

Installation Instructions

Original Instructions



Allen-Bradley

by ROCKWELL AUTOMATION

Neutral Position Limit Switch

Bulletin Number 802T

The contact block and operating head for the neutral position limit switch are not generally available as field replacement parts. These parts are not precalibrated for field interchangeability. Do not conduct a field replacement of a contact block or operating head in a neutral position switch unless you have the personnel and equipment to perform the following calibration procedure.

Contact Block Replacement

1. Remove the cover from the front of the switch enclosure.



SHOCK HAZARD: Verify that all electrical power to the switch is disconnected.

2. Remove the screw and crescent-shaped retention bracket that holds the contact block into the enclosure. This retaining bracket is on the conduit end of the enclosure.
3. Lift out the contact block.
4. Verify that the insulator in the bottom of the enclosure stays in place and that the U-shaped actuator slide stays attached to the operating head plunger. See [Figure 1](#).
5. Place the replacement contact block into the enclosure. Verify that the actuator slide engages the opening in the back of the contact block.
6. Secure the contact block in place with the retaining bracket and screw. Verify that the retaining bracket is placed with the deflected ends inward.
7. After you have replaced the contact block, measure the angular reset overtravels of the operating shaft to verify that they are within 0.5° of one another. The reset overtravel angles, angles A and B in [Figure 1](#) must not be less than 3° . You must provide a test setup for measuring these angles. This setup must have the following (or equivalent) features:
 - a. The switch is secured to a surface so it cannot move.
 - b. An indicator or pointer to aid in angle measurement. (A catalog number 802T-W3 lever is suggested.)
 - c. The angles are measured with a protractor.
8. If the reset overtravel angles require adjustment, you must follow the following procedure:
 - a. Remove the contact block following [step 2](#) and [step 3](#).
 - b. The adjusting nut is the 6.35 mm (0.25 in.) hexagon-shaped piece that extends from the head into the switch enclosure. The groove at the end of the adjusting nut retains the actuator slide.
 - c. To make the adjusting nut more accessible, rotate the operating shaft of the head in a clockwise direction.
 - d. If necessary, remove the actuator slide to get sufficient access to the adjusting nut. To remove it, rotate the actuator slide 90° and slip it out of the groove in the adjusting nut.
 - e. Actual adjustment of the reset overtravel angles is accomplished by turning the adjusting nut about $1/4$ turn. If angle A is smaller, turn adjustment nut clockwise. If angle B is smaller, turn adjustment nut counter clockwise.
 - f. To replace the actuator slide, slip it into the groove on the adjustment nut from the side and rotate it to the bottom of the casting.
 - g. Replace the contact block by following [step 4](#)..[step 7](#).

9. Recheck the angles per [step 7](#). If the reset overtravel angles are still not within the required limits, repeat [step 8](#) until they are obtained.
10. Replace enclosure cover and tighten screws to $0.56\text{ N}\cdot\text{m}$ (5 in-lb).

Operating Head Replacement

IMPORTANT You must remove the contact block from the switch enclosure before you can replace the operating head.

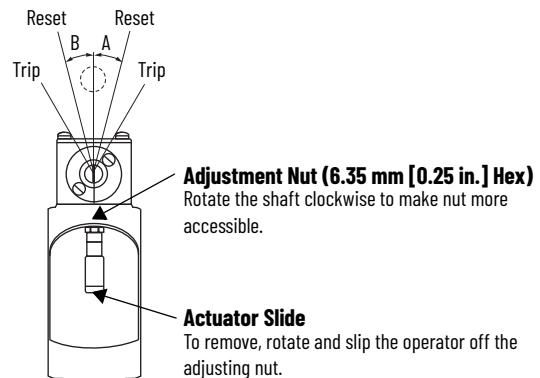
1. Remove the cover from the front of the switch enclosure.



SHOCK HAZARD: Verify that all electrical power to the switch is disconnected.

2. Remove the screw and crescent-shaped retension bracket that holds the contact block into the enclosure. This retaining bracket is on the conduit end of the enclosure.
3. Lift out the contact block.
4. Remove the four slotted-head screws that secure the operating head to the switch enclosure.
5. Lift the operating head from the switch enclosure. The U-shaped actuator slide remains attached to the operating head adjustment nut.
6. Slip the actuator slide out of the groove in the adjusting nut.
7. Install the actuator slide on the replacement operating head by slipping the slide into the groove on the replacement adjustment nut.
8. Position the replacement operating head over the switch enclosure. Slip the actuator slide through the opening in the switch enclosure and align the diaphragm seal with the seat in the switch enclosure.
9. Before you replace the four operating head mounting screws, confirm that the insulator in the bottom of the switch enclosure is in place. Make sure to position the actuator slide so that the insulated end engages the opening in the back for the contact block.
10. Replace the four head mounting screws and tighten to a torque of $0.68\text{ N}\cdot\text{m}$ (6 in-lb).
11. Follow [step 5](#)..[step 10](#) in [Contact Block Replacement](#).

Figure 1 - Operating Head



Rockwell Automation Support

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Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
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Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

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