

Tank Observation Light EVA160

Installation & Maintenance Information

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

Crouse-Hinds Model EVA160 Tank Observation Lights are mounted directly into tank walls to light the inside of the tanks, vats and process vessels used in chemical plants, petrochemical plants and petroleum process industries.

EVA160 Tank Observation Lights are suitable for use in Class I Groups C, D hazardous (classified) areas as defined by the National Electrical Code® when installed in compliance with the National Electrical Code and any local codes.

INSTALLATION

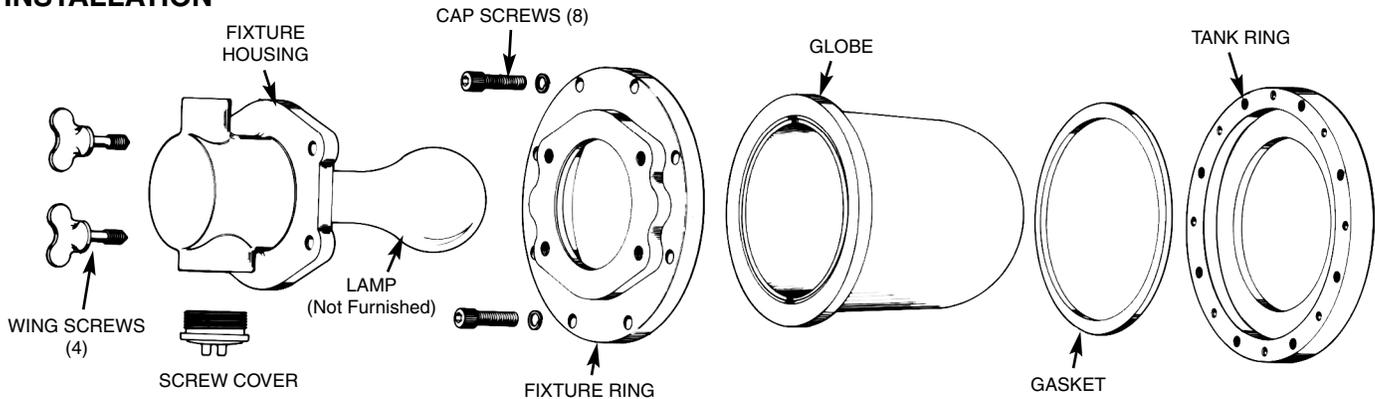


Figure 1.

EVA160 Detail View

⚠ WARNING

Electrical Power must be turned **off** before and during installation and maintenance.

1. If tank light is received assembled, disassemble by removing the four wing screws, then the fixture housing. Remove the eight 1/4"-20 Allen Head cap screws and washers and separate the fixture ring globe and gasket from the tank ring.

⚠ WARNING

Be sure that tank is completely free of any hazardous vapors, gases or liquids before securing tank ring to tank.

2. Using the inner circumference of the tank ring as a template, locate and prepare a 4-11/16 inch diameter opening into the tank. Secure the tank ring to the outside of the tank with eight (8) counter-sunk 3/16 inch diameter rivets (not supplied) or braze ring to tank if desired. See Figure 2.

⚠ CAUTION

To reduce the possibility of globe breakage, the tank ring must not be warped or distorted when attached to the tank wall. The tank wall area must be flat with no ridges, seams or curves. When riveting, use a sequential installation procedure. When brazing to tank wall be sure that excessive heat does not warp ring or tank wall. Brazing material must be compatible with tank ring material – silicon bronze ASTM B198, alloy 12A, and with tank material.

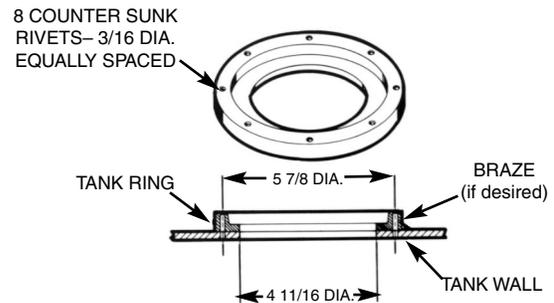


Figure 2.

Tank Ring Mounting

⚠ CAUTION

The globe is tempered glass. Avoid scratching or chipping.

