

Series 39 Rotary Limit Switch Kit (Male Output Shaft)

Installation, Operation and Maintenance Instructions

INSTALLATION

Included in the Rotary Limit Switch Kit (RLK) is a Rebuild/Accessory Addition label which is to be marked and applied to actuator after RLK has been installed.

The top of the actuator is determined by the nameplate being read "right-side-up." Actuator sizes 10, 15 and 20 use a double-flatted output shaft (the top flats being oriented 90 degrees to the bottom flats), while sizes 25 through 50 use a square (cross-sectional) output shaft. (See figures A and B.)

NOTE: For series "39" actuators ONLY: The 2539-5039 cannot be cross-line mounted.

The normal method of mounting is to have the actuator in-line with the pipe line and the valve and actuator in the "FAIL-CLOSED" position.

For "FAIL-CLOSED" cross-line operation (10–20 sizes), invert actuator and cross-line mount actuator to pipe line.

For "FAIL-OPEN" in-line operation (10–20 sizes), cut pip off top bearing of actuator if bracket does not allow for attaching actuator (Rev. 1 actuators only). Place valve in open position. Invert actuator and mount in-line with pipe line. NOTE: If in-line coupling is used, actuator does not need to be inverted.

For "FAIL-OPEN" cross-line operation (10–20 sizes), cut pip off of bottom bearing if required (as noted above). Place valve in open position, mount actuator cross-line to pipe line.

MOUNTING THE SWITCH

1. Remove the position indicator (if any) from actuator shaft.
2. Actuator should be in the "closed" position.
3. Position mounting bracket (1) onto actuator. Firmly secure with four (4) screws (2) and lockwashers (3) supplied with the mounting kit.

Figure A

Sizes 10 through 20

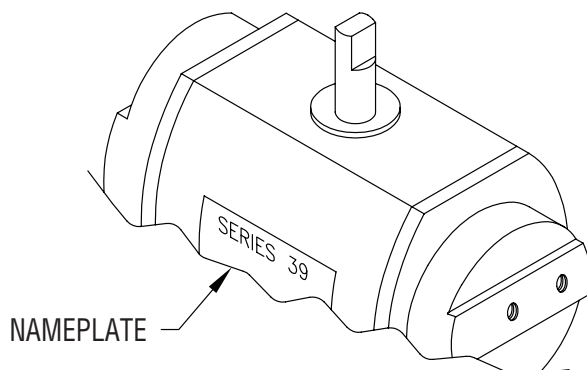
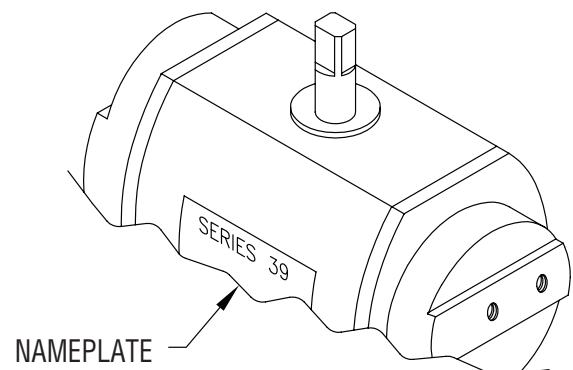


Figure B

Sizes 25 through 50



4. Place coupling (4) over shaft of actuator and align it with the shaft. Install and slightly tighten the lower set screw (8) provided.
5. Place switch (5) and four (4) rubber washers (9) onto mounting bracket. Align flat of the switch input shaft with upper set screw hole in the coupling and slide switch shaft into the coupling (4). Install and slightly tighten the set screw (8) provided.
6. Secure limit switch with four (4) 3/8"-24 cap screws (6) and lockwashers (7), and slightly tighten cap screws (6) at this time.
7. Firmly tighten the two (2) coupling set screws (8).
8. Manually cycle actuator before wiring switch, for proper alignment.
9. After manually cycling actuator, firmly tighten (but do not overtighten) the four (4) cap screws (6). Also, ensure that the two (2) coupling set screws (8) are tight.

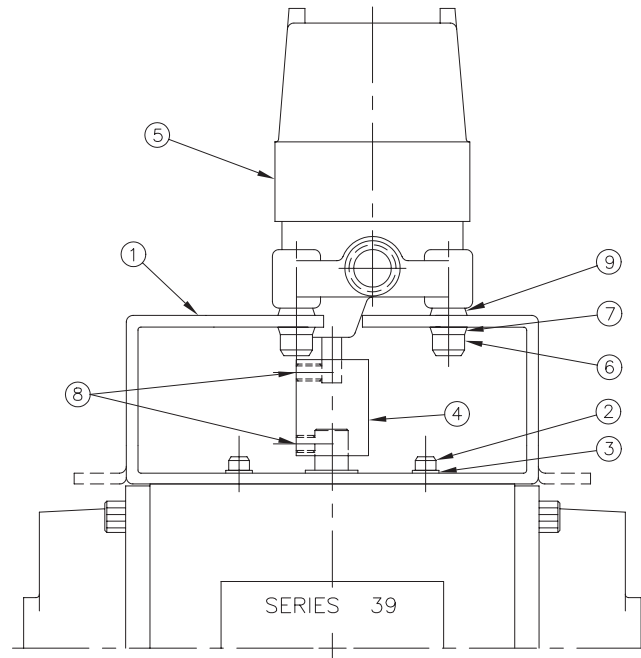
NOTE: When actuator is inverted 180° and mounted on valve, the switch is installed in the same manner as described above.

SWITCH ADJUSTMENTS

Detailed switch adjustment procedures are described on an Instruction Sheet provided with each switch. The actuator should be placed in the position in which switch indication is desired (Open/Closed) and then these instructions should be followed.

WIRING

Wiring should be installed in accordance with prevailing electrical codes.



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