



 $(\mathbf{A})$ 

B

B

A

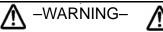
C

## **OUTLET BOX MOUNTING INSTRUCTIONS**

DO NOT ATTEMPT INSTALLATION UNTIL YOU ARE FAMILIAR WITH ALL WARNINGS, PRECAUTIONS, AND PROCEDURES OUTLINED WITHIN THIS INSTRUCTION SHEET.



ELECTRICAL POWER MUST BE OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.



LUMINAIRE MUST BE GROUNDED AS REQUIRED PER PARAGRAPH 410.44 AND ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND/OR SECTION 10 AND RULE 30-500 OF CANADIAN ELECTRIC CODE. FAILURE TO PROPERLY GROUND THIS LUMINAIRE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

#### INSTRUCTIONS FOR INSTALLATION

NOTE: For suitable fixture support, consult National Electrical Code (NEC) or Canadian Electrical Code.

FIXTURES MUST HAVE A MINIMUM OF FIVE FULL THREAD ENGAGEMENTS. INSTALLATION MUST BE IN COMPLIANCE WITH LOCAL AND/OR NATIONAL CODES.

**NOTE:** OUTLET BOX THREADS MUST BE LUBRICATED TO PREVENT GALLING. IF LUBRICANT IS REMOVED, LIGHTLY LUBRICATE WITH A CORROSION INHIBITING PETROLEUM BASED GREASE SUCH AS PETROLATUM OR SOAP-THICKENING MINERAL OIL TO INSURE EASE OF FUTURE MAINTENANCE.

#### PENDANT MOUNT

Install pendant mount on conduit. Tighten set screw A to 30 in.-lbs. torque to prevent loosening.

#### **CEILING MOUNT**

Install ceiling mount by means of four external mounting holes B on 6" bolt circle. Plug unused conduit entries with close-up plugs C.

#### WALL OR BULKHEAD MOUNT

Install wall or bulkhead mount by means of four external mounting holes B in backplate so that threaded hub is extending downward. Plug unused conduit entries with close-up plugs C.

#### STANCHION MOUNT

Install stanchion mount on conduit. Tighten set screw A to 30 in-lbs. torque to prevent loosening.

**NOTE:** For suitable supply wire, consult marking on fixture (ballast housing) for required temperature rating. Fixture mount must be grounded per applicable code referred to above. A separate grounding screw in the outlet box is provided to install ground lead. Check ground continuity before energizing the fixture.

WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects In materials and workmanship for a period of five (5) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of T&B products immediately voids all warranties.

LIMITATIONS AND EXCLUSIONS: THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL THOMAS & BETTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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## LUMINAIRES FOR HAZARDOUS LOCATIONS AND ADVERSE ENVIRONMENTS

DO NOT ATTEMPT INSTALLATION UNTIL YOU ARE FAMILIAR WITH ALL WARNINGS, PRECAUTIONS, AND PROCEDURES OUTLINED WITHIN THIS INSTRUCTION SHEET.



ELECTRICAL POWER MUST BE OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.

INSTALLATION PRECAUTIONS:

- 1. DO NOT INSTALL LUMINAIRE IN ANY CLASSIFIED LOCATION WHERE THE MARKED OPERATING TEMPERATURE EXCEEDS THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERES. CONSULT LUMINAIRE NAMEPLATE FOR SUITABILITY IN SPECIFIC HAZARDOUS LOCATIONS.
- 2. DO NOT INSTALL LUMINAIRE IN A LOCATION WHERE THE AMBIENT TEMPERATURE EXCEEDS THE MAXIMUM AMBIENT TEMPERATURE SHOWN ON THE LUMINAIRE NAMEPLATE.
- 3. REFER TO LUMINAIRE NAMEPLATE FOR MINIMUM SUPPLY WIRE TEMPERATURE RATING.
- 4. VERIFY THAT THE SUPPLY VOLTAGE AGREES WITH LUMINAIRE RATING AS INDICATED ON NAMEPLATE.
- 5. LAMP RECEPTACLE SCREW SHELL MUST BE AT LOWEST POTENTIAL (OR GROUND)
- 6. ALL LOCAL, NEC AND CEC CODES MUST BE FOLLOWED WHEN INSTALLING THE LIGHTING LUMINAIRE. FOR CODE INTERPRETATION, CONSULT YOUR LOCAL CODE AUTHORITY. USE WIRING METHOD FOR CLASS I & CLASS II DIV.1. AND PER NEC & CEC CODE.
- 7. BALLAST HOUSING MUST BE ASSEMBLED WITH LISTED LUMINAIRE FITTINGS AS SPECIFIED ON THE NAMEPLATE. THE MOUNTING OUTLET BOX AND GLOBE ASSEMBLY MUST FULLY ENGAGE THE HOUSING WITH A MININUM OF FIVE THREADS. REPLACE CRACKED OR DAMAGED GLOBE PRIOR TO USE.
- 8. VERIFY THAT GROUND CONTINUITY HAS BEEN ESTABLISHED BY USING AN OHMMETER OR OTHER SUITABLE TESTING EQUIPMENT BEFORE ENERGIZING THE LUMINAIRE. FAILURE TO PROPERLY GROUND THE LUMINAIRE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

