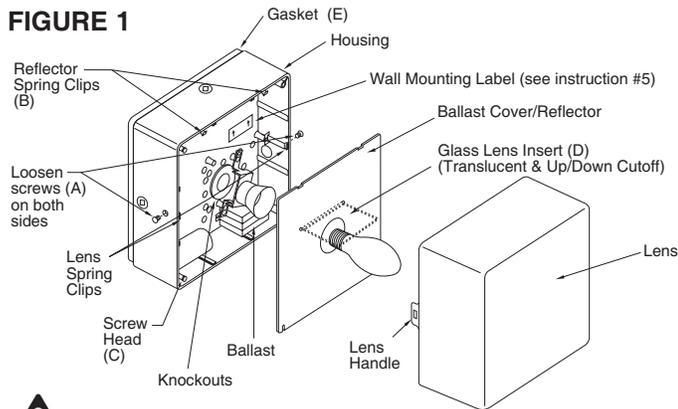


# INSTALLATION INSTRUCTIONS SQUARE HID SECURITY

Document:	CI308X69R0	Date	2013-4-29
Created By:	TMT	DCR#	2013-137



**FIGURE 1**



## CAUTIONS

### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Risk of fire and electrical shock. High temperature in fixture. 150° C wire nuts are required.
2. Risk of fire. Most dwellings built before 1985 have supply wire rated 60° C. Consult a qualified electrician before installing. (See ELECTRICAL CONNECTIONS section.)
3. To avoid the possibility of electrical shock, turn off power supply before installation or servicing.
4. In continuously operating Metal Halide systems (24 hours/day, 7 days/week), turn lamps off once per week for at least 15 minutes. Failure to comply increases the risk of violent lamp failure.

### NOTES

1. This carton contains fixture, ballast lamp and mounting hardware.
2. Caulk between gasket (E) and mounting surface to prevent water from entering fixture from behind. A high grade caulking material, such as silicon rubber, should be used.

### LENS REMOVAL - FIGURE 1

1. Unscrew two stainless steel phillips flat head screws (A) on sides of casting 3-4 turns (do not remove). Push inward on screw heads and lift lens away from casting.

### MOUNTING (WALL OR CEILING) - FIGURE 1

1. Remove reflector by disengaging two spring clips (B). Lift up on reflector while sliding it out from under two screw heads (C).
2. See knockout schematic found on reverse side of instruction sheet. **Note:** Knockouts on back wall of 8" fixture are located 1.6" above center line of fixture.
3. Electrical service from behind fixture: Remove lampholder

bracket to expose knockouts by loosening screws which attach bracket to housing. Slide bracket to side and lift away from bosses. Remove appropriate mounting hole knockouts using a hammer and center punch.

Electrical service from surface conduit: Remove appropriate 1/2" conduit entrance plug or plugs on the sides of the housing. Conduit entrance plugs can be removed with a 3/8" socket drive. When using surface conduit, stabilize fixture by removing knockouts for the 4" sq. junction box and run either #8 or #10 screws into mounting surface.

4. **NOTE:** If fixture is provided with photo control and is wall mounted, make sure photo control is positioned so that it faces to the side. If positioned on top or bottom of fixture, fixture may not function properly.
5. **NOTE:** Wall mounted fixtures should be oriented with ballast and capacitor positioned at bottom of fixture as shown. Wall mounting label should point upward.
6. **NOTE:** For wall-mounted translucent lens and Up/Down cutoff fixtures, glass lens insert (D) should be above lamp as shown. For ceiling mounted translucent lens fixtures, remove and discard the glass lens insert (D) attached to the reflector by removing #6 screw which holds glass lens in place.
7. Caulk between gasket (E) and mounting surface to prevent water from entering fixture from behind. A high grade caulking material, such as silicon rubber, should be used.
8. Properly attach fixture to conduit or junction box.
9. Junction Box Mounting: Fixture is provided with two (2) #8-32 x 1" threaded studs and two (2) hex nuts for attaching to junction box. To mount fixture to junction box, thread studs into appropriate junction box making sure several threads engage. Make sure input leads are pulled through knockouts in back of housing prior to attaching fixture to junction box. Align holes of fixture over threaded studs attached to junction box and push fixture tight to box until studs protrude through holes in housing. While holding fixture in place, thread hex nuts onto threaded studs inside housing and tighten. **Care should be taken not to pinch leads.**

### ELECTRICAL CONNECTIONS

1. Make electrical connections making sure fixture is properly grounded. See fixture label for supply wire temperature required.

