STORAGE and HANDLING

The Reliance DuraStar LED Illuminator meets or exceeds all applicable specifications when shipped from the factory.

All units should be inspected upon receipt to ensure that no damage has been incurred during transit. If there has been, a claim should be filed with the carrier immediately. The unit should be stored in an area protected from the elements and corrosive fumes, in a secure manner where they can neither fall, nor be struck by other objects. Care should be taken to protect the window and the end connections from damage. Avoid placing any objects on the illuminator at any time.

COMPONENTS

There are three main components that make up the DuraStar Illuminator: the light strip with louvers, the power supply, and the cable connecting these two main pieces. The cable may have more than one piece depending on the required distance between the illuminator and the power supply. *Note that an illuminator hood is not required or recommended.*

INSTALLATION

Caution: All lights are tagged with the service conditions for that particular unit. These specifications are located on the Reliance tag on the power supply housing, and are contained in the "Specifications" section of this manual. Do not use or refer to specifications listed on the red label on the power supply housing. They are specifications for generic use. Review the ratings prior to installation and again prior to start-up, to ensure proper operation in the installed environment. Should there be any doubt as to the applicability of a unit for the installed environment, consult the factory before placing the unit into service.

Note: All installation steps should be performed by a qualified technician and should be executed in accordance with all applicable national and local codes.

The light and power supply should be checked to ensure that they contain no foreign matter, and that the end connections are clean, undamaged, and in line with existing conduit.

Step by step instructions:

1) The upper bracket on the illuminator has two holes that fit onto the hood pins that are installed on the top of the gage glass body. There are two different upper brackets: one for the FG400 and FG900 series gages and another for the FG1500 and FG2000 series gages. Verify that the assembly you received fits the existing gage glass. Slip the upper illuminator bracket onto the hood pins. (See Figure 1)

2) Let the lower bracket rest on the gage glass between the cover plate. Adjust the lower bracket by loosening the set screw and align the bracket at the lowest point on the glass between the cover plate opening. Tighten the set screw to secure the lower bracket.

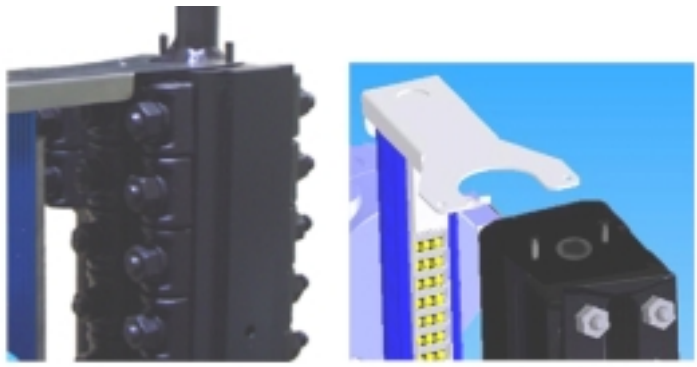


Figure 1

3) Open the cover of the power supply housing. Insert the AC line wires into the housing and connect to the "AC IN" terminal block. A ground screw is located inside of the enclosure if required.
Caution: The DC output is pre-wired. If this connection is removed during installation, reconnect the "AC IN" and "DC OUT" to the proper positions. Failure to do so will result in permanent damage to the power supply.

4) IMPORTANT: The customer must have a "sealing fitting" in the conduit supplying power to the light's power supply within 18" of the power supply.

5) If the cable will not reach the power supply, contact your local Clark-Reliance representative for the optional extension cable.

Caution: Verify that the area is free of flammables.

6) Replace the cover on the power supply housing.

7) Switch "ON" the power supply making sure the illuminator is functioning properly, with all LED's illuminated.

8) If the LED's do not illuminate, remove the cover on the power supply once the power has been turned on. An internal LED will be lit if it is wired correctly. See Figure 2, Detail "B".

9) If the LED in the power supply is not lit, check the power source and the connection before continuing.

Note: Any additional components must be installed prior to the customer's sealing fitting.

