These installation instructions are intended for use with the Electrical Actuator Placement Indicator Switch Assembly Kit (Part No. 441871).

Personnel responsible for the installation, recharge, or maintenance must read and fully understand these instructions prior to attempting to install the Placement Indicator Switch.

CAUTION

The Placement Indicator Switch will not function correctly if not properly installed. Read and follow all instructions carefully. Ensure the placement indicator switch is properly communicating with the fire control panel before leaving the location.

DESCRIPTION

The placement indicator switch (see Figure 1) is a monitoring device to indicate proper placement of the system electrical actuator. The switch mounts directly to the actuator, and is active when the sensor switch is depressed, allowing a small electric current to pass through the end-of-line (EOL) resistor*. Passing current through the EOL resistor enables the fire control panel to indicate the actuator is in the proper position for system operation.

If the electrical actuator is not in the proper position, the placement indicator switch is closed (not active). The current does not pass through the EOL resistor, and therefore the fire control panel indicates the actuator is not in the proper position.

* Refer to fire control panel for correct EOL resistor value.

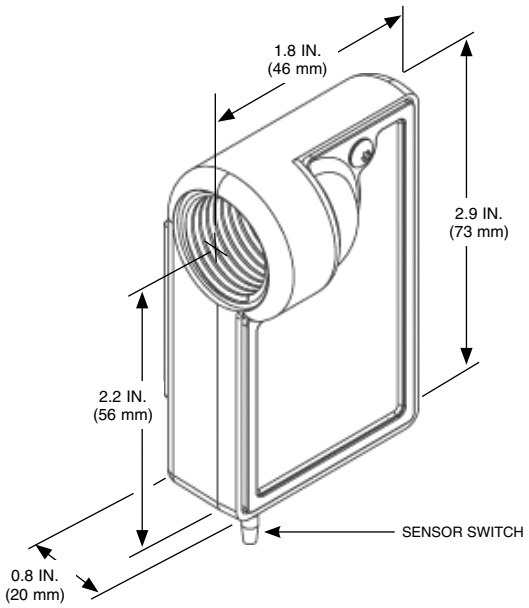

FIGURE 1
PLACEMENT INDICATOR SWITCH
009586

SPECIFICATIONS

Housing:	Molded Plastic (Nylon)
Switch Assembly:	
Current Rating:	0.4 A
Rated Voltage:	24 VDC
Fasteners:	Stainless Steel

INSTALLATION

Note: For 3 in. valve size, begin at Step 3.

1. **For 1 in. and 2 in. valves only**, place the bump plate on the top of the 1 in. container valve to ensure proper engagement. See Figure 2.

⚠ WARNING

Container must be properly secured in approved brackets before work begins. Failure to properly secure container could cause serious personal injury or death.

2. **For 1 in. and 2 in. valves only**, secure the bump plate to the valve using the M8 fastener provided with the kit. See Figure 2.

   Note: The attachment point is the same as the chain lanyard for the cap.

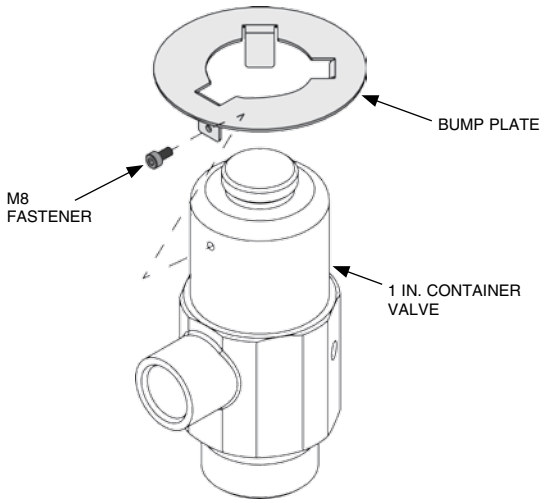

FIGURE 2
1 IN. VALVE APPLICATION ONLY
009589

INSTALLATION (Continued)

3. Secure the mounting bracket to the placement indicator switch housing using the nut provided. See Figure 3. The nut secures to the integral bolt on the placement indicator switch. See Figure 8. Leave the nut slightly loose for adjustment later.