**NOTE: ALL WIRE NUTS MUST BE RATED FOR 150°C.**

### SET BALLAST VOLTAGE

1. This fixture is normally equipped with a multi-volt ballast and is factory set to the highest voltage. If another voltage is desired:

Disconnect factory set volt lead and recap with same wire connector. Strip appropriate lead and connect to incoming hot lead using wire connector provided in label attached to leads.

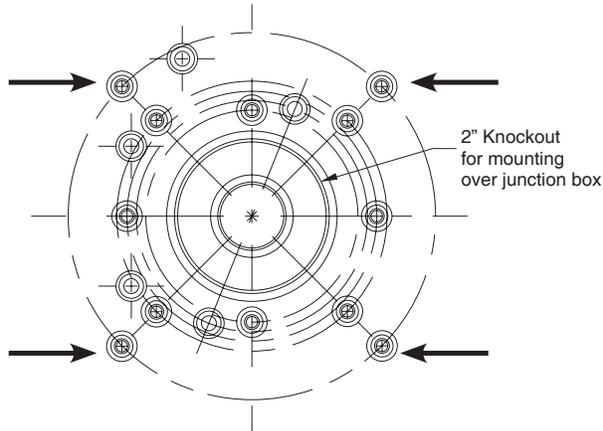
When this fixture is supplied with single voltage lead, please make sure the voltage furnished to the fixture is the same as specified on the unit.

# INSTALLATION INSTRUCTIONS SQUARE HID SECURITY

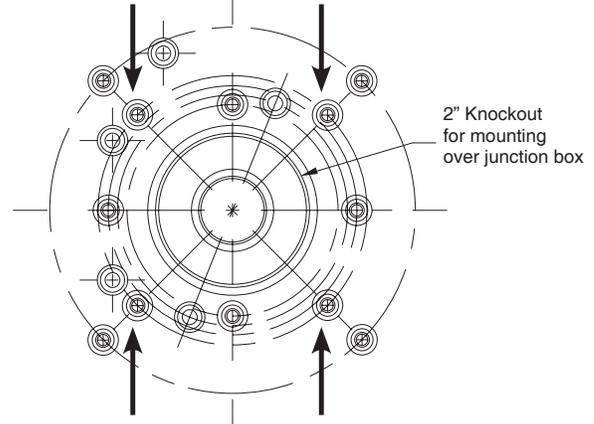
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- Reinstall lampholder bracket to housing bosses.
- Reinstall reflector by sliding one end under screw heads and snapping other side under reflector spring clips.
- Install lamp.
- Reinstall lens assembly by pushing lens firmly against housing while tightening screws on sides of housing. **Make sure lens clips have engaged lens latch by verifying that lens is securely attached to housing.**

