

## Installation, Operation and Maintenance Manual

Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

### Tools Required:

$\frac{5}{16}$  in. hex nut driver

$\frac{3}{8}$  in. electric drill

$\frac{1}{2}$  in. open end wrench

### Part Number 828599

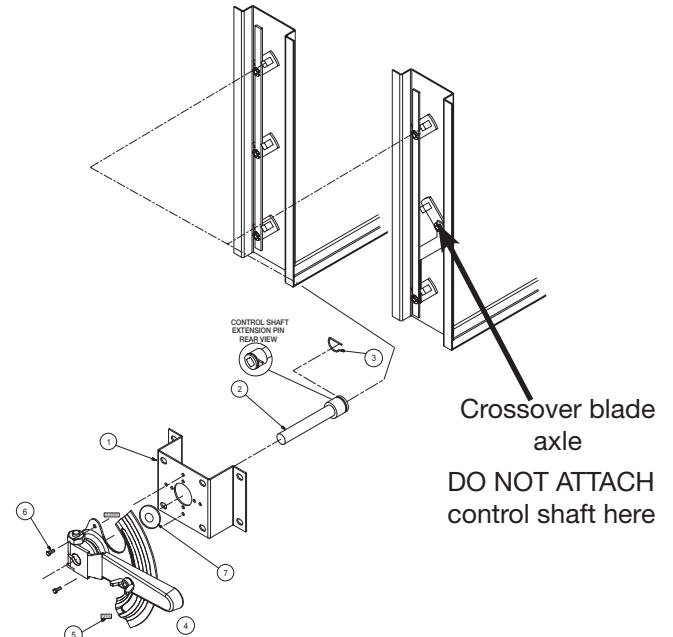
No.	Qty	Description
1	1	Standoff bracket
2	1	Extension pin
3	1	Retaining clip
4	1	1/2 in. Manual quadrant
5	1	Open and close labels
6	2	TEK screws
7	1	Washer

### Before Installing Damper in the Duct

1. If damper has more than one blade, determine which blade axle will be driven by the extended control shaft. Always attach extended control shaft to a blade axle which is directly connected to the main linkage tiebar. DO NOT attach extended control shaft to a crossover blade axle.
2. Cut hole approximately 1 in. diameter in the duct where damper drive blade axle will be located. Hole must provide clearance for enlarged portion of the extended control shaft.

### After Damper is Installed in Duct

1. Push extended control shaft through the hole in the duct and onto drive blade axle. Retainer clip should "click" into groove on the drive blade axle and hold shaft into place. Standard control shaft location is the third blade from the bottom on dampers with three or more blades. Control shaft location is the first blade from the bottom on dampers with one or two blades.
2. Install the stand off bracket with washer over the extended control shaft and screw bracket to the duct. Make sure screws do not interfere with damper



### Note: For Dampers Installed In Ducts

Extended control shaft is installed from outside of duct after damper is installed. Install as shown above.

linkage or blade movement. Assemble manual quadrant to the extension bracket assembly (screws provided).

3. With the damper either fully open or closed, lock manual quadrant to the extended control shaft so the manual quadrant can move the damper between open or closed.

**Note:** Tighten down the bolt on manual quadrant to 250 in. lb. of torque. Apply "OPEN" and "CLOSED" labels if damper movement is opposite to that engraved on the manual quadrant.

4. Set the damper to the desired position and tighten wing nut on the manual quadrant to hold the damper in place.

### Caution

Standoff bracket with the washer is needed to support the extended control shaft. If not installed as directed, the extended control shaft may not operate the damper correctly.

