

## 43191680-102 Auxiliary Switch

### INSTALLATION INSTRUCTIONS

### APPLICATION

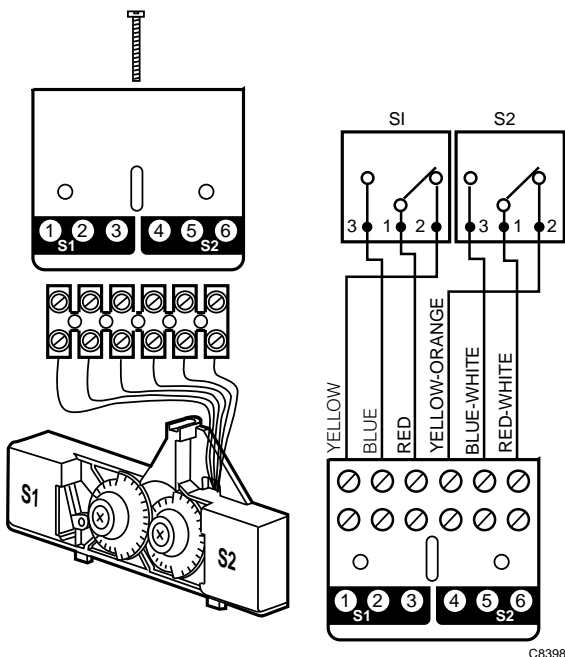
The 43191680-102 Dual Auxiliary Switch provides two independent, spdt switching functions. Switching points are adjustable over the full length of the actuator stroke; for example, the switch can be used to switch pumps at any point or to provide remote indication of any specific stroke position. These switches are used with valve actuators as shown in Table 1. The switches are furnished factory wired to the terminal block. Fig. 1 illustrates the parts furnished with this switch and the wiring connections.

#### IMPORTANT

*These switches are rated at 24 Vac maximum.*

**Table 1. Applicable Actuators for 43191680-102 Dual Auxiliary Switches.**

Actuator	Stroke
ML6421A	3/4 in.
ML6421B	1-1/2 in.
ML7421A	3/4 in.
ML7421B	1-1/2 in.



C8398

**Fig. 1. Auxiliary Switch Parts and Wiring.**

### INSTALLATION

#### When Installing this Product...

- ❶ Read these instructions carefully. Failure to follow them could result in the equipment not operating properly.
- ❷ Check the part numbers in the preceding section to be sure that the product is suitable for your application.
- ❸ The installer must be a trained, experienced service technician.
- ❹ After completing installation, use these instructions to check product operation.



#### CAUTION

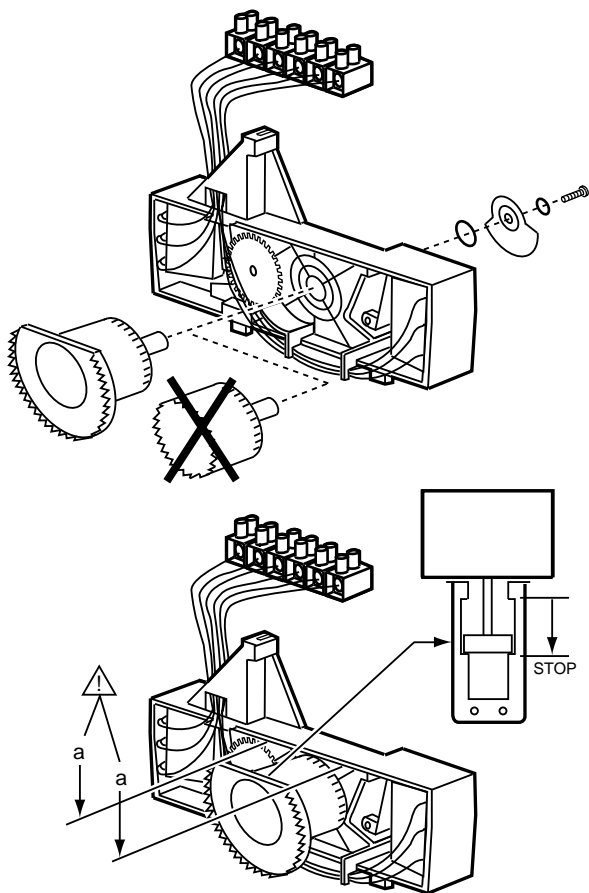
Disconnect the power supply to the auxiliary potentiometer and actuator before beginning installation to prevent electrical shock or equipment damage.

#### Mounting, Connecting, and Adjusting

- ❶ Remove actuator cover.
- ❷ For M6421A/M7421A Actuators with a 3/4 in. stroke, skip this step and proceed to Step ❸.

For M6421B/M7421B Actuators with a 1-1/2 in. stroke, replace the gear on the switch assembly with the larger gear furnished in the bag assembly. See Fig. 2. Be sure that the gear is positioned as shown by the points marked as a-a and that the actuator shaft is fully extended to the lower stop. Then proceed to Step ❸.