# A-WARNING- A

DO NOT SCRATCH, SCORE, NICK OR CHIP THE GLASS GLOBE.

FIRE AND EXPLOSION HAZARD.

BREAKAGE OF GLASS GLOBE AND EXPOSURE OF LAMP TO A COMBUSTIBLE ATMOSPHERE CAN RESULT IN AN EXPLOSION AND POSSIBLE INJURY OR DEATH.

## A -WARNING-

LUMINAIRE MUST BE GROUNDED AS REQUIRED PER PARAGRAPH 410.44 AND ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND/OR SECTION 10 AND RULE 30-500 OF CANADIAN ELECTRIC CODE. FAILURE TO PROPERLY GROUND THIS LUMINAIRE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.



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#### LUMINAIRE CLEANING:

Periodic cleaning of the globe assembly may be needed to maintain full lighting efficiency and to prevent excessive dust or dirt accumulation, which could cause the luminaire to operate at a higher temperature.

Cleaning the luminaires components should be done with a non-abrasive solution of soap or detergent and water. Residual solution should be removed by clean water rinsing.

NOTE: IF LUBRICANT IS REMOVED FROM THREADS DURING MAINTENANCE OR RELAMPING, LIGHTLY LUBRICATE WITH A CORROSION INHIBITING PETROLEUM BASED GREASE SUCH AS PETROLATUM OR SOAP-THICKENING MINERAL OIL. FOR APPLICABLE PRODUCT CONSULT YOUR LOCAL HAZLUX<sup>®</sup> DISTRIBUTOR.

### DISCHARGE VESSEL REPLACEMENT PROCEDURES

## A –WARNING– A

DISCONNECT THIS LUMINAIRE FROM SUPPLY CIRCUITS BEFORE REMOVING GLOBE TO AVOID EXPOSING HOT SURFACES OR ELECTRIC ARCING TO HAZARDOUS ATMOSPHERE. DO NOT RE-ENERGIZE UNTIL THE GLOBE HAS BEEN RE-INSTALLED. FAILURE TO COMPLY WITH THIS WARNING CAN CAUSE FIRE OR EXPLOSION WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.

- 1. Loosen thumb set screw to allow globe assembly to turn freely.
- 2. Remove globe assembly.
- 3. FOR HAZLUX<sup>®</sup> 5

Remove H.I.D. lamp and/or optional quartz lamp.

(NOTE: it may be necessary to remove the H.I.D. lamp to replace the optional auxiliary quartz lamp.)

Verify that the H.I.D. lamp complies with lamp specifications on luminaire nameplate, then install. To install quartz auxiliary lamp, push and twist lamp into bayonet receptacle.

FOR HAZLUX<sup>®</sup> 5M

Remove lamp(s).

Verify that the replacement lamp complies with lamp specifications on luminaire nameplate, then install.

To install fluorescent lamp, push lamp into bi-pin receptacle.

4. To reassemble globe assembly, refer to installation procedure.

#### FILE THIS INSTRUCTION SHEET FOR FUTURE USE

WARRANTY: Thomas & Betts sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Thomas & Betts warrants that this product will be free from defects In materials and workmanship for a period of two (2) years following the date of purchase. Upon prompt notification of any warranted defect, Thomas & Betts will, at its option, repair or replace the defective product. Misuse, misapplication or modification of Thomas & Bettes products immediately voids all warranties.

Limitations and Exclusions: THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL THOMAS & BETTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.



