

Contents:

- (1) MA-ND3 Motor Actuator
- (1) ND/ND2 Anti-Rotation Bracket
- (1) URD/RDN Anti-Rotation Bracket
- (1) ND3 Anti-Rotation Bracket
- (1) Shaft Adaptor
- (4) 11/32 hex nuts
- (2) #8 x 1/2" self tap screws
- (2) Flat washers
- (4) #6 phillips screws

Tools Required:

- 1/4" Nut Driver
- 5/16" Nut Driver
- 11/32" Nut Driver (ND/ND2)
- 3/32" Allen Wrench (RDN)
- Medium Phillips Screwdriver
- Precision Pocket Screwdriver

The New & Versatile **MRK Damper Motor Replacement Kit** is compatible with original ND & ND2 Rectangular Dampers. It also works with any URD damper ever produced, including RDN style dampers.

Installation and service should be performed by qualified personnel only. Follow all local & national, mechanical & electrical codes & ordinances.

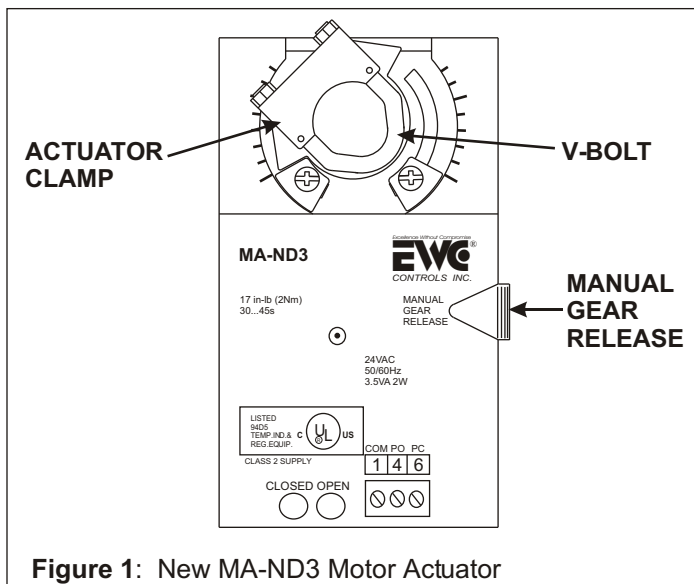


Figure 1: New MA-ND3 Motor Actuator

BEFORE YOU BEGIN

- Read all instructions and figures pertaining to the model actuator you are replacing.
- Gather the necessary tools to complete the replacement.
- Disconnect 24vac power supply.
- Tag and remove low voltage wires from existing actuator.

ATTACHING BRACKET TO ACTUATOR

MODEL URD & RDN STYLE DAMPERS

(Figure 2)

- Keeping the folds on the *Anti-Rotation Bracket* away from the Motor Actuator, align holes on *Anti-Rotation Bracket* with holes on rear of *MA-ND3*.
- Using 1/4" nut driver, Insert 1/2" self-tapping screws into proper holes and tighten.
- Follow instructions for **Replacing Motor Actuator** for URD or RDN on pages 2 and 3.

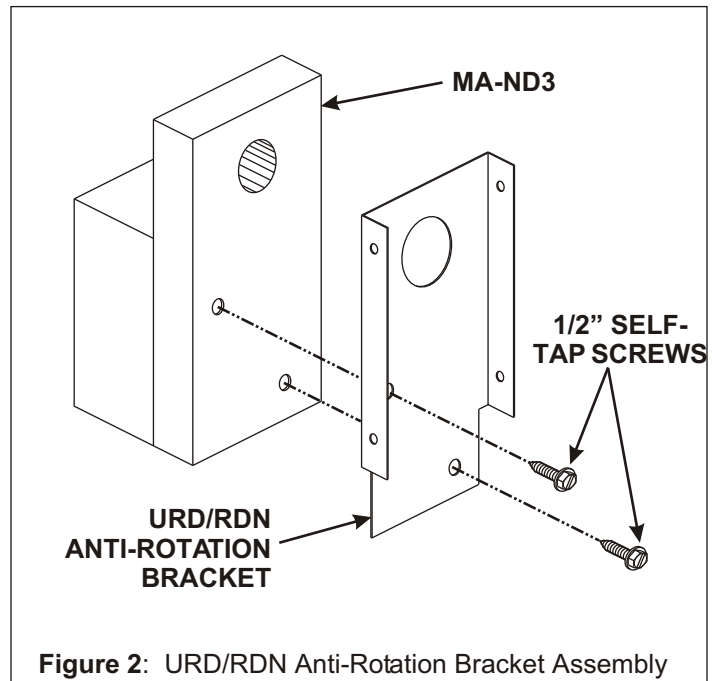


Figure 2: URD/RDN Anti-Rotation Bracket Assembly

MODEL ND & ND2 STYLE DAMPERS

(Figure 3)