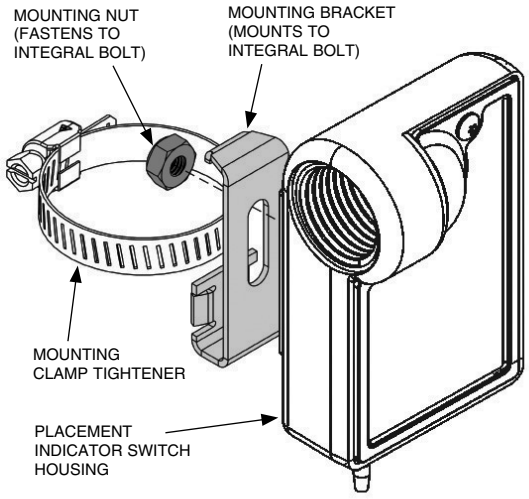

FIGURE 3
PLACEMENT INDICATOR SWITCH MOUNTING BRACKET
009588

4. Install the placement indicator switch with mounting bracket to the electrical actuator.
   a. Fit the mounting clamp around the inside, lower leg of the bracket as shown in Figure 4.
   b. Slide the clamp onto the electrical actuator and position just above the knurled swivel coupling. See Figure 4.
   c. Tighten the mounting clamp to the actuator.

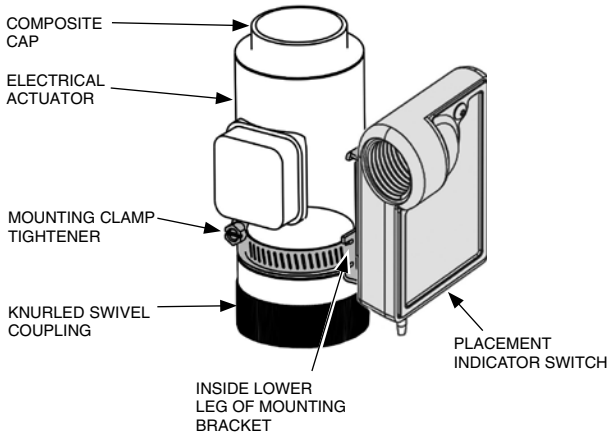

FIGURE 4
PLACEMENT INDICATOR SWITCH INSTALLATION
009651

5. Install the electrical actuator.

⚠ CAUTION

Before installing electrical actuator to the top of the container valve, make certain piston in bottom of actuator is free to move up and down. If piston is in the down position, DO NOT install.

   a. Check the actuator pin to ensure it is in the UP (armed) position; this position will be approximately 3/16 in. (5 mm) above the bottom of the knurled swivel coupling.

      Note: The composite cap attached to the actuator is used as the reset tool. To reset the actuator, put the cap in place and turn the knurled swivel coupling until the cap threads are completely engaged. A small “click” will be heard when the pin is reset.

⚠ CAUTION

Make certain all electric power from the panel to the actuator has been disconnected. Failure to disconnect power may cause system to accidentally discharge.

   b. Hand-tighten the actuator to the valve. See Figure 5 for 1 in. and 2 in. valves, and Figure 6 for 3 in. valve.