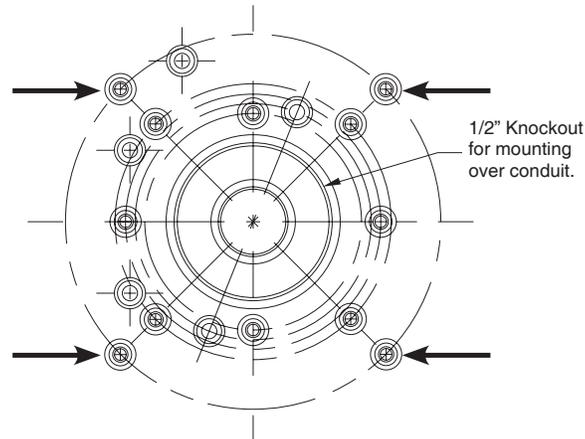
### 4" Sq. Junction Box



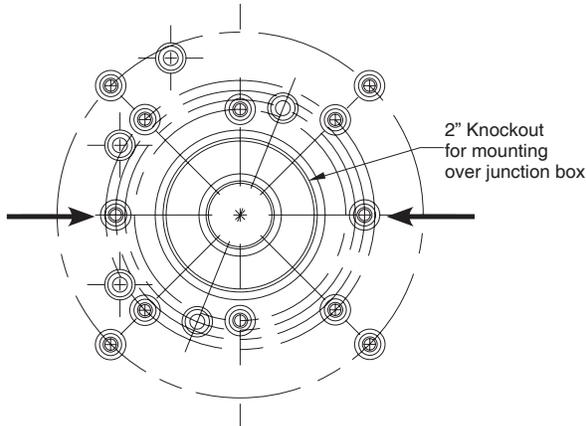
### 4" Octagonal Junction Box



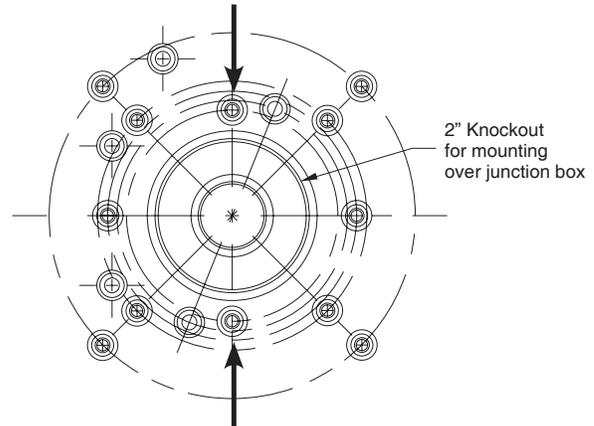
### Conduit Entry



### Single Gang



### Round Plaster Frame Box



Use two (2) #8-32 x 1" threaded studs and two (2) hex nuts (provided) to mount fixture to junction box. To prevent fixture from rotating when mounting to surface using conduit, use 4" sq. junction box holes and either #8 or #10 screws.  
**NOTE:** Knockouts on back wall of 8" fixture are located 1.6" above center line of fixture.

# INSTALLATION INSTRUCTIONS TROUBLESHOOTING BASICS

Document : CI308X65R0

Date: 2013-4-16

Drawing/Page: TMT

DCR#: 2013-138



## CAUTIONS:

### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To reduce the risk of electrical shock, turn off power supply before installation or servicing.
2. Always disconnect the X3 lead from the ignitor before measuring the output voltage of all High Pressure Sodium ballasts and ignitor based Metal Halide ballasts. High voltage starting pulses can cause damage to commonly used voltmeters.

### NOTE:

The voltmeter you use must read true RMS volts.

## SOCKET VOLTAGE TEST PROCEDURE

1. Measure input voltage (V1) to verify rated input voltage is being applied to the fixture.
2. Remove the lamp from the socket and apply proper voltage to the ballast. Read the voltage (V2) between the socket pin and shell; reading must fall within the test limits shown in the table. (See Figure 2.) If reading does not fall within the RMS test limits, contact customer service.