- Lay motor actuator on a bench with the back plate facing up.
- Place one (1) washer over the two (2) lower mounting holes.
- Keeping the folds on the *Anti-Rotation Bracket* towards the motor actuator, align holes on *Anti-Rotation Bracket* with holes and washers on rear of *MA-ND3*.

Model MRK - Motor Actuator Replacement Kit

(Continued from previous page)

-Using 1/4" nut driver, Insert 1/2" self-tapping screws into proper holes and tighten.

-Follow instructions for **Replacing Motor Actuator** for ND/ND2 on Page 3 and 4.

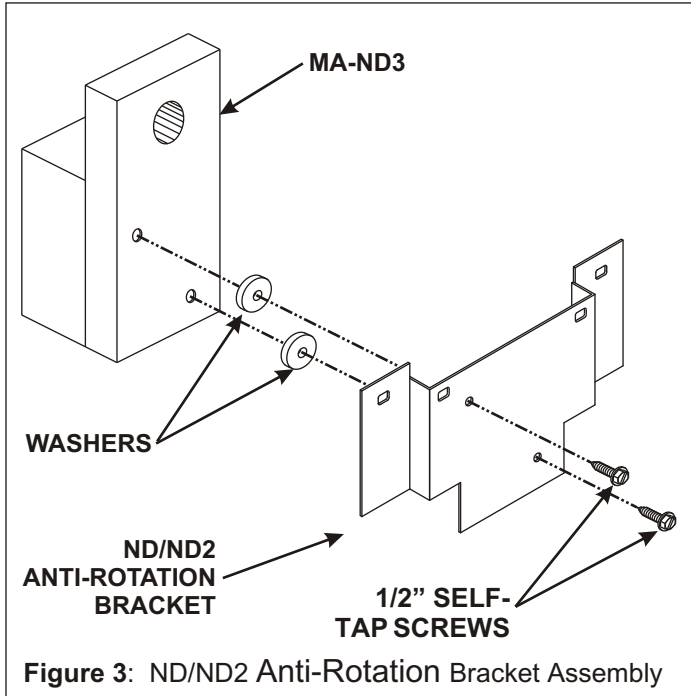


Figure 3: ND/ND2 Anti-Rotation Bracket Assembly

REPLACING MOTOR ACTUATOR

MODEL URD STYLE DAMPERS

(Figure 4)

- Remove the four (4) phillips head screws holding the existing motor actuator to the damper.
- Pull the existing motor actuator straight off.
- Using the *Manual Gear Release* on the New Actuator/Bracket Assembly, position the Actuator Clamp to the far LEFT. (OPEN Position)
- Loosen the nuts on the V-bolt so the Shaft Adaptor will slide thru easily.
- On the URD damper, position the slot on the Damper Blade Shaft vertically and insert the URD/ND mating end of the Shaft Adaptor fully into the Damper Blade Shaft.
- Align Actuator/Bracket Assembly and mounting holes with Shaft Adaptor and mounting brackets.
- Insert Philips head screws thru mounting brackets into the Anti-Rotation Bracket and tighten.
- Using a 5/16" nut driver, tighten the V-bolt to the Shaft Adaptor.
- Reconnect wiring.