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#### INSTRUCTIONS FOR INSTALLATION

Install luminaire outlet box (A) (per instructions supplied with outlet box fitting).

Remove female contact assembly (E) from mounting bosses (B). Pull supply wires (C) (use proper temperature rated wire- See luminaire nameplate on ballast housing).

**NOTE:** LUMINAIRE MUST BE GROUNDED. A SEPARATE GROUNDING SCREW IN THE OUTLET BOX IS PROVIDED TO INSTALL GROUND LEAD. CHECK GROUND CONTINUITY BEFORE ENERGIZING THE LUMINAIRE.

Install grounding lead (D) to grounding screw in outlet box. Connect line lead to terminal (G) marked "LINE". Complete circuit by attaching common or second line to terminal (F) marked "WHITE" in female contact assembly. Visually inspect connection.

Return female contact assembly to outlet box and secure to mounting bosses (B), with fasteners (H).

**NOTE:** ALL THREADS MUST BE LUBRICATED TO PREVENT GALLING. IF LUBRICANT IS REMOVED, LIGHTLY LUBRICATE WITH A CORROSION INHIBITING PETROLEUM BASED GREASE SUCH AS PETROLATUM OR SOAP-THICKENING MINERAL OIL TO INSURE EASE OF FUTURE MAINTENANCE.

Screw luminaire section (ballast housing) onto outlet box until hand tight. To secure luminaire section onto outlet box, tighten #10-24 set screw to 30 in.-lbs. (max.) torque.

BENCH ASSEMBLY- assembly of item (K)(L)(M)(N)(P) may be performed on a bench to facilitate ease of installation.

If luminaire was supplied with multi-tap ballast (indicated by more then one (1) ballast primary volts on luminaire, proper ballast voltage lead corresponding to supply voltage must be connected to luminaire lead labeled "line" with connector supplied. All leads must be inserted into cable tie and secured in place. Unused primary wire must be insulated to prevent shorting.

If luminaire is equipped with quartz auxiliary receptacle (J) install quartz lamp before H.I.D. lamp (Hazlux<sup>®</sup> 5 luminaire only).

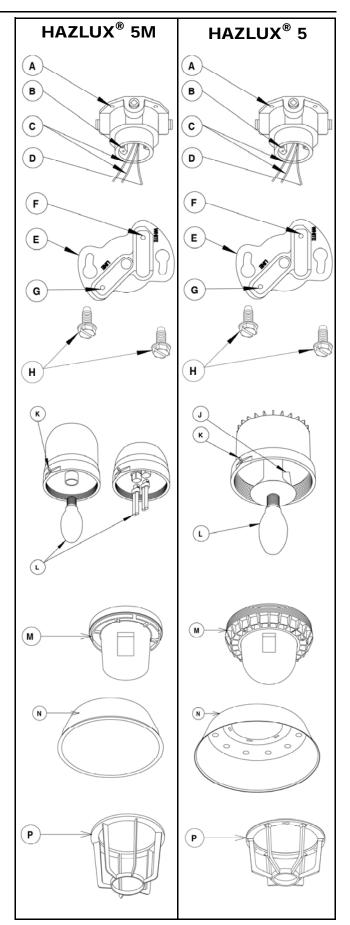
Verify that the lamp(s) (L) complies with lamp specification on luminaire nameplate, then install.

Screw globe assembly (M) (clockwise) onto luminaire section until hand tight. It may be necessary to back off globe assembly (counterclockwise) slightly, to allow thumb screw to enter nearest notch. To lock globe assembly in place, tighten thumb screw (K) into notch in globe retaining ring

**NOTE:** WARNING NOTICE MUST BE REMOVED FROM GLASS GLOBE BEFORE INSTALLATION.

Install reflector (N) and/or globe guard (P) over three screws furnished in lower face of globe assembly. Back out screws sufficiently to allow reflector and/or globe guard to be inserted over screws and twist in place. Tighten screws to hold reflector and/or globe guard securely in place.

DO NOT ENERGIZE THE LUMINAIRE UNTIL THE GLOBE ASSEMBLY AND MOUNTING OUTLET BOX HAVE BEEN INSTALLED TO AVOID EXPOSING HOT SURFACES OR ELECTRIC ARCING TO HAZARDOUS ATMOSPHERE. FAILURE TO COMPLY WITH THIS WARNING CAN CAUSE FIRE OR EXPLOSION WHICH CAN RESULT IN SERIOUS INJURY OR DEATH.



