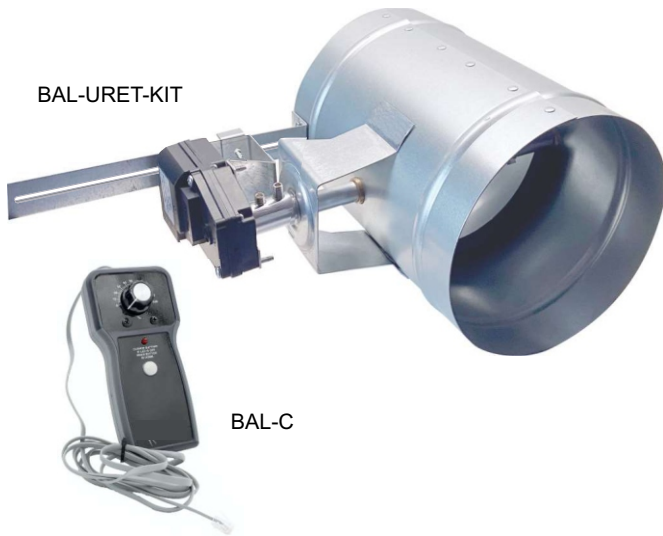




Motorized Balancing Damper Retrofit Kit

Installation Instructions

BAL-URET-KIT



INTRODUCTION:

The BAL-URET-KIT is a retrofit kit designed to convert a manual balancing damper into a fully adjustable, electronic balancing damper that can be remotely operated using the BAL-C, hand-held positioning controller. The damper actuator is accessed through a RJ11 connector cable terminating at an optional wall box, round ceiling plate or diffuser connector.

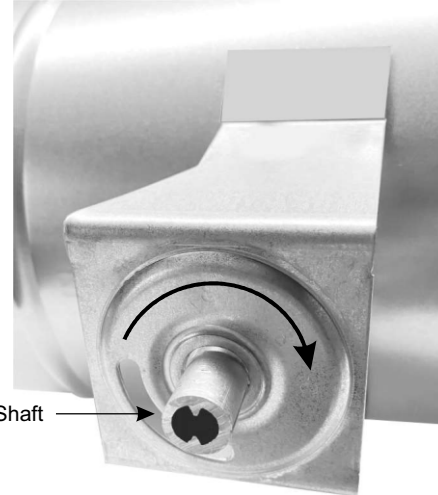
The retro kit is comprised of only three parts making it easy to install on most manual balancing dampers. The kit includes an actuator coupling, anti-rotation bracket and a 12 volt DC actuator with mounting bracket. The actuator coupling is designed to fit a 1/2" round, 3/8" round or 3/8" square damper shaft.

The anti-rotation bracket allows the actuator to be mounted above the balancing damper stand-off and provides a maximum mounting height of 8" above the damper shell.

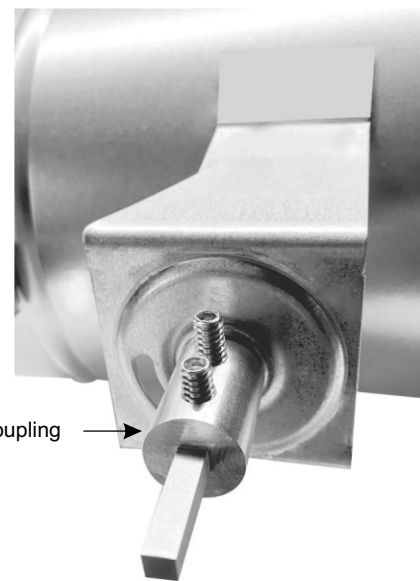
INSTALLATION STEPS:

1. Remove or disable the balancing damper locking mechanism so that the shaft attached to the blade rotates freely without any binding.

Note: The blade rotation must be clockwise to close and counter-clock wise to open.



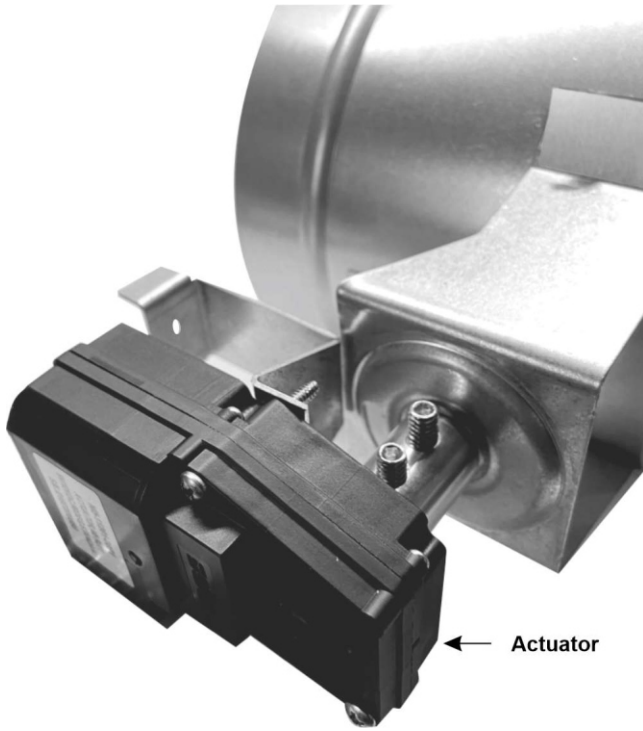
2. Rotate the shaft clockwise until the blade is in the full closed position.



