PLACEMENT INDICATOR SWITCH INERGEN® HF ELECTRIC ACTUATOR INSTRUCTION SHEET

(Document Part No. 441874)

2015-JUL-22 REV. 0 PAGE 1

These installation instructions are intended for use with the Electric Actuator Placement Indicator Switch Assembly Kit (Part No. 441870).

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 electric 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 electric 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.

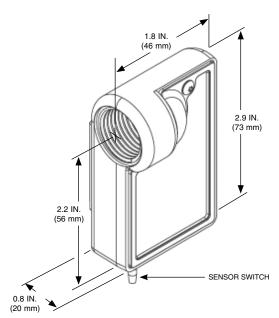


FIGURE 1
PLACEMENT INDICATOR SWITCH

SPECIFICATIONS

Housing: Molded Plastic (Nylon)

Switch Assembly:

Current Rating: 0.4 A
Rated Voltage: 24 VDC
Fasteners: Stainless Steel

INSTALLATION

- 1. Install the placement indicator bump bracket on the container valve.
 - a. Hand-tighten the bracket to the valve by turning the bracket in a clock-wise motion to secure in place.
 See Figure 2.

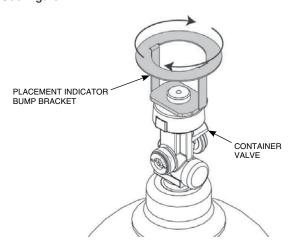


FIGURE 2 PLACEMENT INDICATOR BUMP BRACKET INSTALLATION

Install the booster actuator provided for the container valve.

A CAUTION

Make certain actuator is reset before installing on container valve. Failure to do so will cause system actuation.

a. Make sure the booster actuator is in the SET (armed) position.

This can be confirmed by visually checking the position of the top and bottom pins. When in the SET position the top pin will be approximately flush with the top of the actuator. The bottom pin will be flush with the inside surface of the actuator.

If the actuator requires setting, use the arming tool (Part No. 429847) and follow the instructions listed in "Resetting the Booster Actuator" in the INERGEN® 150 Bar or 200 Bar System Manuals.



PLACEMENT INDICATOR SWITCH INERGEN HF ELECTRIC ACTUATOR INSTRUCTION SHEET

(Document Part No. 441874)
PAGE 2 REV. 0 2015-JUL-22

INSTALLATION (Continued)

Step 2 (Continued)

 Hand-tighten the booster actuator to the container valve or the selector valve. See Figure 3.

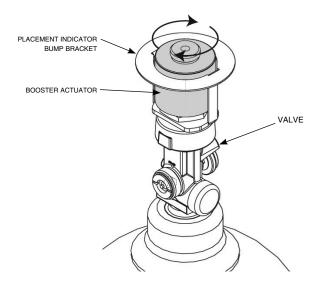


FIGURE 3 BOOSTER ACTUATOR INSTALLATION

3. Install the HF Electric Actuator. See Figure 4.

⚠ 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.

a. Make certain the HF actuator is in the SET (armed) position; the top pin will be flush with the top of the actuator. If the actuator requires setting, use the arming tool (Part No. 75433) and follow the instructions listed in "Resetting the HF actuator" in the INERGEN 150 Bar or 200 Bar System Manuals.

⚠ CAUTION

Make certain actuator is reset before installing on booster actuator. Failure to do so will cause system actuation.

b. Hand-tighten the HF electric actuator to the booster actuator. See Figure 4.

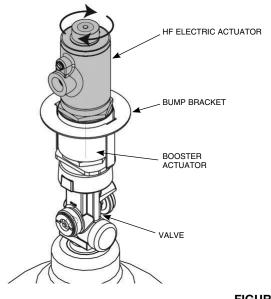


FIGURE 4 HF ACTUATOR INSTALLATION

 Secure the mounting bracket to the placement indicator switch housing using the nut provided. See Figure 5. The nut secures to the integral bolt on the placement indicator switch (see Figure 8). Leave the nut slightly loose for adjustment later.