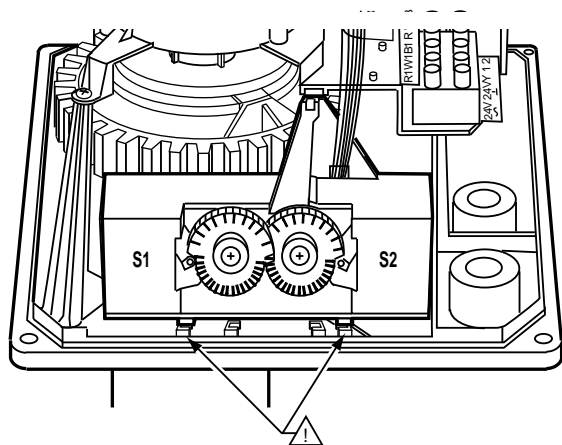




C8399

**Fig. 2. Replacing gear on the switch assembly for M6421B/M7421B applications only.**

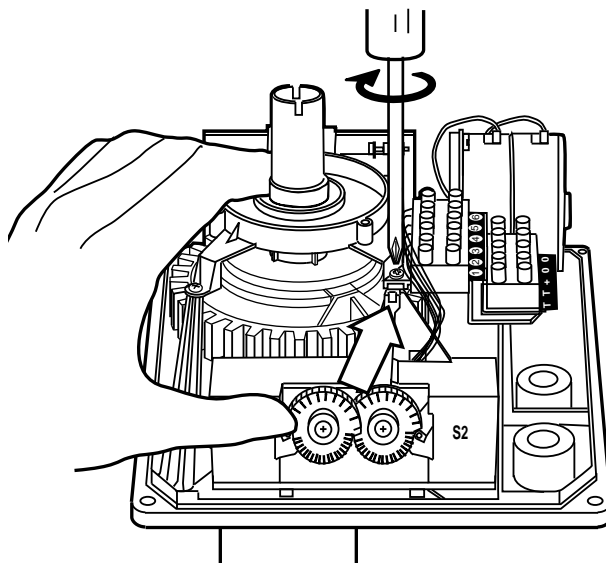
- 3 Install the auxiliary switch assembly. Make sure the two tabs on the bottom of the switch assembly slip snugly into the slots provided in the actuator base. See Fig. 3 .



M15000

**Fig. 3. Installing auxiliary switch assembly.**

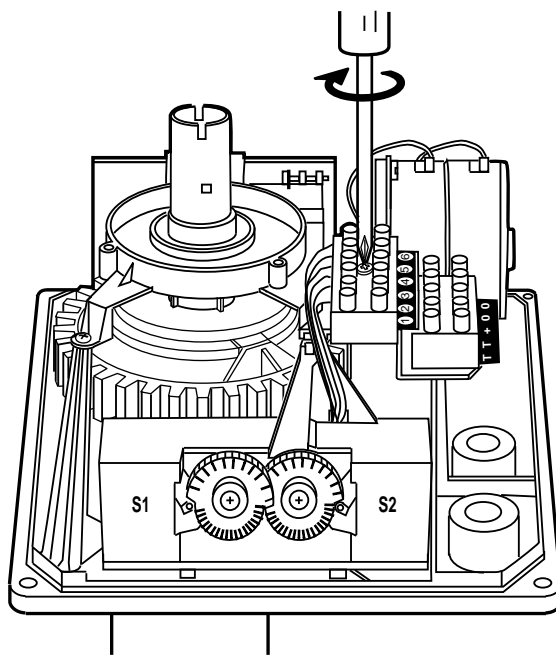
- 4 Secure auxiliary switch assembly with Phillips head screw. See Fig. 3.



M15002

**Fig. 4. Securing auxiliary switch assembly.**

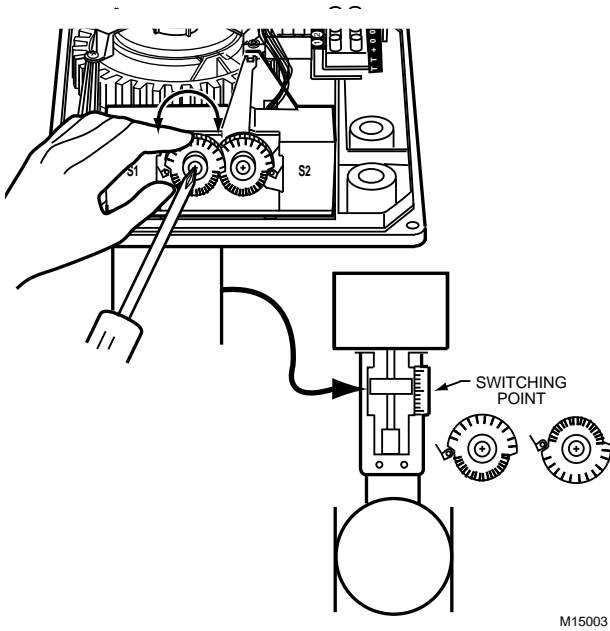
- 5 Secure terminal block and label with Phillips head screws. See Fig. 5.



M15001

**Fig. 5. Securing terminal block and label.**

- 6 Adjust switching point for each switch. See Fig. 6.
  - a. Mount actuator on valve if not already mounted. Accurate calibration requires the actuator mounted on the valve.
  - b. Using manual operation knob on actuator, adjust the actuator shaft to the required switching point for Switch S1.
  - c. Loosen the Phillips head set screw on the cam for Switch S1, set the cam to the required position, and tighten the set screw.
  - d. Repeat the Steps 6a and 6b for Switch S2.



M15003

**Fig. 6. Adjusting switching points.**

## Wiring

Route field wiring in through the conduit opening in the bottom of the actuator, connect to the switch assembly terminal block according to the job drawings, and replace the actuator cover. See Fig. 1 for terminal identification



## CAUTION

Disconnect the power supply to the auxiliary switches and actuator before wiring to prevent electrical shock or equipment damage.

All wiring must comply with local codes, regulations, and ordinances.

## CHECKOUT

Drive actuator shaft fully up and fully down and check the function of the auxiliary switches in the control system.

**Honeywell**

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