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## SUGGESTED INSTALLATION GUIDELINES Indicator Light Unit IL-LC2 and/or Transformer TR-10-SD

The power-on indicator light unit and/or power-on transformer was designed and manufactured for ease of installation. However, the safety of the personnel during the installation is the major factor. Therefore, please adhere to all company safety policies, which pre-empt these suggested guidelines. Two Power-On Kits are described below: NOTE: (WIRING INSTALLATION SKETCH ON REVERSE SIDE)

- 1. **IL-LCPK-1** kit includes: One assembled light unit complete with one *RS1018-SF* lamp bulb assembly and clear lens assembly with threaded housing, one 2 "O-ring, one 2 3/8" O-ring, one 2 3/8" stainless steel mounting nut, and one 2.5" plastic grey flange nut, and separately, one 4"x4" square nylon washer, two (2) terminal butt connectors, one power-on transformer (50 VA capacity), one circuit sticker, and this instruction sheet with wiring sketch on the reverse side.
- 2. **IL-LCPK-2** kit includes *all parts* in kit **IL-LCPK-1**, *less the power-on transformer*. Note: if a lighting transformer is already available and has the capacity, it should be used.

## **Installing the Power-On Light:**

- 1) Prepare mounting hole in instrument housing, as required, with 3" diameter carbide cutter (not provided GEMS Part Number IL-CHC2), remove burrs.
- 2) NOTE (Lining Present): Remove lining partially from instrument housing, as required, with 3" hole saw or mount 4"x 4" square Nylon washer over the lining.
- 3) NOTE: The IL-LC2 can be mounted through material up to ¾" thick. The location for mounting the light unit should be clear of all existing wires, cabling, terminal boards, and/or equipment that would interfere with the mounting nut and/or lamp bulb replacement.
- 4) Place the lens assembly (less RS-1018-SF lamp assembly and plastic flange nut) through the 2 3/8" hole with the 2 3/8" O-ring over the lens threaded housing resting against the 2 3/8" mounting nut and place the 4"x4" square washer on the lens threaded housing.
- 5) Secure the 2 3/8" mounting nut on the lens threaded housing. NOTE: assure six (6) bent tightening lugs on the 2 3/8" mounting nut are pointed away from the washer surface.
- 6) Tighten mounting nut firmly to allow O-ring to make a water tight seal and the lens assembly cannot be turned from the outside.
- 7) Install the RS1018-SF lamp, socket assembly and plastic flange pointing the longest part of the lamp filament to the area where the brightest light is required.
- 8) Splice the required length of two (2) 16AWG customer supplied wires to the pigtails of the lamp assembly with the butt terminal connectors (black wire connected to the single solder contact on the bottom of the lamp assembly and the white wire connected to the socket base sleeve).
- 9) Attach wires to the transformer per wiring diagram. One wire should be placed on the common terminal used for the lighting energy, and the other wire on the terminal that will apply between 7.5 and 9.0 volts at the lamp bulb.

## **Installing the Power-On Transformer:**

If no lighting transformer is available or the existing transformer does not have the capacity for the additional 18 VA capacity required for the 10 volt, 18 watt lamp bulb, then install the power-on transformer. The transformer has four Phillips head screws for mounting, and should be mounted in a safe place. **NOTE before wiring:** The power-on transformer has two primary windings, and can be configured for either 120 or 240-volt service feeds (see wiring diagram). The transformer is shipped for the 240 service feeds.

To change to the 120 volt services feed, refer to the label on the transformer or the sketch on the reverse side. Before running any wires to the transformer, make sure the terminal strap jumpers on the transformer corresponds with the feed voltage, **and that the feed voltage is turned OFF.** After the wiring is complete, turn the feed power on. The voltage at the lamp bulb should be between 7.5 and 9.0 volts. The power-on transformer has a fixed output of 8.8 volts with a reference voltage to 120/240 on the primary. The output will vary in proportion to the input. This 7.5 to 9.0-voltage range will assure maximum lamp bulb performance with minimal failures, providing lamp bulbs are changed out at company prescribed change out intervals.

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