



Kit Part Numbers

13mm Extension Pin Kit	Part #827513
13mm Extension Pin Kit & Manual Quadrant Kit	Part #827514
13mm Manual Quad. Kit	Part #827682
25mm Manual Quad. Kit	Part #827681

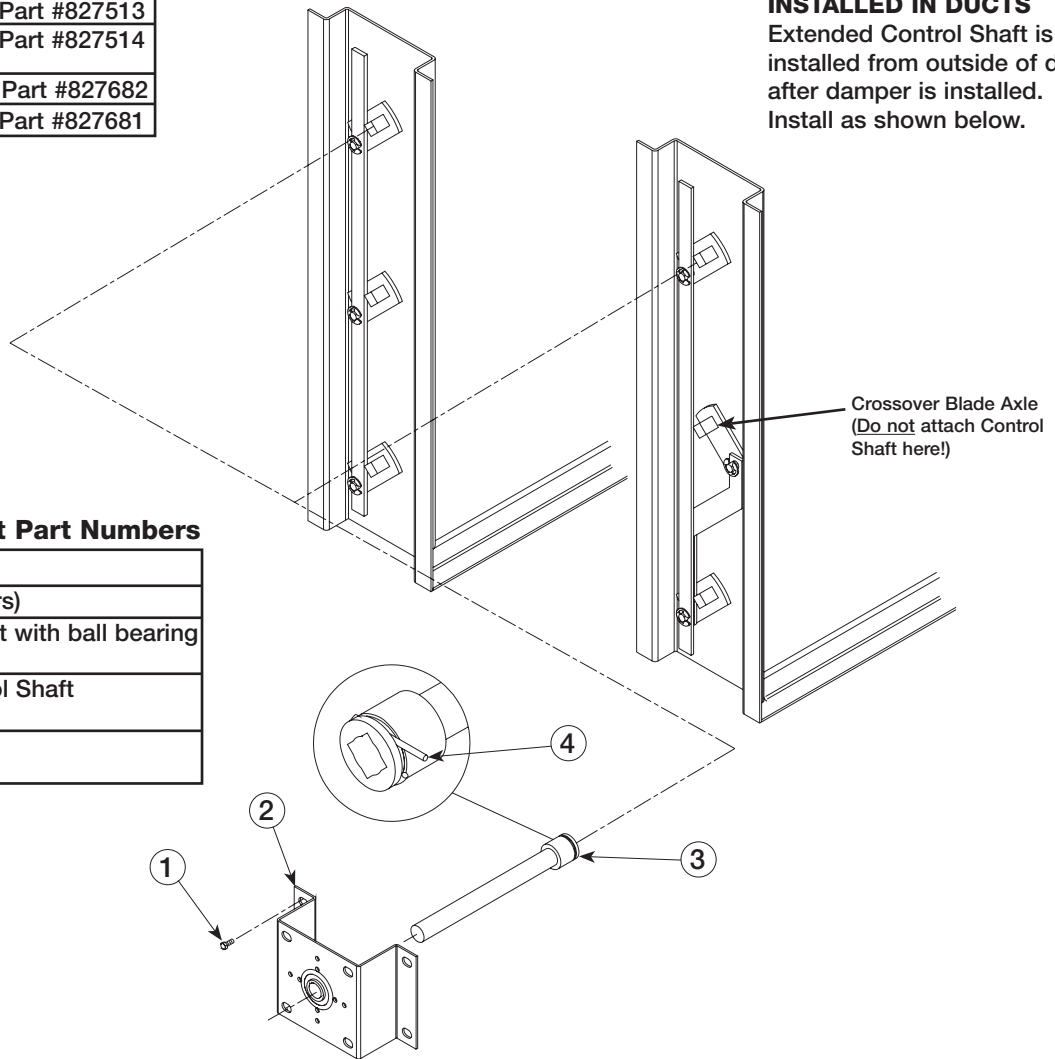
TOOLS REQUIRED:

8mm Hex Nut Driver
Electric Drill
14mm Open End Wrench

NOTE: FOR DAMPERS

INSTALLED IN DUCTS

Extended Control Shaft is installed from outside of duct after damper is installed. Install as shown below.



13mm Extension Pin Kit Part Numbers

No.	Qty.	Description
1	4	Screws (by others)
2	1	Stand off bracket with ball bearing Part #827512
3	1	Extended Control Shaft Part #463406
4	1	Retaining Clip Part #451738

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 25mm in diameter in duct where damper drive blade axle will be located. Hole must provide clearance for enlarged portion of extended control shaft.

After Damper Is Installed in Duct

1. Push extended control shaft through hole in duct and onto drive blade axle. Retainer clip should "click" into

groove on 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 bearing over the extended control shaft and screw bracket to duct. Make sure screws (provided by others) do not interfere with damper linkage or blade movement.

