

# **Reliance DuraStar**

ORDINARY LOCATION INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS Section: R500 Bulletin: R500.E235A Date: 08-02-2012 Supersedes: 06-12-2012

## **STORAGE and HANDLING**

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

All units must be inspected upon receipt to ensure that no damage has been incurred during transit. If damage has occurred, 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**

<u>Caution:</u> 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. Review the ratings prior to installation and again prior to start-up. 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 4 holes that fit onto the pins that are installed on the top of the gage glass body. The inner set of holes is for installation onto FG400 and FG900 series gages. The outer 2 holes are for installation onto FG1500 and FG2000 series gages. Verify that the assembly you received fits the existing gage glass. Slip the upper illuminator bracket onto the pins.
- 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.
- 3) Open the cover of the power supply housing. Connect AC Line to the Fused Wire on the power supply. Connect AC Neutral to the White wire of power supply. Ground the enclosure according to NEC, IEC and/or other Local Regulations.

<u>**Caution:**</u> The DC output is pre-wired. Do not cut or disconnect these wires.





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- 4) If remote mounting the power supply housing and the blue cord will not reach the LED light, contact your local Clark-Reliance representative for an optional extension cable.
- 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 your DuraStar does not illuminate, check power source for voltage and check fuse. If power source and fuse are good, contact manufacturer for further assistance.

### **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 manufacturer 3AG 0.500A 240VAC fuse.

#### **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.

### **SPECIFICATIONS**

Power Supply: 100 – 277 VAC @ 50/60 Hz\* 100 – 240 VAC 50/60 Hz Power Consumption: < 320 mA @ 100 VAC

Est. Life: 100,000 Hours (continuous)

Agency Approvals: FM Ordinary Locations CFM Ordinary Locations

Wire Size: Min 18 AWG / Max 12 AWG Max dist. from power supply to light: 72 ft. (22m) Ambient Temperature: -40 F (-40 C) to 150 F (65 C) Electrical Connection: <sup>3</sup>/<sub>4</sub>" FNPT

\* Voltage for North America Only





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# **NOTES:**

