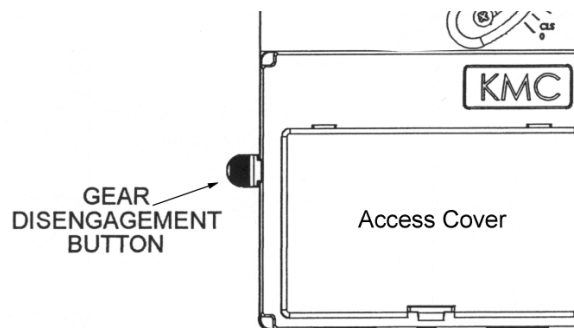


## Adjustments

Once the unit is installed check dampers and verify operation. When 24 VAC is applied between common and open the damper should fully open in approximately 15 seconds (18 seconds in 50 hz applications).

If the damper jams or stalls it will not damage the damper or motor. These problems are usually the result of twisting or bending of the damper body during installation. Straightening the damper body usually fixes these problems.

If it become necessary to force a damper open, press the gear disengagement button and simultaneously turn the mounting hub. Release the button to hold the damper in the new position.



## Maintenance

No routine maintenance is required.

The motors are permanently lubricated and all internal gear-train components are oil-impregnated. Careful installation will ensure long term reliability and performance.

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