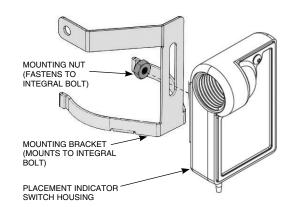


FIGURE 5
PLACEMENT INDICATOR SWITCH
MOUNTING BRACKET

00963

PLACEMENT INDICATOR SWITCH INERGEN HF ELECTRIC ACTUATOR INSTRUCTION SHEET

(Document Part No. 441874) 2015-JUL-22 REV. 0 PAGE 3

INSTALLATION (Continued)

- Install the placement indicator switch with mounting bracket to the HF Actuator.
 - a. Remove the grounding screw from the HF actuator.
 See Figure 6.

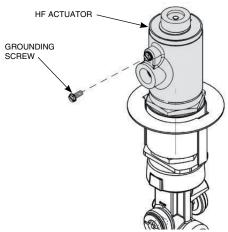


FIGURE 6
GROUNDING SCREW REMOVAL

C

- b. Slide the mounting bracket into position.
- Reinstall the grounding screw to the HF actuator, securing the mounting bracket in place. See Figure 7.
- Adjust the vertical position of the placement indicator switch to ensure the sensor switch is fully depressed. See DETAIL A of Figure 7.
- 7. Secure the placement indicator switch vertical position by snugging the mounting nut tight. See Figure 7.

CAUTION

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

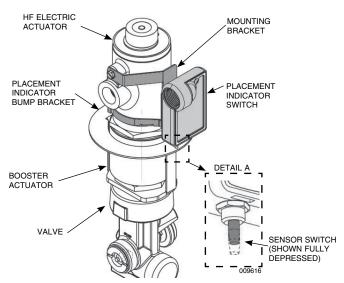


FIGURE 7
PLACEMENT INDICATOR SWITCH INSTALLED

- 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.

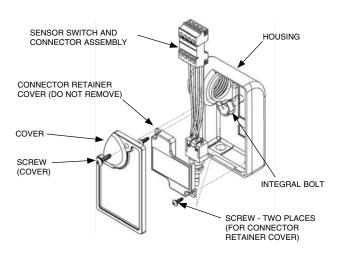


FIGURE 8 PLACEMENT INDICATOR SWITCH INTERNAL COMPONENTS

009592

 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.

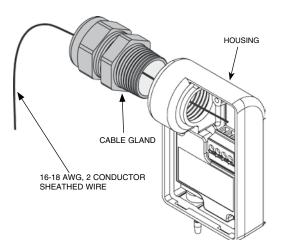


FIGURE 9
INSERT WIRE AND CABLE GLAND

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

PLACEMENT INDICATOR SWITCH INERGEN HF ELECTRIC ACTUATOR INSTRUCTION SHEET

(Document Part No. 441874)
PAGE 4 REV. 0 2015-JUL-22

INSTALLATION (Continued)

 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.

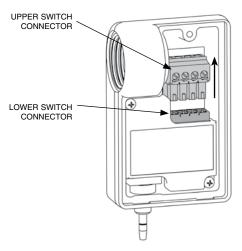


FIGURE 10 SWITCH CONNECTOR ASSEMBLY

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.

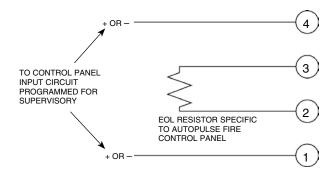


FIGURE 11
EOL RESISTOR ELECTRICAL DIAGRAM

- Reconnect the upper and lower connectors that were disconnected in Step 9 ensuring complete insertion.
- 12. Arrange the wiring within the placement indicator 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.
- 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.
- Ensure all other electrical connections are complete, and ensure the 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.

INERGEN, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.