

## 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 instructions could result in personal injury and/or property damage!

There are situations in the field where the actuator is provided on the damper externally but due to interferences the actuator needs to be moved internally. These instruction give you the steps you need to change from external to internal mount. The AHJ (Authority Having Jurisdiction) and building owner will need to determine if UL Field Inspection will be required.

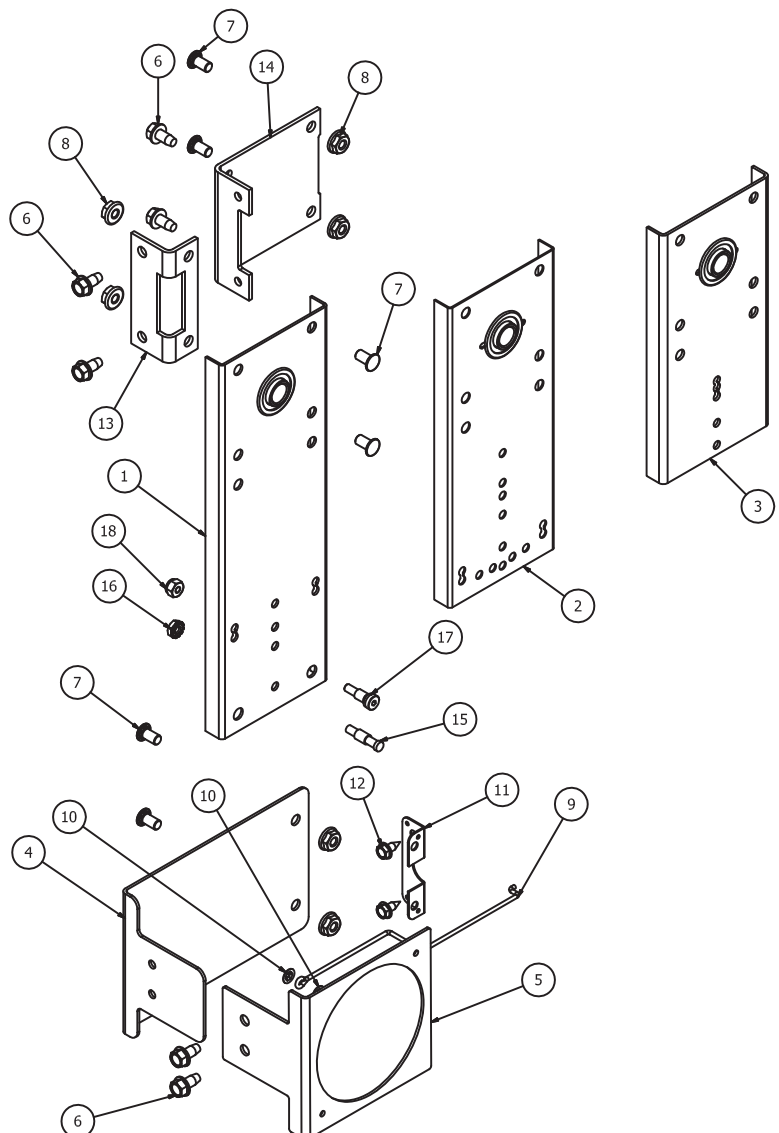
### Tools needed:

Phillips screwdriver  
Flat screwdriver  
Allen wrench  
Pliers  
 $\frac{5}{16}$ ,  $\frac{3}{8}$ , and  $\frac{7}{16}$  inch sockets  
Socket driver

## Kit Number 878883 for $\frac{1}{2}$ in. Jackshaft

ITEM	QTY	PART NO.	DESCRIPTION
1	1	823997	ASM, MOUNTING BRACKET (INTERNAL MOUNTS)
2	1	867719	ASM, MOUNTING BRACKET (INTERNAL MOUNTS),
3	1	835473	ASM, SMALL BELIMO ANTI-ROTATION BRACKET
4	1	704954	BRKT, OCI/RRL/TOR INT MTG-SLEEVE SD
5	1	704953	BRKT,OCI/RRL/TOR INT MTG-TOR SIDE 316 SS
6	6	415264	TCS 23 1/4-20X1/2 HWH MZP
7	6	415609	STUD,PRESS-IN, 1/4-20X1/2,YELLOW ZNC
8	6	415455	NUT,SPNLK 1/4-20ZP
9	1	457808	WIRE, .093 X 6IN INDICATOR SHORT
10	2	415548	RTNR,PUSHON,.125,MECH ZP
11	1	658594	INDICATOR LINK BLADE BRACKET
12	2	415555	TEK SCR,HWH,#10-16X.5,ZP/WAX,#2
13	1	659942	JACKSHAFT ADAPTER INTERNAL MOUNT
14	1	659943	JACKSHAFT BRACKET HONEYWELL MOUNT
15	1	416122	THREADED MTG STUD-BELIMO ACT
16	1	415385	NUT,#10-32 HX KEPS ZP
17	1	416048	CS,SHD. SOC.,#10-24x.375,ZPBAKE
18	1	415934	NUT,#10-24 HH NYLOC ZP