3. Place gasket over globe and insert into tank. Place fixture ring over globe flange and secure with eight 1/4"-20 Allen Head cap screws. Sequentially tighten screws to 130 in. lbs. torque. See Figure 3.

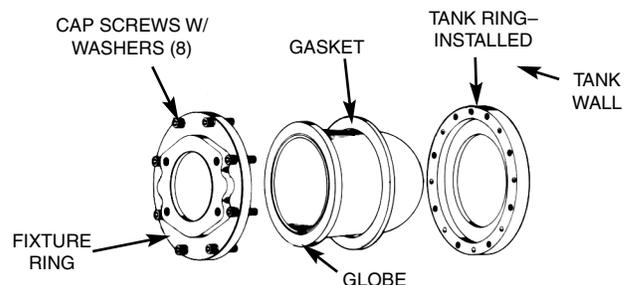


Figure 3.

Globe & Fixture Ring Installation

CAUTION

Do not exceed lamp size or wattage specified.

4. Install 50, 60, 75 or 100 watt, A-21, 120V medium base lamp (user supplied) into lampholder in fixture housing. Insert lamp through fixture ring and secure fixture housing with four wing screws. See Figure 4.

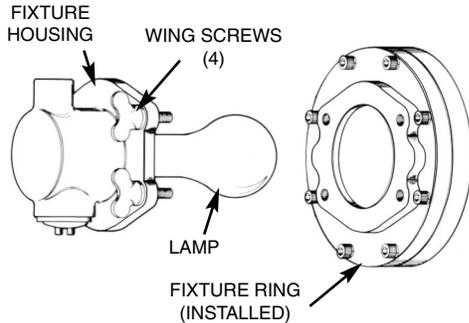


Figure 4.

Lamp/Fixture Housing Installation

5. Connect to conduit system. A Crouse-Hinds EC flexible coupling should be used, so that the housing and lamp may be removed for relamping when required. See Figure 5.

WARNING

Do not use fixture on ungrounded circuits.

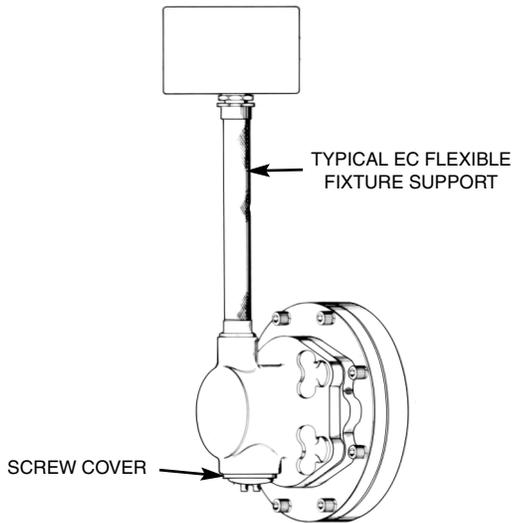


Figure 5.

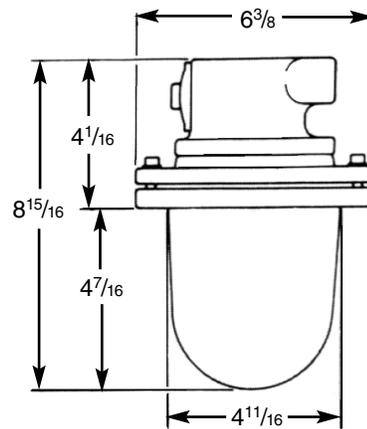
EVA160 Tank Light Installation

6. Remove screw cover and connect wiring to receptacle wiring terminals following approved procedures.
7. Replace screw cover.

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.

DIMENSIONS

EVA160



LAMP RATING

Watts	Lamp
100, A-21 Maximum	Medium Base

MAINTENANCE

1. Frequent inspection should be made. A schedule for maintenance check should be determined by the environment and frequency of use. It is recommended that it should be at least once a year.
2. If necessary to open housing for inspection or service, always disconnect primary power source before opening enclosure.
3. Perform visual, electrical, and mechanical checks on all components on a regular basis.
 - 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.
 - Electrically check to make sure that all connections are clean and tight.
 - Mechanically check that all parts are properly assembled.



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 Revision 1
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