



# DMPR-KC010 Adjustable Blade Position Indicator Switch Kit

Installation



### Figure 1: Adjustable Damper Position Switch Kit Components

## **Table 1: Components**

ltem	Description	Quantity
1	Damper Position Switch	1
2	Clevis Pin	1
3	Position Switch Bracket	1
4	Washer	2
5	Cotter Pin	1
6	Self-threading Hex Head Screw	2
7	Coupler	1
8	3/16-in. Faston Terminal	6
9	Receptacle Housing	2

## **Additional Parts**

- DMPR-KC251 Universal Mounting Bracket required when used with an electric actuator, standard with most pneumatic actuators
- DMPR-KC007 Blade Pin Extension (one standard with each damper)

## **Special Tools Needed**

- 1/8-inch Hex Key
- Continuity Tester or ohmmeter

Mounting



# Figure 2: Installing Position Switch Bracket

- 1. Install the position switch bracket onto the universal mounting bracket (DMPR-KC251) as shown in Figure 2.
- 2. Secure the position switch bracket using two self-threading, hex head screws into existing holes in universal mounting bracket.



# Figure 3: Installing Damper Position Switch

 Insert the coupler into the blade position switch O-ring to the top as shown in Figure 3.

- Remove the cotter pin (Figure 1, item 5) from the clevis pin (Figure 1, item 2) and remove one washer (Figure 1, item 4) from the clevis pin. Leave the clevis pin inside the damper position switch and one washer on the clevis pin.
- 5. Install the damper position switch onto the blade pin extension (DMPR-KC007). Insert the clevis pin through the small hole in the position switch bracket, keeping the washer between the bracket and position switch.
- 6. Install the washer onto the clevis pin and secure it using the cotter pin removed in step 4.
- 7. Verify that the damper is in the fully closed or open position.
- Note: Switches are factory set for approximately 90°.
- 8. Secure the blade position switch to the blade pin extension by using a 1/8-inch hex key to tighten each hex set screw in the coupler to 65 lb-in.

# Setup and Adjustments

1. Verify that the damper is closed or at the desired switching position.



Switch Cams

#### **Figure 4: Switch Positions**

- 2. Connect a continuity tester or ohmmeter to the Common and Normally Open (N.O.)/Normally Closed (N.C.) terminals of the top switch as shown in Figure 4.
- 3. Use the teeth of the top switch cam to rotate the cam until the tester indicates a change in switch position.
- 4. Rotate the damper to the desired switching position for the bottom switch.

- 5. Repeat Steps 3 and 4 for the bottom switch.
- 6. Verify that both switches activate at the desired positions.



# Figure 5: Switch Circuits

**CAUTION:** Potential Shock Hazard. For 110 VAC operation, one receptacle housing with three faston terminals must be installed on each switch.

7. Connect wires to switch terminals referenced in Figure 5 as required.



#### Figure 6: Installing Pointer Scale

- 8. The pointer scale has two sides as shown in Figure 6. Verify that the position scale shows the proper location for the open and closed positions.
- 9. If the position scale does not show the proper locations, pry the position scale out of the recessed slots, and turn and install the position scale by inserting its tabs into the recessed slots of the switch kit.
- 10. Install the pink position indicator so that it points to the damper closed position.





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