

# LOPRO HAZARD-GARD HID LUMINAIRE EVLP SERIES

## Installation & Maintenance Information

**COOPER** Crouse-Hinds

**IF 1375**

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

#### APPLICATION

Low Profile HAZARD-GARD® luminaires are suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC®) & Canadian Electrical Code (CEC):

- Class I Division 1 Groups B (with GB suffix), C, D; Class I Zone 1 IIB + H2 (with GB suffix)
- Class II Groups E, F, G; Simultaneous Presence; Class III

Refer to the Luminaire nameplate for specific classification information, maximum ambient temperature suitability and corresponding operating temperature (T-Code).

Low Profile HAZARD-GARD® luminaire 4X / IP66 construction is designed for use indoors and outdoors in Marine and Wet locations, where moisture, dirt, corrosion, vibration and rough usage may be present

Low Profile HAZARD-GARD® luminaires are supplied with a choice of voltages (120, 208, 220, 240, 277, 480, tri-tap, multi-tap, etc.) and light sources, High Pressure Sodium (HPS), Metal Halide (MH) & Mercury Vapor (MV) in ratings of 50 through 250 watts.

Two styles are available:

- Small globe version for medium base lamps.
- Large globe version for mogul base lamps.



FIGURE 1



#### WARNING

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.



#### WARNING

##### To avoid electric shock:

Be certain electrical power is OFF before and during installation and maintenance.

Luminaire must be supplied by a wiring system with an equipment grounding conductor.

##### To avoid burning hands:

Make sure lamp tube and lamp are cool when performing maintenance.



#### WARNING

##### To avoid explosion:

Make sure that the supply voltage is the same as the luminaire voltage.

Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.

Do not operate in ambient temperatures above those indicated on the luminaire nameplate.

Install luminaire with lamp base up within 25 degrees of vertical position.

All gasket seals must be clean.

Use only the lamp type and wattage specified on the luminaire nameplate.

Use proper supply wiring as specified on the luminaire nameplate.

Before opening, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.

## INSTALLATION

### Mounting

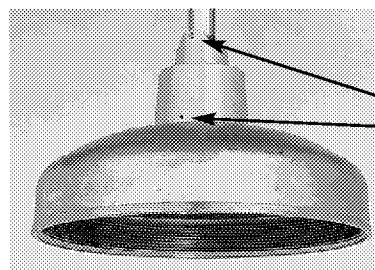
1. Install Mounting module - pendant, ceiling, wall bracket or stanchion in its support position and attach to conduit system. For Group B applications, seal all conduits per NEC section 501-5A (CEC Section 18-108). Secure with set screw.
2. Remove cover from ballast housing and remove the connection block from the cover by unscrewing the four captive screws.



#### WARNING

To avoid explosion in Group B applications, seal all luminaire conduits

3. Apply a liberal amount of HTL lubricant to threads. Thread the cover into the mounting module until the mounting module seats firmly against O-ring seal and secure with set screw. (Pendant mount is shown.)



Set  
Screws

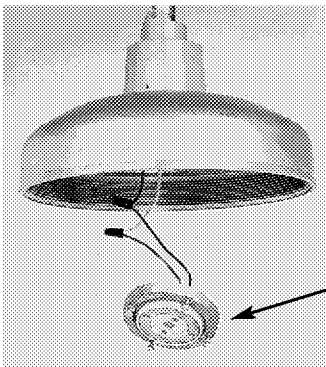
FIGURE 2 - Mounting Module & Cover Installation

**WARNING**

To maintain explosionproof integrity, make sure all threads are fully engaged.

**Wiring**

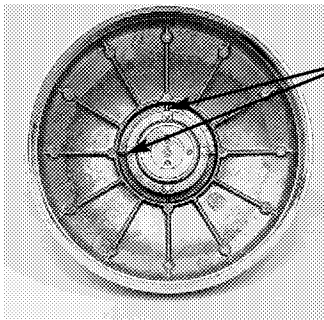
1. Pull field wiring into module and cover.
2. Connect connection block wires to supply wires per the attached wiring diagrams using methods that comply with all applicable codes.
3. Install circuit ground wire to GREEN ground screw near the sealing well in the connection block.
4. Attach ungrounded primary field wire to BLACK conductor and other field wire to RED conductor.
5. Tighten all electrical connections securely.



**Connection Block**

**FIGURE 3 - Wiring Connections**

6. Insert connection block into cover and tighten the four captive screws as follows:
  - Push conductors back up into mounting module.
  - Seat connection block securely into cover.
  - Start all four captive screws into cover and tighten evenly.

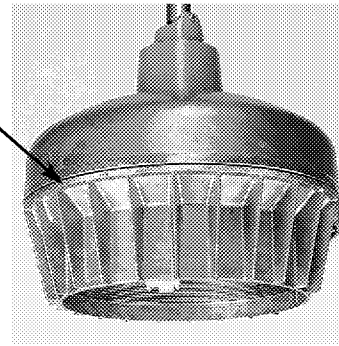


**Captive Screws**

**FIGURE 4 - Connection Block Installation**

7. Loosen locking tab screw and slide tab out of the way. Unscrew globe assembly from ballast housing.
8. Apply a small amount of HTL® lubricant to the threads. Rethread ballast housing onto the cover assembly until the cover assembly seats firmly against O-ring seal and secure with set screw.