Caution

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

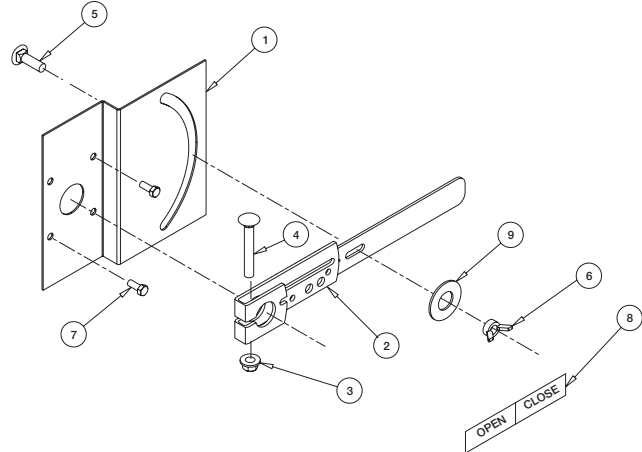
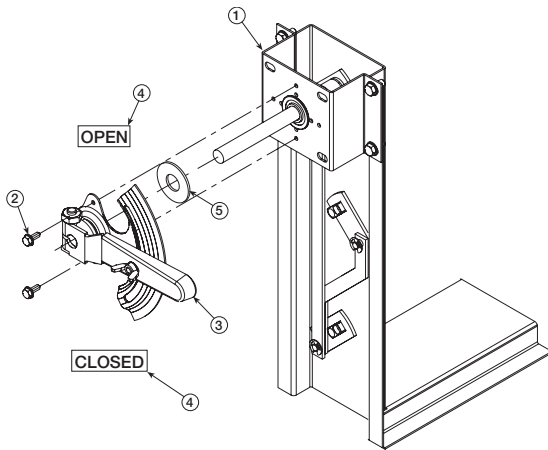
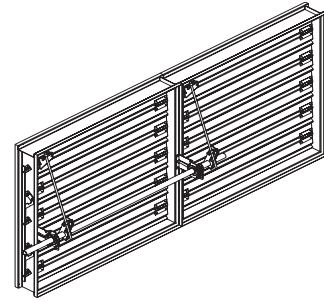
CONTINUED INSTALLATION INSTRUCTIONS for Manual Quadrant Operator

Jackshafted Damper

Manual Quadrant & Extension Pin Kit Part Numbers

No.	Qty.	Description	Part Number
1	1	Extension Pin Kit Assembly	See Page 1
2	2	M4.8 x 13mm self drilling SMS	416246
3	1	13mm Dia. Manual Quadrant	463623
4	1	OPEN & CLOSED Labels	452690
5	1	Washer (included with Part #463623)	

* The 13mm manual quadrant kit (Part #827628) does not include Item #1 above. Kit part #827514 includes both the 13mm manual quadrant kit and the 13mm extension pin kit.



No.	Qty.	Description	Part No.
1	1	25mm Quadrant Bracket	649366
2	1	Quadrant Lever Arm Assembly	814406
3	1	M10 Spinlock Nut ZP	416218
4	1	M10 x 65mm Carriage Bolt	416243
5	1	M10 x 25mm Short Shank Crg. Bolt	415820
6	1	M10 Wing Nut	415821
7	4	M6 x 12mm Self Threading Screw	415264
8	1	Label - Open/Close	452690
9	1	16mm Flat	415381

Non-jackshafted Dampers

Control damper should be mounted in the duct and the shaft extension mounted onto the correct blade of the damper before continuing with these instructions.

After Extended Shaft is Installed

1. Assemble Manual Quadrant to extension bracket assembly (screws provided).
2. With damper either fully open or closed, lock manual quadrant to extended control shaft so manual quadrant can move damper between open and closed. Note: Tighten down bolt on manual quadrant to 28 Nm of torque. Apply "OPEN" and "CLOSED" labels if damper movement is opposite to that engraved in the manual quadrant.
3. Set damper to desired position and tighten wing nut on manual quadrant to hold damper in place.

Jackshafted Dampers

1. Units that are jackshafted do not require Item #1. The jackshaft is, either, 13mm diameter or 25mm diameter depending upon the size of the damper. The manual quadrant kit for the 13mm diameter jackshaft is Part #827514 and the manual quadrant kit for a 25mm diameter jackshaft is Part #827681.
2. With damper either fully open or closed, lock manual quadrant to jackshaft so manual quadrant can move damper between open and closed. Note: Tighten down bolt on manual quadrant to 28 Nm of torque. Apply "OPEN" and "CLOSED" labels if damper movement is opposite to that engraved in the manual quadrant.
3. Set damper to desired position and tighten wing nut on manual quadrant to hold damper in place.