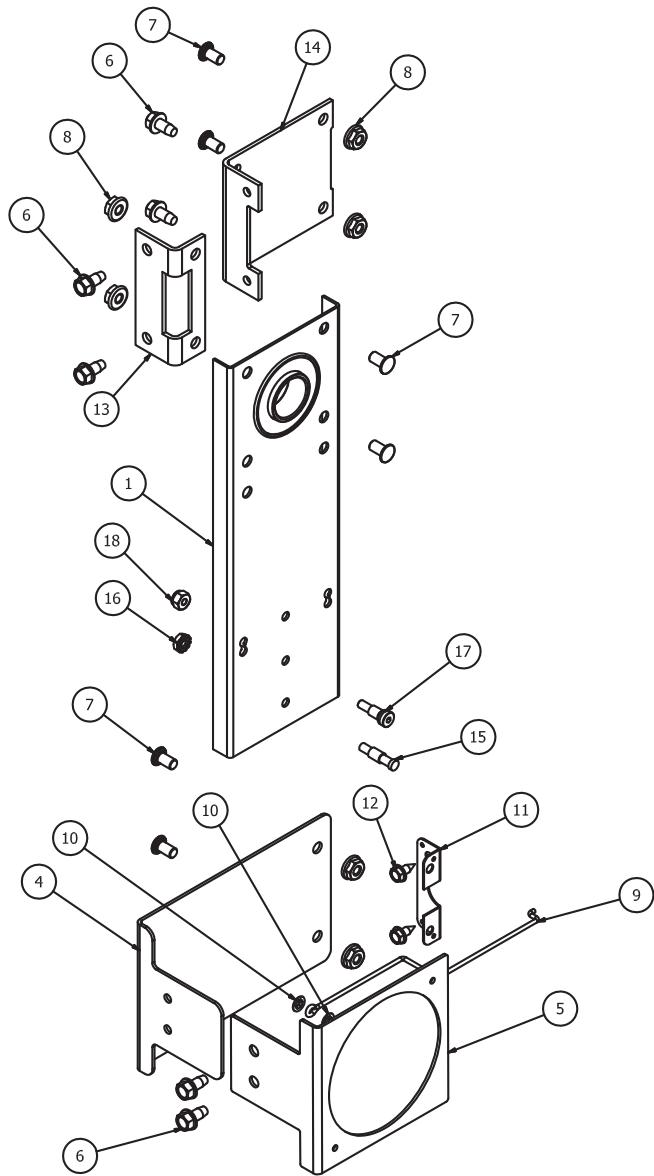
NOTE: ITEMS 9,10,11,12 NOT USED ON RRL ONLY UNITS



Kit Number 878884 for 1 in. Jackshaft

ITEM	QTY	PART NO.	DESCRIPTION
1	1	823990	GGD ACTUATOR MOUNTING BRACKET W/ 1" BEAR
4	1	704954	BRKT, OCI/RRL/TOR INT MTG-SLEEVE SD
5	1	704953	BRKT OCI/RRL/TOR INT MTG-TOR SIDE 316 SS
6	6	415264	TCS 23 1/4-20X1/2 HWH MZP
7	6	415609	STUD,PRESS-IN,1/4-20X1/2,YELLOW ZNC
8	6	415455	NUT,SPNLK 1/4-20ZP
9	1	457808	WIRE, .093 X 6IN INDICATOR SHORT
10	2	415548	RTNR,PUSHON,.125,MECH ZP
11	1	658594	INDICATOR LINK BLADE BRACKET
12	2	415555	TEK SCR,HWH,#10-16X.5,ZP/WAX,#2
13	1	659942	JACKSHAFT ADAPTER INTERNAL MOUNT
14	1	659943	JACKSHAFT BRACKET HONEYWELL MOUNT
15	1	416122	THREADED MTG STUD-BELIMO ACT
16	1	415385	NUT,#10-32 HX KEPS ZP
17	1	416048	CS,SHD, SOC, #10-24x.375,ZPBAKE
18	1	415934	NUT,#10-24 HH NYLOC ZP

ITEMS 9,10,11,12 NOT USED ON RRL ONLY UNITS



## Instructions to Change From External Right to Internal Left

1. Disconnect the power source to the actuator and temperature device (RRL, RRL/OCI, or TOR). Remove the cover off the temperature device.