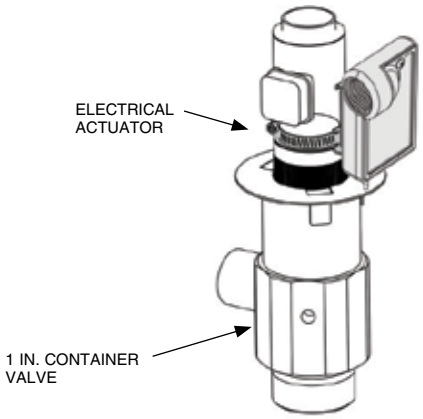

FIGURE 5
SWITCH INSTALLATION FOR 1 IN. VALVE
009596

INSTALLATION (Continued)

Step 5b (Continued)

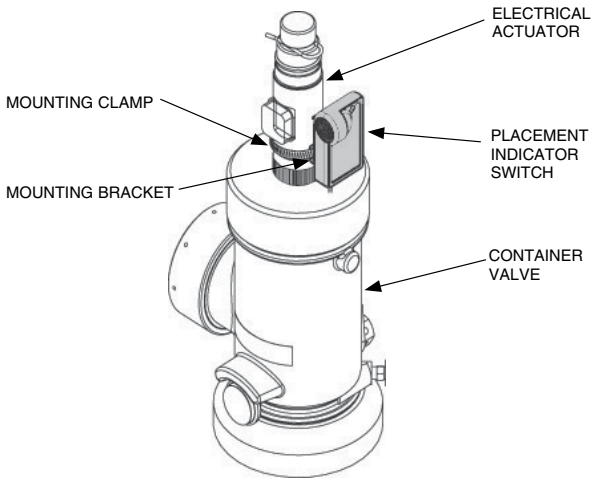

FIGURE 6
SWITCH INSTALLATION FOR 3 IN. VALVE
009587

6. Adjust the vertical position of the placement indicator switch to ensure the sensor switch is fully depressed. See Figure 7, Detail A.

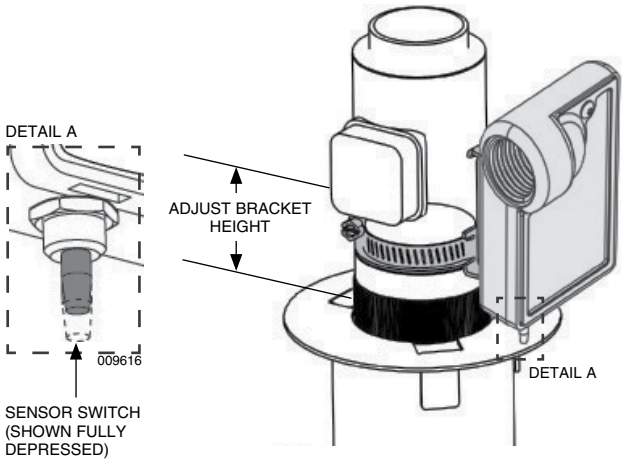

FIGURE 7
PLACEMENT INDICATOR SWITCH INSTALLED
009647

7. Secure the placement indicator switch by snugging the mounting nut tight. See Figure 7.

CAUTION

Do **NOT** over-tighten the mounting nut to the placement indicator switch housing.

8. Locate the cable gland found in the Placement Indicator Switch Installation Kit.
   a. Remove the cover of the placement indicator switch using the appropriate screw driver. See Figure 8.
   Note: Do not remove the connector retainer cover.

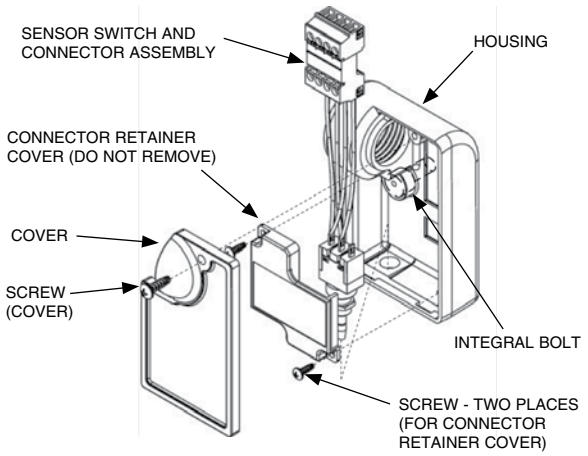

FIGURE 8
INTERNAL COMPONENTS
009592

   b. Run a 16-18 AWG, 2 conductor power-limited cable through the cable gland and continue into the placement indicator switch as shown. See Figure 9.