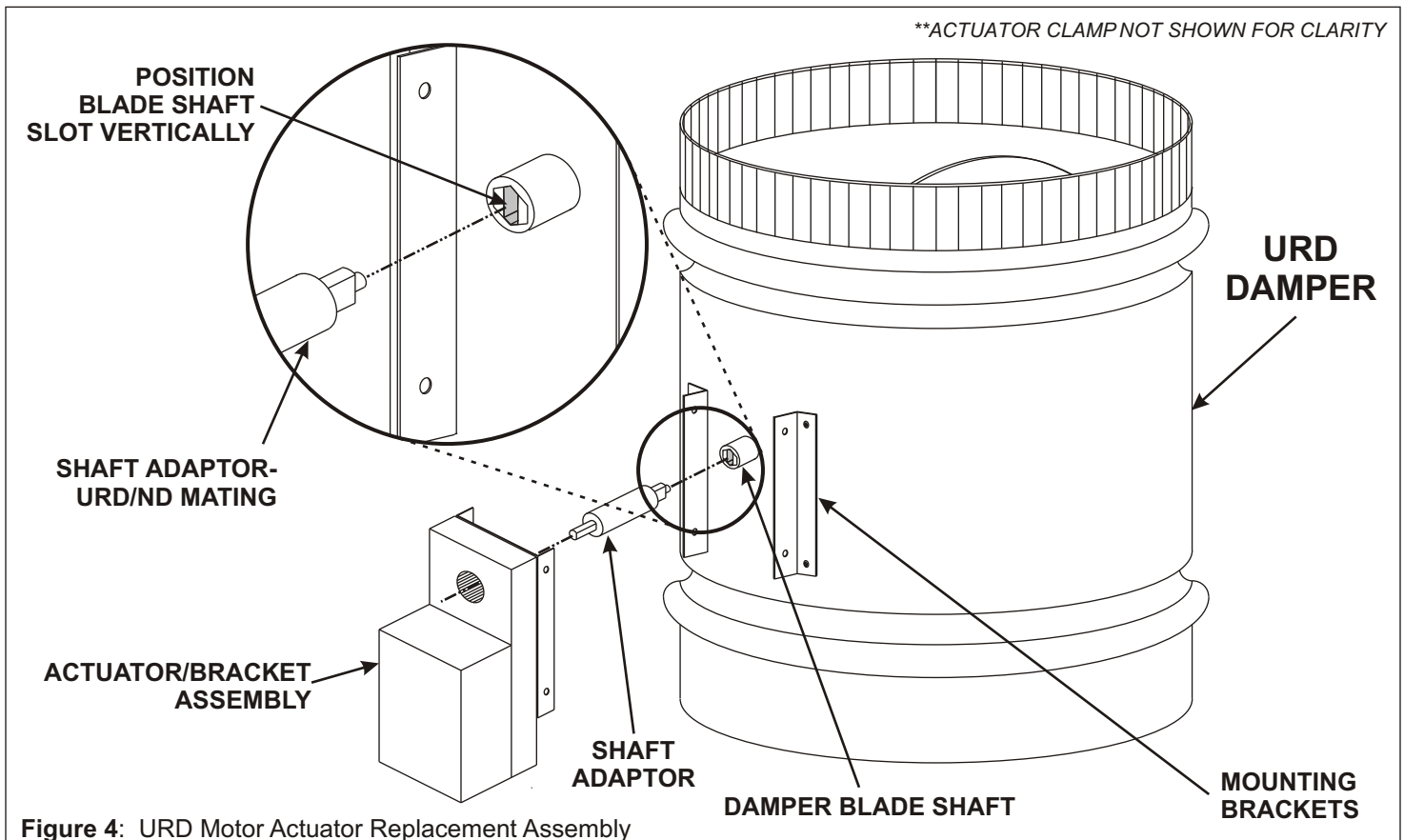


Figure 4: URD Motor Actuator Replacement Assembly

MODEL RDN STYLE DAMPERS

(Figure 5)

- Align *Damper Blade Shaft* set screw with access opening on existing motor actuator.
- Using a 3/32" allen wrench, loosen the set screw on the *Damper Blade Shaft*.
- Remove the four (4) phillips head screws holding the existing motor actuator to the damper.
- Pull the existing motor actuator straight off.
- Using the *Manual Gear Release* on the New Actuator/Bracket Assembly, position the *Actuator Clamp* to the far RIGHT. (CLOSED Position)
- Loosen the nuts on the *V-bolt* so the *Shaft Adaptor* will slide thru easily.
- On the RDN damper, position the set screw on the *Damper Blade Shaft* so it is facing UP and insert the RDN mating end of the *Shaft Adaptor* fully into the blade shaft with the flat side UP.
- Using 3/32" allen wrench, tighten the set screw on the *Damper Blade Shaft*.
- Align Actuator/Bracket Assembly and mounting holes with *Shaft Adaptor* and mounting brackets.
- Insert Philips head screws thru mounting brackets into the *Anti-Rotation Bracket* and Tighten.
- Using a 5/16" nut driver, tighten the *V-bolt* to the *Shaft Adaptor*.