2. Disconnect the conduit from the sleeve.



3. Loosen set screws on the actuator.



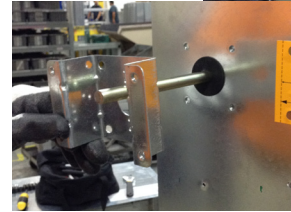
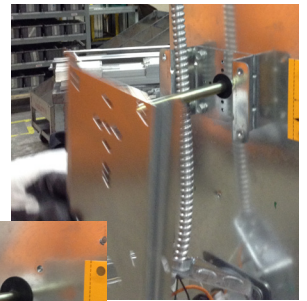
4. Take junction box with RRL (or RRL/OCI, TOR) and rubber gasket off of the sleeve.



5. Loosen the bolt that holds the actuator to the bracket. Set aside the actuator and RRL (or RRL/OCI, TOR) assembly.



6. Take actuator bracket and standoff bracket off the sleeve.



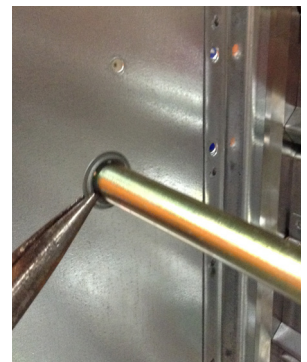
7. Loosen crankarm screw.



8. Mark the jackshaft so you know where to trim. Slide the jackshaft out of the sleeve so you can cutoff the excess jackshaft.



9. Remove retainer clip on the opposite end of the jackshaft.



10. Trim the jackshaft.



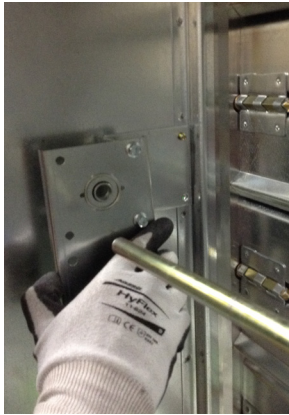


## Instructions to Change From External Right to Internal Left....

11. Loosen the bolts on the left side of the sleeve that holds the jackshaft bracket. Remove the bracket.



12. Assemble the jackshaft bracket (Item 14) and the adapter for internal mount (Item 13). Mount actuator bolt to the mounting bracket (Item 1). Assemble jackshaft bracket, adapter, and the mounting bracket together.



13. Mount the actuator to the actuator bracket assembly.



14. Slide the jackshaft through the mounting bracket assembly until it touches the sleeve. Center crankarm assembly. Tighten the bolt to the jackshaft.



15. Drill holes in RRL (OCI and TOR) bracket (Item 4) and mount to the frame.



16. Re-assemble the RRL (or RRL/OCI, TOR) assembly. Mark the holes on the frame where you are going to mount the bracket. Drill and attach the bracket.

Note: Make sure the conduit is long enough before drilling.



17. Attach the conduit, using the bracket, to the sleeve so it doesn't interfere with the blades.



If you have an OCI, RRL/OCI, or TOR see [www.greenheck.com](http://www.greenheck.com) on how to mount the blade indicator.

## Instructions to Change From External Left to Internal Left

1. Disconnect the power source to the actuator and temperature device (RRL, RRL/OCI, or TOR). Remove the cover off the temperature device.



2. Disconnect the conduit from the sleeve.



3. Loosen set screws on the actuator.



4. Take junction box with RRL (or RRL/OCI, TOR) and rubber gasket off of the sleeve.



5. Loosen the bolt that holds the actuator to the bracket. Set aside the actuator and RRL (or RRL/OCI, TOR) assembly.



6. Take the actuator and standoff brackets off the sleeve.



7. Loosen crankarm screw.



8. Mark the jackshaft so you know where to trim. Slide the jackshaft out of the sleeve so you can cutoff the excess jackshaft.



9. Loosen the bolts on the right side that holds the jackshaft bracket. Remove the jackshaft bracket on the left side. Loosen the bolts on the right side that holds the jackshaft bracket.



10. Trim the jackshaft.





## Instructions to Change From External Left to Internal Left

11. Assemble the jackshaft bracket (Item 14) and the adapter for internal mount (Item 13). Mount actuator bolt to the mounting bracket (Item 1). Mount the actuator assembly to the frame.



12. Install the jackshaft bracket back on the right side. Center crankarm assembly. Tighten the bolt to the jackshaft.



13. Drill holes in RRL (OCI and TOR) bracket (Item 4). Mount to the frame.



14. Re-assemble the RRL (or RRL/OCI, TOR) assembly. Mark the holes on the frame where you are going to mount the bracket. Drill and attach the bracket.

Note: Make sure the conduit is long enough before drilling.



15. Attach the conduit, using the bracket, to the sleeve so it doesn't interfere with the blades.



If you have an OCI, RRL/OCI, or TOR see [www.greenheck.com](http://www.greenheck.com) on how to mount the blade indicator.

## Our Commitment

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*

Product warranties can be found online at [Greenheck.com](http://Greenheck.com), either on the specific product page or in the literature section of the website at [Greenheck.com/Resources/Library/Literature](http://Greenheck.com/Resources/Library/Literature).