Hazlux<sup>®</sup>





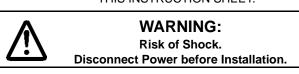


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### INSTALLATION INSTRUCTIONS FOR LUMINAIRE MOUNTS

DO NOT ATTEMPT INSTALLATION UNTIL YOU ARE FAMILIAR WITH ALL PRECAUTIONS AND PROCEDURES OUTLINED WITHIN THIS INSTRUCTION SHEET.



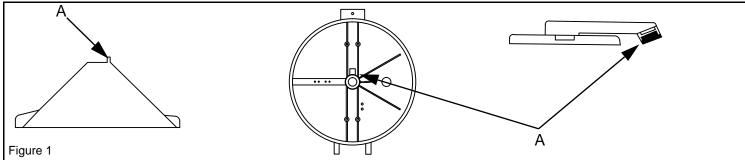




LUMINAIRE MUST BE GROUNDED AS REQUIRED PER PARAGRAPH 410.44 AND ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND/OR SECTION 10 AND RULE 30-500 OF CANADIAN ELECTRIC CODE. FAILURE TO PROPERLY GROUND THIS LUMINAIRE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

#### **1. PENDANT AND STANCHION TYPE MOUNTS**

Screw the luminaire mount onto previously install conduit, a minimum of 3 threads must be engaged between the conduit and luminaire mount. Tighten the conduit locking screw (A) to 30 inch pounds (figure.1).



### 2. CEILING AND WALL TYPE MOUNTS

Install the luminaire mount to the appropriate mounting surface by means of the external mounting lugs (B).

### The bolt positions are as follows:

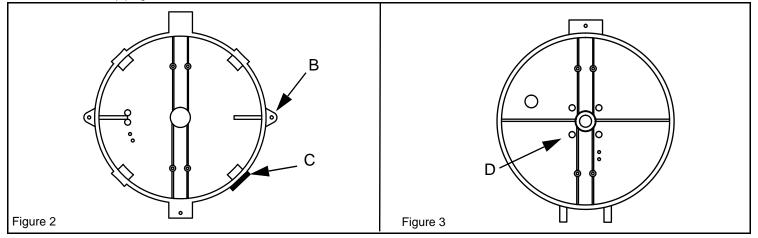
#### a. Ceiling:

12-3/4" bolt circle for std - 3 or 9-5/8" bolt circle for mini - M3

#### b. Wall:

#### 3-3/4" X 3-3/4" bolt pattern

Install conduits plug in any unused conduit entries with the supplied close-up plugs (C), minimum of 3 threads must be engaged between the conduit or close-up plug and luminaire mount.



### 3. 4 INCH OUTLET BOX TYPE MOUNTS

Install the luminaire mount to previously installed 4 inch outlet box using supplied gasket and screws tighten mounting screws (d) to 30 inch- pounds.

Always inspect gasket joints before closing the luminaire, if gasket shows any indication of deterioration, replace the luminaire.

EQUIPMENT

GROUNDING

SCREW



## INSTALLATION INSTRUCTIONS FOR FIXTURE TANKS

# A - CAUTION - A

DO NOT ATTEMPT INSTALLATION UNTIL YOU ARE FA-MILIAR WITH ALL PRECAUTIONS AND PROCEDURES OUTLINED WITHIN THIS INSTRUCTION SHEET.

## $\underline{\wedge}$ – WARNING – $\underline{\wedge}$

ELECTRICAL POWER MUST BE OFF BEFORE AND DUR-ING INSTALLATION AND MAINTENANCE.

## $\underline{\wedge}$ – WARNING – $\underline{\wedge}$

THE FIXTURE MUST BE GROUNDED AS REQUIRED BY THE NATIONAL ELECTRIC CODE (PARAGRAPH 410-21 AND ARTICLE 250) OR CANADIAN ELECTRIC CODE (RULE 30-500 AND SECTION 10). FAILURE TO PROPER-LY GROUND THE FIXTURE MOUNT WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SE-RIOUS INJURY OR DEATH.

## 

All national and electrical/building codes must be followed in the installation of the fixture. For code interpretation, consult local code authority.



Do not install fixture in any classified location where the marked operating temperature exceeds the ignition temperature of the hazardous atmospheres. Consult fixture nameplate for suitability in specific hazardous locations.