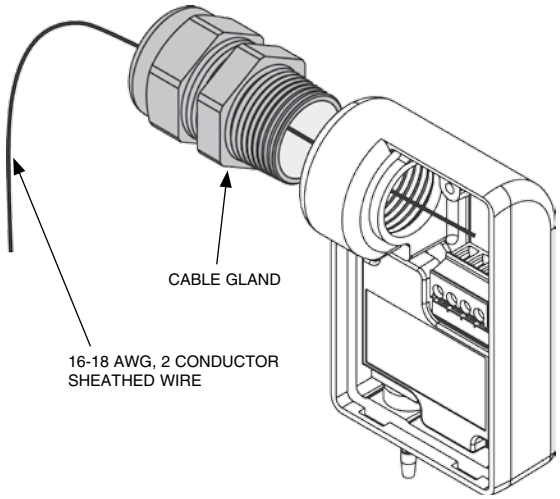

FIGURE 9
INSERT WIRE AND CABLE GLAND
009591

   c. Hand-tighten the cable gland to the placement indicator switch housing. At this time, do not tighten cable gland to wire.

INSTALLATION (Continued)

9. Disconnect the upper switch connector from the lower switch connector by pulling the upper connector apart from the assembly with your fingers. See Figure 10.

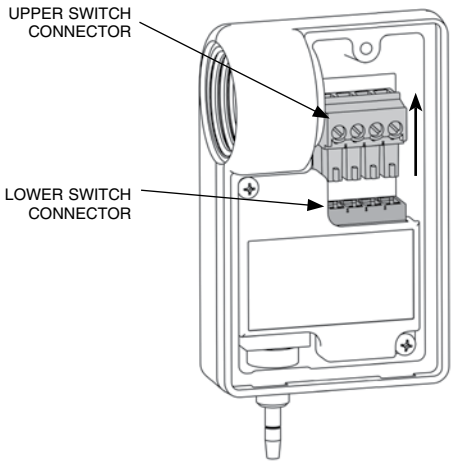

FIGURE 10
SEPARATE UPPER SWITCH CONNECTOR
009615

10. Separate the two conductor wire, strip the wire covering, remove covering from the ends, and install into the upper switch connector per the wiring diagram. Reference your AUTOPULSE fire control panel documentation for correct EOL resistor value and install the correct EOL resistor per the wiring diagram. See Figure 11.

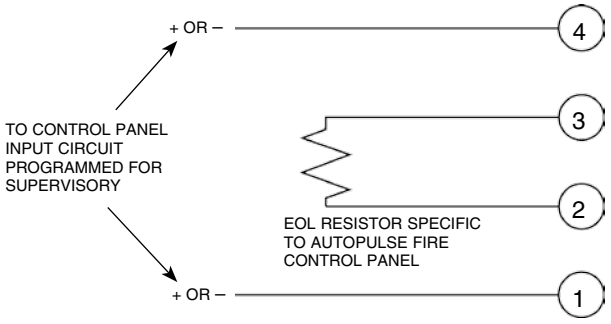

FIGURE 11
EOL RESISTOR ELECTRICAL DIAGRAM
009621

11. Reconnect the upper and lower connectors disconnected in Step 9, ensuring complete insertion.
12. Arrange the wiring within the placement indicator switch housing.
13. Tighten the cable gland to the wire. Tightening the nut to cable gland will compress the cable gland grommet, and bind the grommet to the wire.
14. Re-assemble the cover to the housing using the appropriate screw driver.
15. Once in place, run the other end of the wire to the wall mounted junction box that will be wired through conduit to the fire control panel.
16. Ensure all other electrical connections are complete, and ensure placement indicator switch is indicating proper position at the fire control panel.

Note: The converted metric values in this document are provided for dimensional reference only and do not reflect an actual measurement.