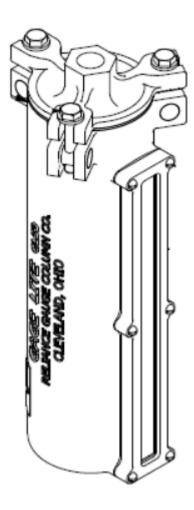
03/24/2020



# GL53 Illuminator Installation Instructions



**Caution**: Before proceeding, follow any and all plant lock out - tag out procedures required. Verify that all power is turned off to the probes. If under pressure, the equipment should be isolated, or the boiler should be shut down *before* proceeding with the installation. Open drain valve to eliminate any trapped pressure. Any trips or alarms connected to the controller should be bypassed. All inspection and installation steps should be performed by a qualified technician and should be executed in accordance with all applicable national and local codes.





## Installation Instructions for Model GL-53 Water Gage Illuminators for Tubular Glass Gages or Prismatic Gages

### 1. General Information

Model GL-53 Water Gage Illuminators are designed to improve the vision of the water level, for plant personnel. If a tubular glass or prismatic type water gage is installed in an area with adequate lighting, a gage illuminator may not be required. However, if the water gage is to be viewed from a distance greater than 25 feet, then a gage illuminator is recommended.

### 2. Installation

Model GL-53 illuminators are designed with a ½" female NPT electrical conduit connection. These illuminators must be installed vertically with the conduit connection located at the bottom. A flexible power cord can be temporarily installed on the unit and used to test the unit. **NOTE:** Use caution when testing as the illuminator will become very hot! This will enable the installer to optimize the illuminator location, with respect to the gage. Then, a permanent power connection can be installed. Normally, the illuminator will be installed parallel to the gage and aimed from the left or right side (approximately 30° from center), to prevent obstructing the operator's view of the water gage.

If the illuminator is to be installed with a prismatic type water gage, one illuminator can be used for up to two sections of size 9 glass or approximately 27 inches of water gage viewing.

This illuminator can be installed outdoors.

#### 3. Maintenance

There is no maintenance required, other than the occasional need to service the lamp. For additional instructions, see form E178-A. As an option to extend lamp life, we suggest an illuminator timer: model TPS-120 (for 120 VAC supply). An illuminator timer provides up to 3 minutes of operation time, by depressing a pushbutton. This results in extended lamp life, reduced power consumption and maintenance. Consult C-R or your local representative for additional details.



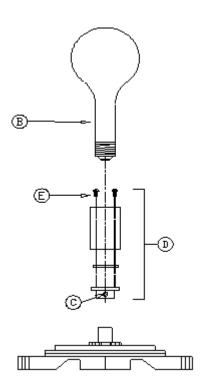


<u>Note:</u> Make sure that the power is turned off to the supply wiring <u>before</u> connecting the illuminator.

### Tools needed:

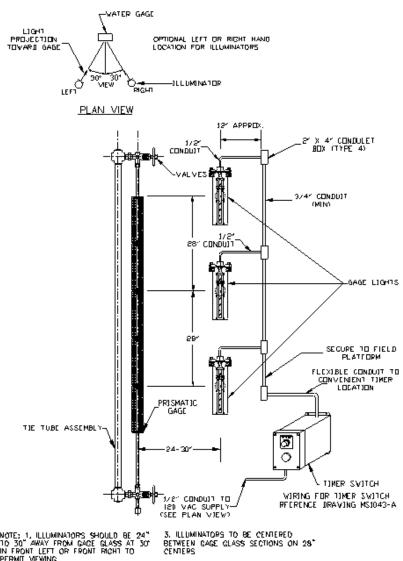
- Slotted Screwdriver
- 1/2" Wrench
- 1. Open the illuminator housing by loosening the three hex head cap screws on the end of the unit that secures the Conduit/Lamp assembly in place.
- 2. Carefully remove the assembly and remove the existing (B) from the illuminator housing and set aside.
- 3. Loosen the screw (C) from the side of the lamp socket/conduit connector that holds the assembly in place on the pipe nipple.
- 4. Take the lamp socket/conduit connector assembly (D) off of the housing end piece and set the housing aside.
- 5. Disassemble the lamp socket/conduit connection assembly by removing the two screws (E) from *inside* of the lamp socket. (Note that there are two small washers on the assembly screws. Do not lose these washers as they are needed for re-assembling the illuminator.)
- 7. Connect the *black* wire to the 'gold' screw terminal on the bottom of the lamp socket.
- 8. Connect the *white* wire to the 'silver' screw terminal on the bottom of the lamp socket.
- 9. Re-assemble the lamp socket/conduit connector assembly using the same two screws with washers inside of the lamp socket. Make sure that the mounting plate is centered on the lamp socket/conduit connector assembly.

- 10. Thread the lamp socket/conduit connector assembly back into the bottom of the pipe nipple and tighten the holding screw.
- 11. Carefully screw the lamp into the socket and re-assemble the bottom assembly back onto the illuminator housing (make sure that the gasket between the bottom assembly and housing is in place). Secure by tightening the three hex head cap screws on the bottom side of the housing.
- 12. Wire the illuminator to the 120 V. power supply.









NOTE: 1, ILLUMINATORS SHOULD BE 24"
10-30" AWAY FROM GACE GLASS AT 30"
IN FROMT LEFT OR FROMT RIGHT TO
PERMIT MEWING
2, WARING FOR CAGE LIGHTS
REFERENCE PAGE 3 OF THIS MANUAL

REPLACEMENT PARTS	
PART NUMBER	DESCRIPTION
GL53-7R	LAMP SOCKET
E32-24	9 WATT LED LAMP – 120 VOLT

Any additional questions should be directed to your local Clark-Reliance Representative, or to the Factory. Phone: (440) 572-1500 or email www.relianceappeng@clark-reliance.com.