**O-Ring Seal**

**FIGURE 5 - Ballast Housing Installation****WARNING**

To maintain explosionproof integrity, make sure all threads are fully engaged.

9. Install lamp. See LAMP INSTALLATION AND REPLACEMENT section.
10. Apply a small amount of HTL® lubricant to threads. Rethread globe assembly onto ballast housing until assembly seats firmly against O-ring. Slide locking tab into position so it engages one of the slots on the globe assembly. Tighten screw to secure locking tab.
11. Install guard as follows:
  - Loosen the attachment screw that is opposite the slotted end of each (3) mounting plate.
  - Slide the guard mounting loops under the screws, past the raised dimple in the mounting plates.
  - Retighten the three screws to secure the guard.
12. Install reflector, if required. See REFLECTOR INSTALLATION section.
13. Turn power on.

**REFLECTOR INSTALLATION****Optional Reflectors**

- Angle RA739
- Dome RD739

The optional reflectors are attached to the Lo Profile Hazard-Gard® luminaire as follows:

1. Position reflector over globe. When correctly placed, all three tabs of reflector are located between the three reflector mounting plates.

**Note:** Angle reflector should be installed closest to final mounting position.

2. Rotate reflector clockwise so that the three tabs slide under mounting plates.
3. Continue to rotate reflector clockwise until reflector tabs engage captivated boss on the mounting plates and reflector "snaps" into position.
4. Adjust angle reflector to its final orientation by loosening set screw at mounting module joint and turning luminaire clockwise. Retighten set screw.
5. To remove reflector, rotate counterclockwise until the three reflector tabs are free of the mounting plates.

## LAMP INSTALLATION AND REPLACEMENT

1. Disconnect power to the luminaire and allow to cool completely.
2. Loosen screw that secures locking tab. Lift tab and retighten screw to hold locking tab temporarily out of the way. Unscrew globe assembly and remove old lamp. Note: If globe assembly resists turning, insert a straight blade screwdriver in jacking slot and pry loose. (See Figure 6.)
3. Perform cleaning and inspection as noted in the MAINTENANCE section.
4. Screw new lamp into lampholder and securely tighten lamp. New lamp must be identical type, size and wattage as marked on the luminaire nameplate.



### CAUTION

To prevent ballast damage on high pressure sodium luminaires, replace burned out lamps as soon as possible.

To avoid shortened lamp life, lampholder failure, wiring faults or ballast failure, tighten lamp firmly and completely.

To avoid injury, guard against lamp breakage.

5. Thoroughly clean or replace O-ring gasket seal.
6. Apply a small amount of HTL lubricant to threads. Rethread globe assembly onto ballast housing until assembly seats firmly against O-ring seal. Secure with locking tab, making sure tab engages slot on globe assembly.

## MAINTENANCE

1. Perform visual, electrical and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However it is recommended that checks be made at least once a year. We recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA 70B: Recommended Practice for Electrical Equipment Maintenance ([www.nfpa.org](http://www.nfpa.org))
2. The globe (and guard & reflector when used) should be cleaned periodically to insure continued lighting performance. To clean, wipe the reflector, then the guard and globe with a clean damp cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCF or Duco #7. Do not use an abrasive, strong alkaline, or acid cleaner. Damage may result.
3. Check slip ring on the connection block for electrical continuity. Remove any surface contamination by lightly polishing contact ring(s). Carefully bend contacts up to form a 45 degree angle.
4. Visually check for undue heating evidenced by discoloration of wires or other components, damaged parts, or leakage evidenced by water or corrosion in the interior. Replace all worn, damaged or malfunctioning components and clean gasket seals before putting the luminaire back into service.
5. Electrically check to make sure that all connections are clean and tight.
6. Mechanically check that all parts are properly assembled.

