

# G241, G243, and G245 Refractors for CHAMP® VMV Series HID Lighting Fixtures

**COOPER** Crouse-Hinds

IF 1152

## Installation & Maintenance Information

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

### APPLICATION:

G241, G243, and G245 refractors are for installation on Crouse-Hinds CHAMP® VMV Series HID lighting fixtures in wattages of 50 through 175. CHAMP VMV fixtures with G241, G243, and G245 refractors may be used in areas that are classified as Class I, Division 2; Class II, Groups F and G; Class III; and simultaneous exposure hazardous (classified) locations as defined by the National Electrical Code®. The T-rating of the fixture must not exceed the ignition temperature of the atmosphere in which it is to be operated. Refer to the fixture nameplate for specific classification information and appropriate operating temperature (T) rating.

CHAMP VMV fixtures with G241, G243, and G245 refractors are designed for use in wet locations, outdoor marine and industrial locations, and other indoor and outdoor locations where moisture, dirt, corrosion, vibration, and rough usage may be a problem.

Review and obtain a thorough understanding of these instructions before proceeding with installation. It will ultimately save time and help ensure proper installation.



### REFRACTOR INSTALLATION

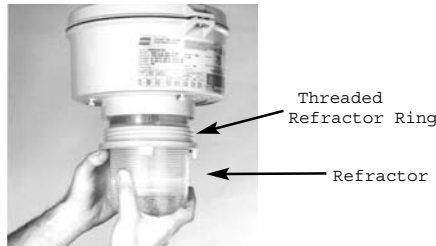
#### ⚠ WARNING

Electrical power must be **OFF** before and during installation and maintenance.

#### ⚠ IMPORTANT

When installing this G241, G243, and G245 refractor as part of a NEW CHAMP VMV fixture installation, follow instructions furnished with the fixture (IF1108) for fixture installation, then refer to these instructions to complete the installation.

- Carefully place threaded aluminum refractor ring over the G241, G243, and G245 glass refractor.
- Place glass refractor (with threaded ring) over the lamp. When correctly placed, the flat surface of the glass refractor will seat firmly against the silicone rubber gasket of the VMV lighting fixture.



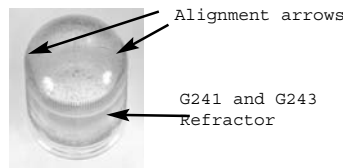
- Hand tighten the threaded refractor ring onto the threaded fixture housing.

#### ⚠ CAUTION

Do not lean on the fixture or use it as a support. Make sure footing is secure when installing refractor.

#### IMPORTANT NOTE

- If installing G245 refractor (symmetrical distribution), proceed to Step 5.
  - If installing G241 refractor (long, narrow distribution), the refractor position must now be adjusted to ensure that the long, narrow light distribution is properly aligned for the application. Proceed to Step 4.
  - If installing the G243 refractor (bent long distribution), the refractor must be positioned to ensure that the light distribution is properly aligned for the application. Proceed to Step 4.
- Adjust the position of the G241 or G243 refractor to ensure that the long, narrow light distribution is aligned properly for your application. To do this:
    - Loosen the threaded refractor ring one-quarter to one-half turn, just enough to rotate the glass refractor without interference.
    - Rotate the refractor in the fixture until the arrows on the closed end of the refractor are parallel to the long, narrow area to be lighted. For example, if you are lighting a walkway, adjust the refractor so that the arrows point along the walkway.

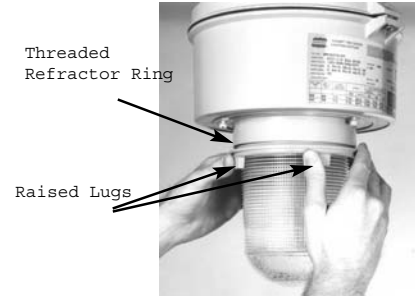


- Tighten the threaded refractor ring, making sure that the glass refractor does not rotate from its adjusted position.

- Check the threaded refractor ring to be sure it is threaded tightly in place. This is to be done by hand. Utilize the four raised lugs on the cast ring to tighten the ring securely by hand. **DO NOT** use tools to tighten the refractor ring. Overtightening could damage the glass refractor.

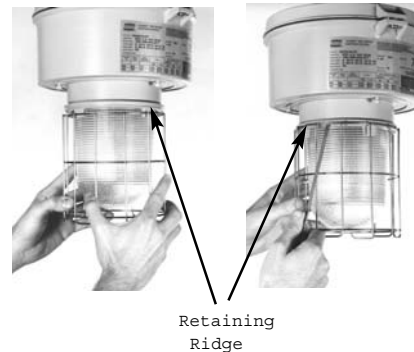
#### ⚠ WARNING

**DO NOT** use tools to tighten threaded refractor ring. The use of tools will cause overtightening which could damage the glass refractor.



### GUARD INSTALLATION/REMOVAL

- Place optional stainless steel wire guard over refractor and push into place over retaining ridge in threaded refractor ring.
- For guard removal, carefully pry open guard at retaining ridge and slide off.



### RELAMPING

#### ⚠ CAUTION

When high pressure sodium of 70 or 100 watt metal halide lamps burn out, replace as soon as possible to prevent damage to the ballast.

- Shut off power to the fixture. Allow lamp and refractor to cool.
- Remove guard if fixture is provided with one. See **GUARD INSTALLATION/REMOVAL** section of this instruction sheet.
- While holding glass refractor, unthread and remove threaded refractor ring.
- Carefully remove refractor from fixture and set aside safely for reassembly after lamp replacement.
- Replace lamp with identical type lamp as marked on the fixture nameplate.
- Replace refractor. Follow instructions in **REFRACTOR INSTALLATION** section of this instruction sheet.

### MAINTENANCE

#### ⚠ CAUTION

Always disconnect primary power source before opening fixture for inspection or service.

Perform visual, electrical, and mechanical inspections on a regular basis. This should be determined by the environment and frequency of use. However, it is recommended that a check should be made at least once a year. We recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B. The refractor should be cleaned periodically to ensure continued lighting performance. To clean, wipe the refractor with a clean, damp, soft 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 to the refractor may result.

- Relamp high pressure sodium and 70 or 100 watt metal halide fixtures as soon as possible after the lamp burns out to prevent damage to the ballast.
- Visually check for undue heating evidenced by discoloration of wire or other components, damaged parts or leakage evidenced by water or corrosion in the interior.
- Electrically check to make sure that all connections are clean and tight.
- Mechanically check that all parts are properly assembled.

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.

\*National Electrical Code is a registered trademark of the N Fire Protection Association.