- Reconnect wiring. Note: Refer to MA-ND3 Submittal sheet for proper wiring.

MODEL ND/ND2 STYLE DAMPERS

(Figure 6)

- Remove the two (2) 11/32" actuator mounting nuts holding existing motor actuator to damper frame.
- Pull the existing motor actuator straight off.
- For ND2 dampers place one (1) of the supplied 11/32" hex nuts on each existing *Mounting Post*. (Not necessary for older ND dampers).
- Using the *Manual Gear Release* on the New Actuator/Bracket Assembly, position the *Actuator Clamp* to the far LEFT. (OPEN Position)
- Loosen the nuts on the *V-bolt* so the *Shaft Adaptor* will slide thru easily.
- On the damper, position the slot on the *Damper Blade Shaft* vertically and insert *Shaft Adaptor* fully into the *Damper Blade Shaft*.
- Align Actuator/Bracket Assembly and mounting holes with *Shaft Adaptor* and mounting posts.
- Replace 11/32" hex nuts on mounting posts and tighten.
- Using a 5/16" nut driver, tighten the *V-bolt* to the *Shaft Adaptor*.
- Reconnect wiring.

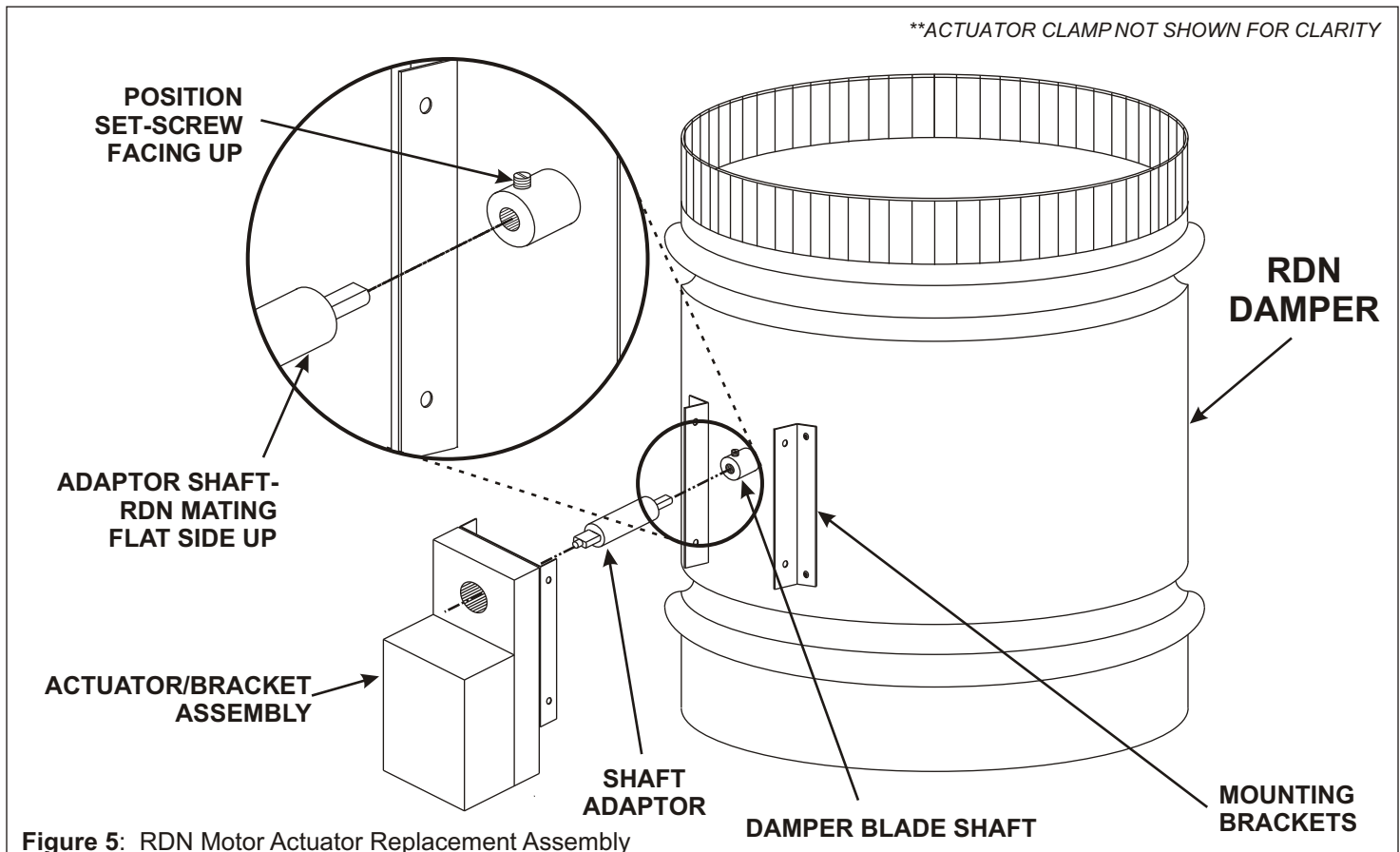


Figure 5: RDN Motor Actuator Replacement Assembly

Model MRK - Motor Actuator Replacement Kit

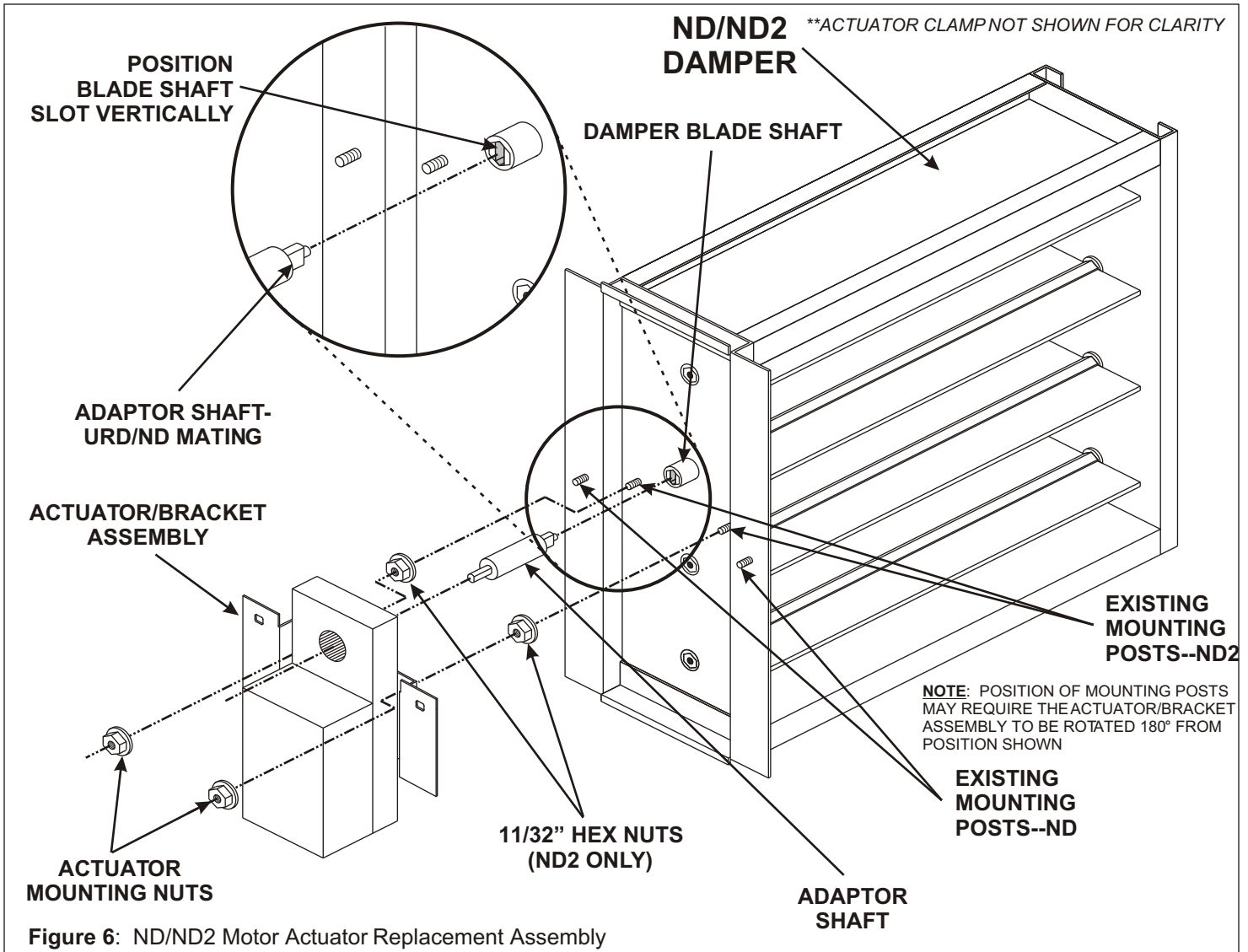


Figure 6: ND/ND2 Motor Actuator Replacement Assembly

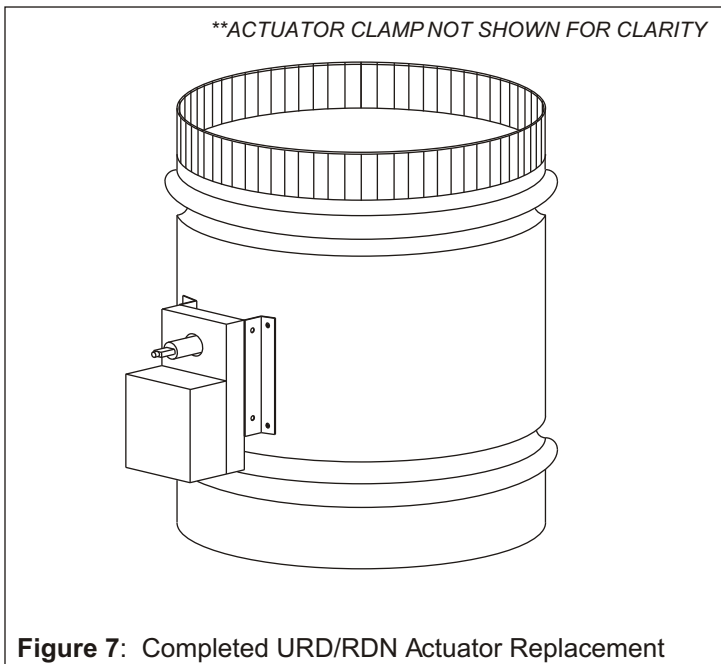


Figure 7: Completed URD/RDN Actuator Replacement

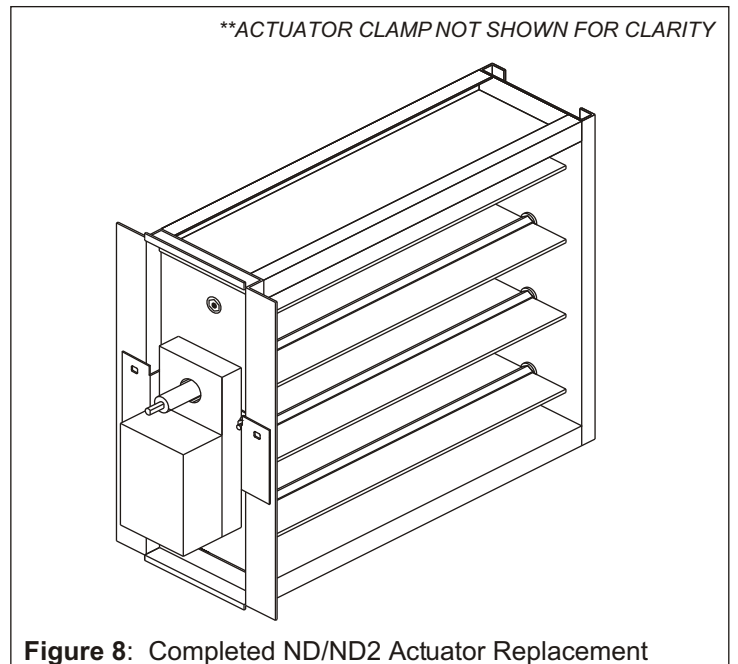


Figure 8: Completed ND/ND2 Actuator Replacement