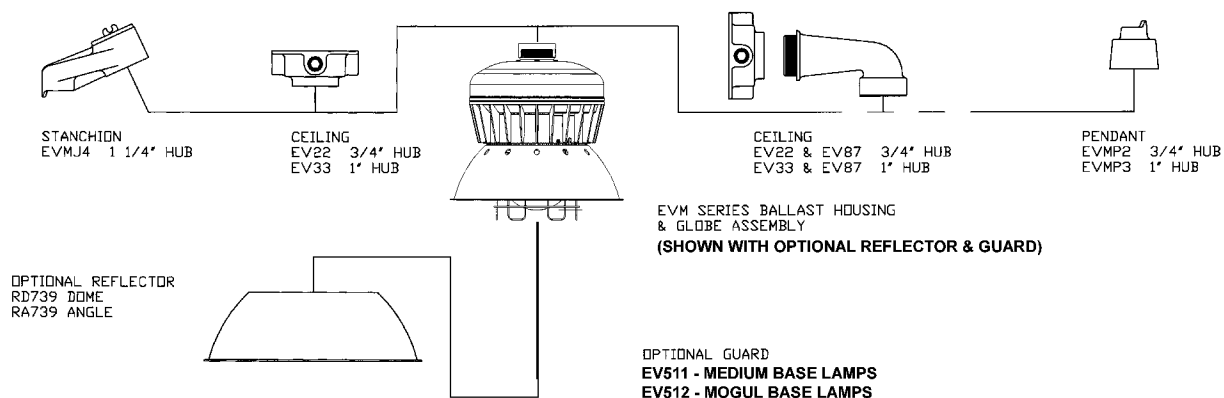
## REPLACEMENT PARTS

EVLP Low Profile Hazard-Gard® series luminaires are designed to provide years of reliable performance. However, should the need for replacement parts arise, they are available through your authorized Cooper Crouse-Hinds distributor. Assistance may also be obtained through your local Cooper Crouse-Hinds representative or the Cooper Crouse-Hinds Sales/Service Department, P.O. Box 4999, Syracuse, New York 13221, Phone 315-477-7000.

### FIELD ASSEMBLED LUMINAIRE LOW PROFILE HAZARD-GARD SERIES LUMINAIRE 50 - 250 W EVLP SERIES

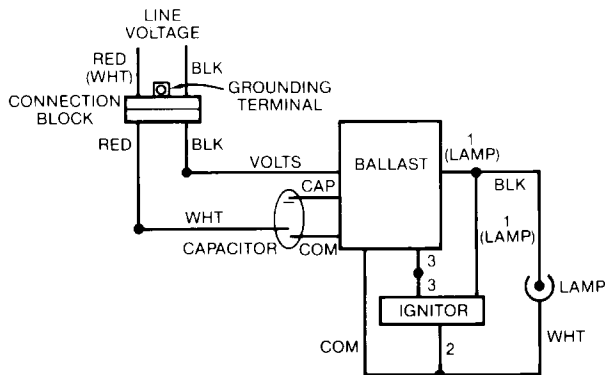
A complete EVLP Series luminaire consists of:

A mounting module, ballast housing with globe assembly, guard and reflector

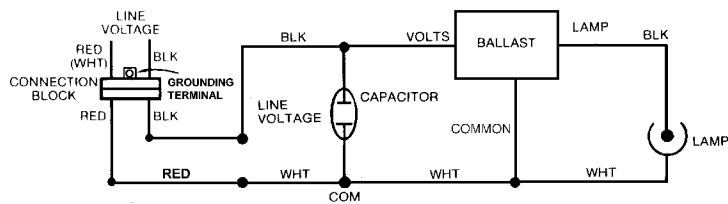


## WIRING DIAGRAMS

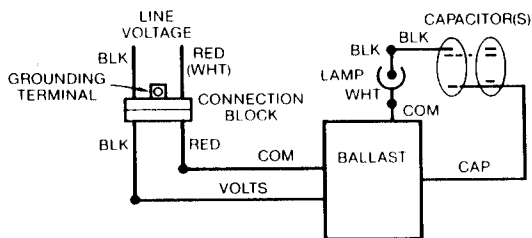
**High Pressure Sodium (HPS) — 50, 70, 100 and 150-CE watts**  
**208, 240, 277, 347 and 480 volts**  
**Metal Halide (MH) — 70, 100 watts**  
**all voltages**



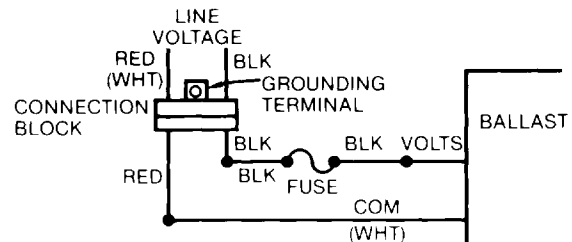
**High Pressure Sodium (HPS) — 50, 70, 100 and 150-LX watts**  
**— 120 volts**



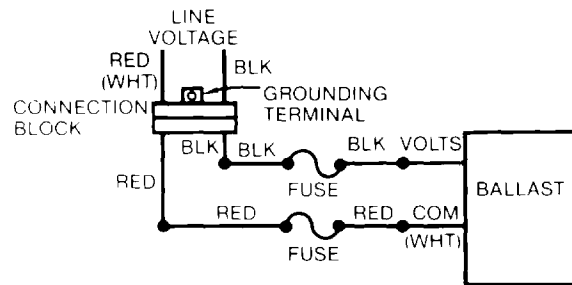
**Metal Halide (MH) — 175 and 250 watts**  
**all voltages**



### FUSE OPTION (Catalog Suffix S658)



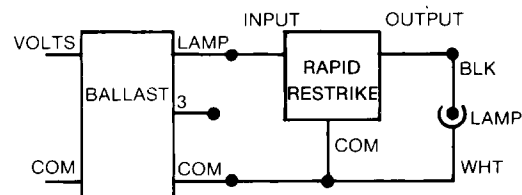
120/277V SINGLE FUSE



208, 240, 480V DOUBLE FUSE

### Rapid Restrike Option

**50, 70, 100 and 150-LX watt HPS Only**  
**(Catalog Suffix IRBG)**



*All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale", and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.*