

These instructions apply to the internal field replacement of the Honeywell, FATPA Series, actuators on Greenheck models VCD control dampers, when they are duct mounted or sleeved.

ACTUATOR	PART #
MS4120F-1006 115V	382823
MS8120F-1002 24V	382824
MS4620F-1005 230V	382825
MS4120F-1204 115V	383024
MS8120F-1200 24V	383255
MS4620F-1203 230V	383254
MS7510A2008	383739
MS7510A2206	383213
MS8110A1206	383818
MS7520A2015	383785
MS7520A2213	383784

ITEM #	QTY	PART #	DESCRIPTION
1	1	723981	INTERNAL ACTUATOR BRKT
2	1	839475	DRIVE LINK ASSEMBLY
3	1	829206	1/2" CRANKARM ASSEMBLY
4	1	451588	1/4" E-RING
5	1	593831	6.5" JACKSHAFT, 1/2" DIA.
6	1	415934	10-24 NYLOC NUT
7	1	846545	1/2" ANTI-ROTATION BRKT. ASM
8	1	416048	10-24X.375 SHOULDER BOLT
9	2	415264	1/4-20x1/2 TCS
10	1	SEE CHART	ACTUATOR
11	1	370159	1/2" SNAP IN BEARING
12	1	416179	RETAINING RING 1/2"

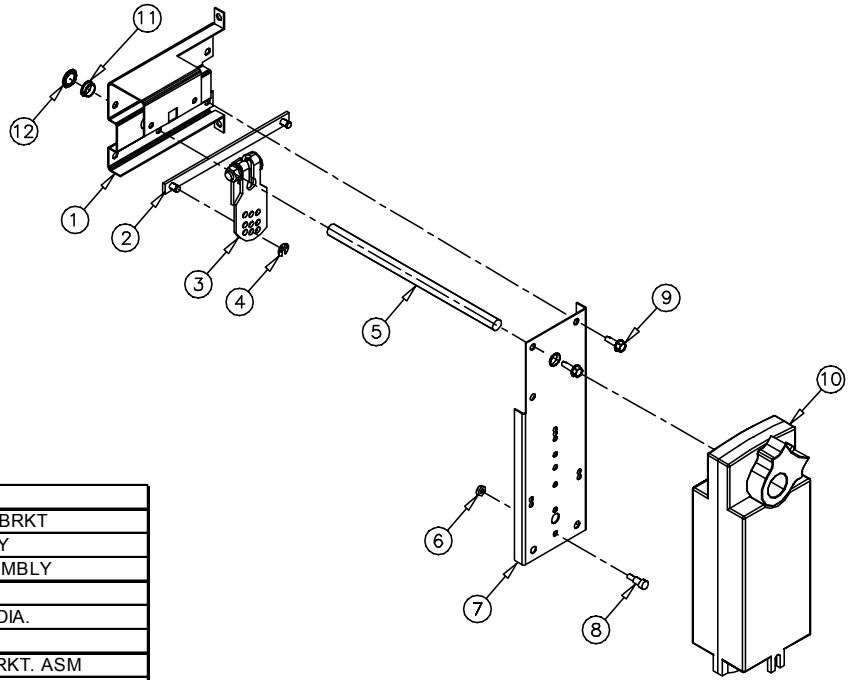
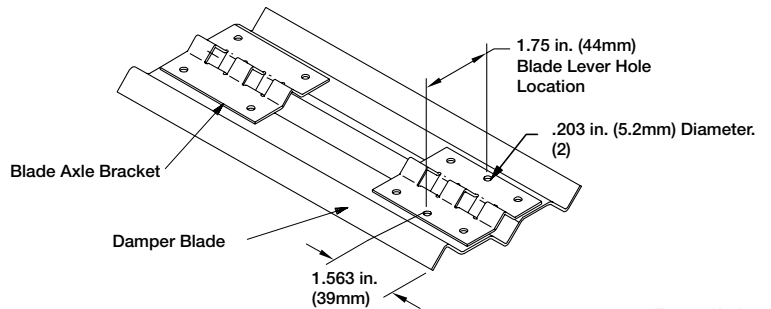


Figure 1: Honeywell Series internal mount (exploded view).

Tools Required:

- Wrenches: (1) 7/16 in., (1) 3/8 in., (1) 9/16 in.
 (1) Ratchet with 3/8, 7/16, 9/16 in. deepwell socket
 (1) 1/8 in. Allen wrench,
 (1) Drill with 3/8 in. nut driver,
 (1) .203 dia. drill bit



Detail A



WARNING

Equipment Damage or Electrical Power Hazard. Line voltage can cause death or serious injury and short equipment circuitry. Disconnect power supply before installation.



CAUTION

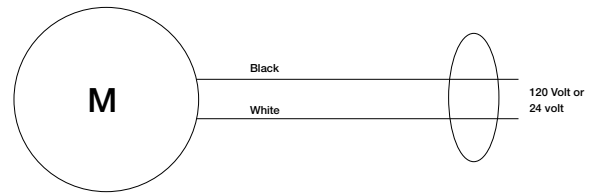
Device Malfunction Hazard. Improper set screw tightening causes device malfunction. Tighten set screws with proper torque to prevent damper shaft slippage.

INSTRUCTIONS

MS DIRECT DRIVE SERIES

These installation instructions assume a damper is already mounted in a duct or sleeve. Have damper blades in the fail position.

1. Drill [2] .203 inch holes in the third blade from bottom, at location shown in detail "A".
2. Attach blade drive lever to blade using [2] ¼ in. - 20 x ½ in. thread cutting screws, self drilling screws or ¼ -20 x 1¼ in. bolts.
3. Fasten actuator bracket (item 1) to the left jamb of damper frame using [2] thread cutting screws. Note: the 0.563 in. hole in the bracket (item 1) that the 6 1/2 in. jackshaft (item 5) goes through must be centered with the centerline of the blade. Snap bearing (item 11) into internal actuator bracket (item 1).
4. Snap bearing (item 11) into anti-rotation bracket (item 7) and attach the anti-rotation bracket assembly (item 7) to the internal mount bracket (item #1) using [2] thread cutting screws (item 9).
5. Slide ½ in. diameter rod (item 5) slightly through the anti rotation bracket (item 7). Install crankarm (item 3) and drive link (item 2) onto the ½ in. diameter rod (item 5) and install retaining clip (item 12) to lock drive link onto the crankarm.
6. Install 10-24 x .375 shoulder bolt (item 8) to the anti rotation bracket (item 7) using #10 Nylock nut (item 6).
7. Attach actuator (item 10) to anti-rotation bracket assembly (item 6). Tighten actuator onto shaft.
8. Connect drive link to blade drive lever using e-clip. With blades closed and the actuator in its fail position, position blades in their fail position and tighten the crankarm to the 1/2 in. shaft.
9. Connect all electrical leads to the actuator. Apply power to the actuator. The damper blades should power position and return to the fail position when power is disconnected.



Wiring Illustration

Important

A break in power of less than one second can cause the actuator to spring-return 5 degrees or less and remain in place until a break in power of longer duration.

Model	Volts	Running	Holding
MS4120F1006	120 VAC	35W	10W
MS4120F1204			
MS4620F1005	230 VAC	35W	10W
MS4620F1203			
MS7510A2008	24 VAC/VDC	14W	5W
MS7510A2206		14W	
MS7520A2007		16W	
MS7520A2015		22W	
MS7520A2205		16W	
MS7520A2213		22W	
MS8110A1206	24 VAC/VDC	30W	8W
MS8120F1002	24 VAC	45W	10W
MS8120F1200			