Do not install fixture in a location where the ambient temperature exceeds the maximum ambient temperature shown on the fixture nameplate.

Consult fixture marking for minimum required supply wire temperature rating.

Verify that supply voltage agrees with fixture rating as indicated on nameplate.

Product must be used only with globe intact and fully engaged. Replace cracked or damaged globe prior to use.

Failure to properly ground fixture may create an electrical shock hazard which can cause serious injury or death and which can create a risk of fire or explosion.



Use only lamp size and wattage as shown on fixture nameplate.

Fixture may be energized in a hazardous location ONLY AFTER:

the fixture tank has been secured to the mount AND the optical configuration (Globe, Refractor, or Closed Bottom Reflector) has been assembled to the tank as outlined in this instruction sheet.

Install fixture mount (outlet  $\Box$   $\Box$  box) per the installation instructions supplied with the fixture mount.

Ground fixture mount. If mount is not grounded through a metal raceway, such as metal conduit, a separate grounding conductor must be provided. Attach this grounding conductor to the provided "EQUIPMENT GROUNDING SCREW". Location of the equipment grounding screw is marked in each mount except cone pendant mount. See illustration above for location of equipment grounding screw in cone pendant mount.

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## 

VERIFY THAT GROUND CONTINUITY HAS BEEN ESTAB-LISHED BY USING AN OHMMETER OR OTHER SUITA-BLE TESTING EQUIPMENT BEFORE ENERGIZING THE FIXTURE. FAILURE TO PROPERLY GROUND THE FIX-TURE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

Pull supply wires.

**NOTE:** Consult markings on the fixture nameplate for required temperature rating of supply wire insulation.

Hang fixture tank on fixture mount hinge, attach ground bonding lead to supplied grounding screw in fixture mount and connect supply wires to fixture (ballast) leads with supplied wire connectors.

Swing fixture closed and secure with furnished screw. Always inspect gasketed joints before closing the luminaire. If gasket shows any indication of deterioration, replace the luminaire.

**NOTE** - BENCH ASSEMBLY: The remainder of the assembly operations may be performed on a bench before hanging fixture tank on fixture mount hinge.

Before installing lamp(s) verify that they comply with the lamp specifications on the fixture nameplate. If a lamp base extender was supplied with the optical assembly, install it between the lamp socket and lamp.

Consult fixture markings to verify that the optical configuration (Globe, Refractor, Reflector, Guard, etc.) to be installed is suitable for the required application. Continue assembly with appropriate section.

> (FLUORESCENT LAMPS)

## GLOBE OR REFRACTOR

(Threaded Type)

Screw into threaded portion of fixture tank hand tight.

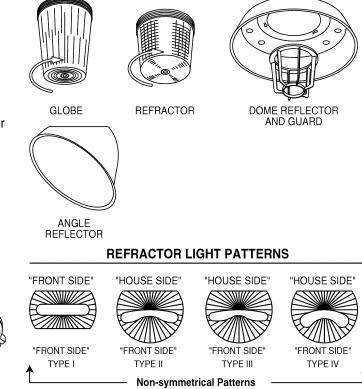
Non-symmetrical refractors require aiming. Consult instruction sheet supplied with fixture mount for directions.

### **REFLECTOR** and/or GUARD

Back out three screws furnished in lower face of fixture tank (around globe) sufficiently to allow for reflector and/or guard clearance. Position reflector and/or guard over screws and twist in place. Tighten three screws to retain reflector and/or guard.

## **REFLECTOR GUARD**

Position clamping ring of guard over lip of reflector and securely tighten screw.





Symmetrical

**REFRACTOR** - (Reflector Type)

Screw into threaded portion of fixture tank hand tight.

Non-symmetrical refractors require aiming. Loosen clamping ring, turn refractor to desired position and retighten clamping ring.

#### GUARD

GROUND

Position clamping ring of guard over lip of refractor and securely tighten screw.



REFRACTOR

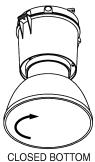
(INCANDESCENT OR HID LAMP)

CLOSED BOTTOM REFLECTOR

Screw into threaded portion of fixture tank hand tight.

## GUARD

Position clamping ring of guard over lip of refractor and securely tighten screw.



CLOSED BOTTON REFRACTOR