FUSE REPLACEMENT

The power supply is fused for AC protection. In the event of a large voltage surge, the fuse may release, causing no output. Replace the fuse with any manufacture 2AG 0.375A 240VAC fuse. (See Figure 2 – Detail A)

OPERATION

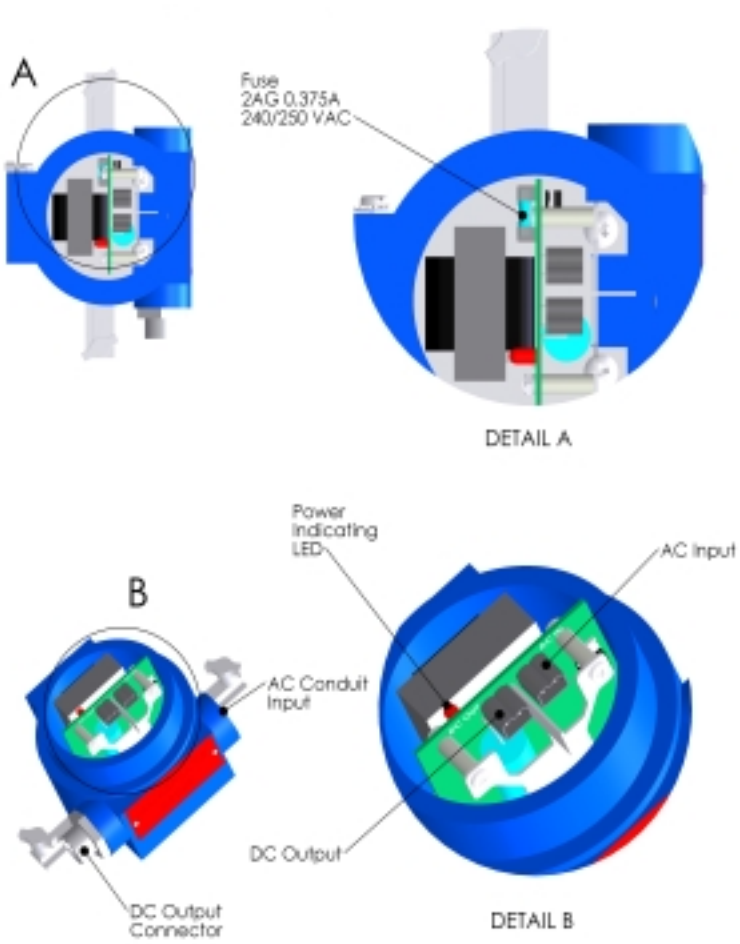
The LED illuminator can run continuously. The operating life of the LED's exceed 100,000 hours under normal conditions.

ROUTINE MAINTENANCE

Keep the window on the front of the light clean using commercial glass cleaners, such as Windex ® or similar. Never use harsh abrasives, wire brushes, metal scrapers, or any material that could scratch the window. The window may be cleaned while the unit is in operation. Never use petroleum based products on the window as they will damage the glass seals.

The light may be removed while the unit is in operation during inspection or maintenance of the customer's gage glass. The illuminator may also be disconnected from the power supply, if desired. Disconnect the cord at the supplied screw connector adjacent to the power supply. The plant power going to the power supply does not need to be disconnected.

Figure 2: Wiring Instructions



Caution:
Incorrectly wiring the AC input to the DC output will cause permanent damage to the power supply and could result in ignition of hazardous atmosphere

Confirm that the correct supply voltage is being applied to the illuminator power supply. The unit has been manufactured for a specific power source, either 120 or 240 VAC.

SPECIFICATIONS

Power Supply: 120 or 240 VAC @ 50-60 Hz
Power Consumption:< 750 mA @ 120 VAC
< 375 mA @ 240 VAC

Est. Life: 100,000 Hours (continuous)

Agency Approvals: FM and CSA
Class I, Div. I Grps. B, C, & D
Class II, Div I, Grps. E, F, & G
Intrinsically Safe Associated Apparatus

Wire Size: Min 18 AWG / Max 12 AWG
Max dist. from power supply to light: 8 feet (2.5M)

Ambient Temperature: -40 F (-40 C) to 170 F (77 C)
Electrical Connection: ¾" FNPT

NOTES:

16633 Foltz Parkway, Strongsville, OH 44149 USA
Telephone: (440) 572-1500 Fax: (440) 238-8828
www.clark-reliance.com