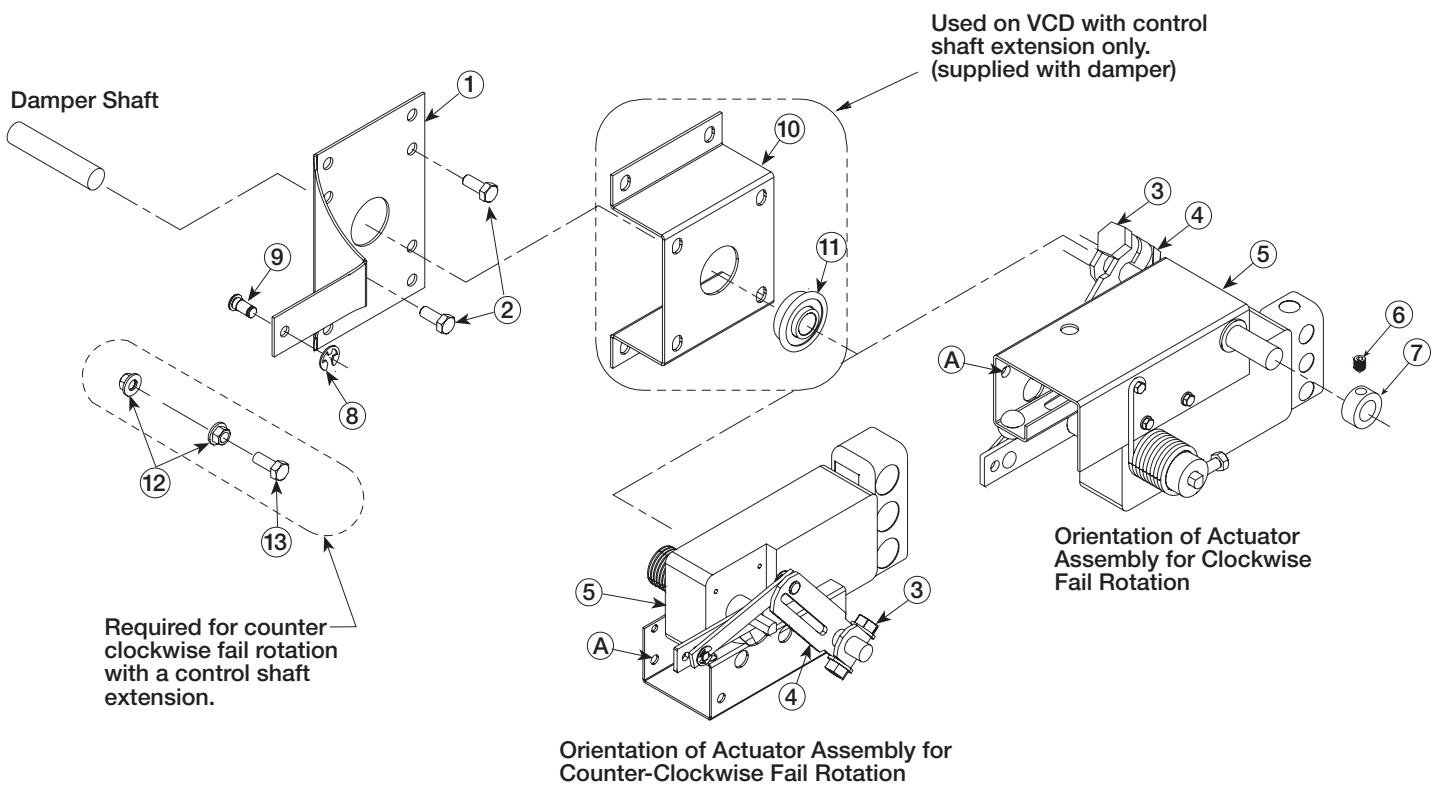


**Field Installation Instructions for
Multi Products Actuators
Models MP-3560, MP-3754, MP-3755 &
MP-3756**

UL Listed Electric Actuators with Spring Return

These instructions apply to the external field installation of Multi Products actuators on Greenheck models VCD Control Dampers.

Multi Products actuators are impedance protected, and stall type. They rotate to their stall position when power is applied and spring return to their fail position when power is interrupted.



Tools Required:
(1) 3/8" and (2) 1/2" wrenches
(1) 5/32" Allen wrench

Part No.	Qty.	Description
1	1	Anchor Bracket
2	4	1/4"-20 x 1/2" Thread Cutting Screws
3	1	5/16" Bolt with Nut
4	1	Linkage
5	1	Actuator Assembly
6	1	Set Screw
7	1	Shaft Collar
8	1	E-Ring
9	1	Knurl Pin
10	1	Stand Off Bracket (Used with Shaft Extension)
11	1	Ball Bearing (Used with Shaft Extension)
12	2	1/4"-20 Spinlock Nut
13	1	1/4"-20 x 1 1/4" Bolt

Instructions:

These installation instructions assume the damper is already mounted in a duct or sleeve with the damper shaft extending beyond the sleeve or duct 6".

1. Install the anchor bracket.

Dampers with a jackshaft

- 1a. Mount the anchor bracket, #1, onto the jackshaft bracket with four 1/4"-20 X 1/2" thread cutting screws. Orient the anchor bracket perpendicular to the damper on the duct or sleeve so that the bracket's shaft hole is centered on the jackshaft.

Dampers without a jackshaft (shaft extension)

- 1b. Mount the anchor bracket, #1, spanning across the damper frame flanges. Orient the anchor bracket perpendicular to the damper on the duct or sleeve so that the bracket's shaft hole is centered on the shaft extension. Fasten to the damper frame with four #14 Tek screws or equal, supplied by others. Be sure not to run the screws into the damper linkage, which is between the flanges.
2. Note the damper shaft rotation for fail direction and orient the actuator appropriately. The actuator assembly, #5, can be mounted with linkage towards or away from the damper to provide correct rotation. Make sure the linkage is as shown in the appropriate illustration.

Note: Inspect the damper blades and the damper shaft to determine the proper damper shaft rotation for the desired blade fail position.

3. Insert the damper shaft through the crankarm and the nylon bearings in the actuator assembly.

4. Hole A in the mounting bracket mates with the 1/4" pin of the anchor bracket, #9, which is installed by the factory. Secure the bracket with an E-ring, #8.

Note: For clockwise fail rotation with a control shaft extension use part #12 and #13 in place of part #8 and #9 to fasten the actuator assembly to the anchor bracket.

5. Position the damper blades in the fail position, either open or closed.
6. Tighten the 5/16" bolt, #3, in the crank arm, #4.
7. On dampers with jackshafts, if the linkage is facing the damper, install the shaft collar, #7, with the set screw, #6, onto the damper shaft to hold the actuator on the shaft, otherwise the shaft collar is not needed.
8. The above wiring illustration identifies actuator electrical connections. Wiring should be per an approved project or job wiring diagram and must comply with all applicable electrical codes.
9. Apply power to the actuator.

The damper blades should fully open or close and return to the fail position when power is disconnected, if they do not, adjustments can be made by:

- Resetting the crankarm position on the damper shaft.
- or-
- Loosening the set screw in the 5/16" shaft collar on the motor shaft to increase or decrease return spring tension.

Wiring Diagram