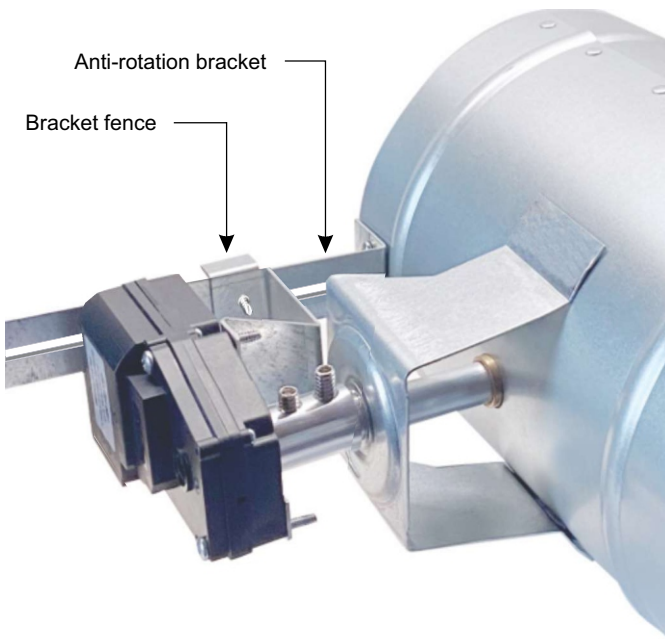
3. Attach the actuator coupling to the shaft and tighten using a 3/32 hex key.

4. Once the coupling is secure, make sure the damper is in the closed position (clockwise) before proceeding to mount the actuator.

Note: The actuator comes from the factory in the full close position but it is highly recommended that it be tested using the BAL-C hand-held remote control positioner before mounting. See Verification Procedure in the instructions.



5. Slide the actuator onto the square shaft of the coupling as illustrated.



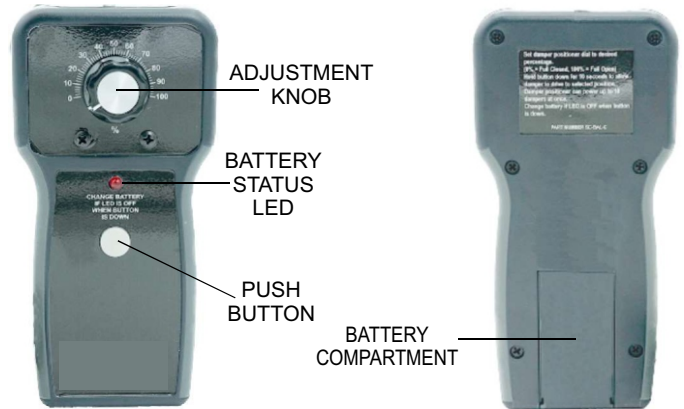
6. Take the Anti-rotation bracket and butt it against the bracket fence mounted to the actuator.

7. The bracket has two pre-drilled mounting holes. Mark the mounting hole locations and use the self-tapping screws provided in the kit to attach the bracket to the side of the damper shell.

8. The anti-rotation bracket is slotted and the bracket fence has a pre-drilled hole. Once the fence and bracket are aligned, use the self-tapping screw supplied in the kit to secure the fence to the bracket.

VERIFICATION PROCEDURE:

After the actuator is installed and wiring is completed, operation of the damper must be verified using the BAL-C hand-held remote control positioner.



- A. Connect a 9 volt battery to the controller.
- B. Plug the RJ11 cable into the associated Rj11 connector for the damper being tested.
- C. Set the adjustment knob to 100% and hold the push button down for 10 seconds. Damper should drive full open.
- D. Set the adjustment knob to 50% and hold the push button down for 10 seconds. Damper should drive to the half way mark.
- E. Set the adjustment knob to 0% and hold the push button down for 10 seconds. Damper should drive to the full closed position.
- F. Set the adjustment knob to 100% and hold the push button down for 10 seconds until damper is in the full open position.
- G. Change battery if LED is OFF when button is pushed.



www.iohvaccontrols.com
866-225-5032