Contents:
(1) ND/ND2 Anti-Rotation Bracket
(1) URD/RDN Anti-Rotation Bracket
(1) Shaft Adaptor
(4) 11/32 hex nuts
(1) 10-32 x 1/2” Screw
(1) 10-32 Hex Nut
(4) #6 phillips screws
(1) M5 Metric Flanged Nut

Tools Required:
5/16” Nut Driver
11/32” Nut Driver (ND/ND2)
3/32” Allen Wrench (RDN)
Medium Phillips Screwdriver
Flat Head Screwdriver
Precision Pocket Screwdriver

The Versatile DHK Damper Hardware Kit is compatible with original ND & ND2 Rectangular Dampers. It also works with URD & RDN Style Round Dampers. The DHK will not work on a ND damper with a Motor side dimension of 8” or less. If your damper is 8” or less, the entire damper must be replaced.

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

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
-Select appropriate Anti-Rotation Bracket for your damper. See figures 2 or 3.
-Keeping the top folds on the Anti-Rotation Bracket toward the Motor Actuator, slide the Motor Actuator into the Anti-Rotation Bracket, making sure the folds grab the top of the Motor Actuator.
-Insert screw through Mounting Tabs and tighten nut using a nut driver.
-Follow instructions for Replacing Motor Actuator for URD or RDN on pages 2 and 3.
-Follow instructions for Replacing Motor.
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 3: ND/ND2 Anti-Rotation Bracket Assembly

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.
-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.

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.

-Disconnect wiring. Note: Refer to MA-ND5 Submittal sheet for proper wiring.
Figure 6: ND/ND2 Motor Actuator Replacement Assembly

Figure 7: Completed URD/RDN Actuator Replacement

Figure 8: Completed ND/ND2 Actuator Replacement