Figure 1

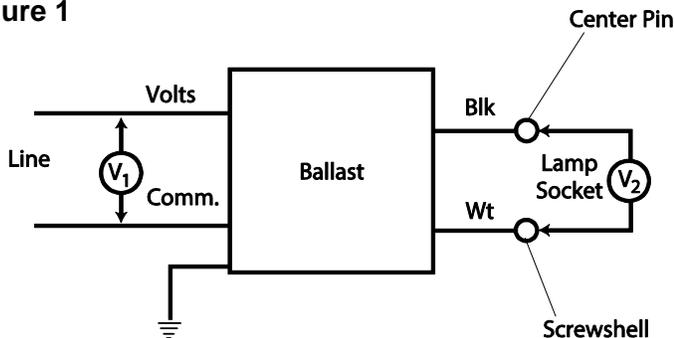


Figure 2

## SOCKET VOLTAGE TEST LIMITS TABLE

<u>Wattage</u>	<u>LAMP ANSI Number</u>	<u>Ballast Type</u>	<u>RMS Voltage</u>
<b>Metal Halide Ballasts:</b>			
50*	M110		230-280
70*	M98		255-305
100*	M90		240-290
125*	M150	CWA	200-250
150*	M102	CWA, Reactor	215-270
175	M57		285-320
175*	M152	CWA, Reactor	240-290
200*	M136	CWA	215-265
200*	M136	Reactor	250-305
250	M58		285-320
250*	M153	CWA, Reactor	240-305
320*	M154	CWA, Reactor	240-305
350*	M131	CWA, Reactor	240-305
400	M59		285-320
400*	M155	CWA, Reactor	240-305
450*	M144	CWA	265-325
750*	M149	CWA	355-405
875*	M166	CWA	375-465
1000	M47		400-445
1000*	M141	CWA	380-460
1500	M48		400-445
*Pulse Start (ignitor used)			
<b>High Pressure Sodium Ballasts:</b>			
35	S76		110-130
50	S68		110-130
70	S62		110-130
100	S54		110-130
150	S55		110-130
250	S50		175-225
400	S51		175-225
1000	S52		420-480

# INSTALLATION INSTRUCTIONS TROUBLESHOOTING BASICS

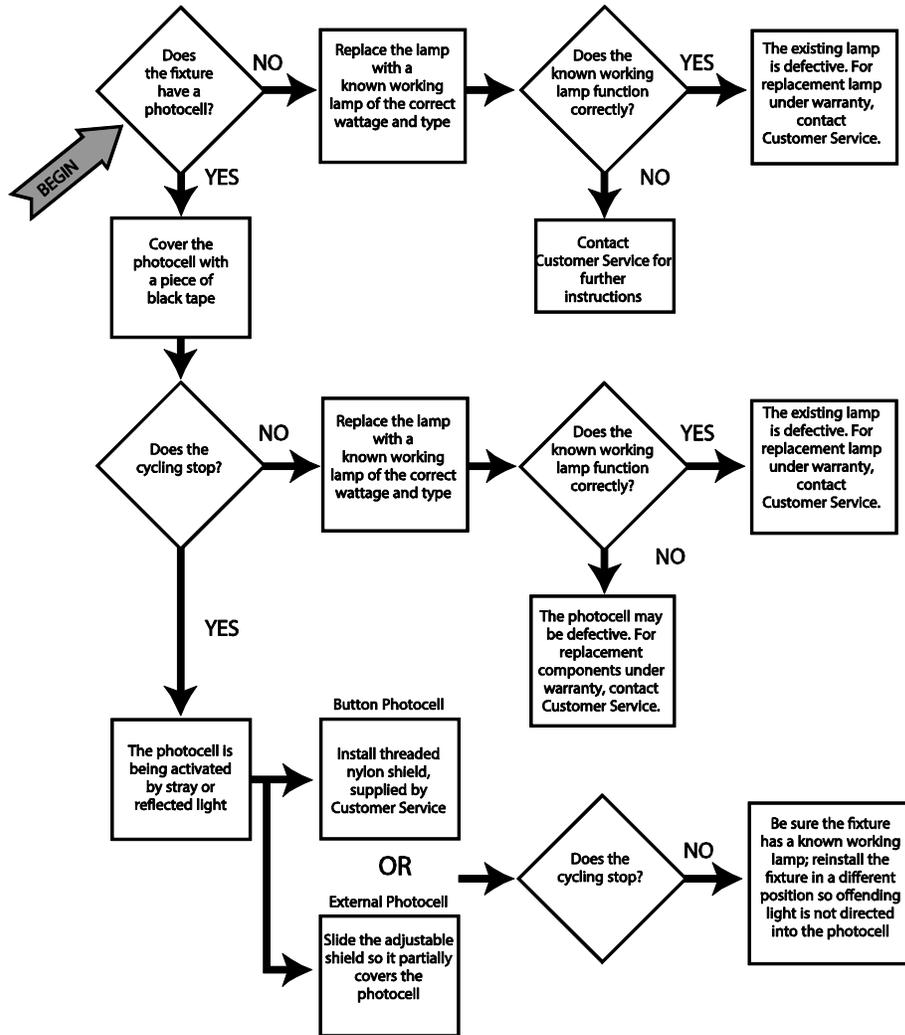
Document : CI308X65R0

Date: 2013-4-16

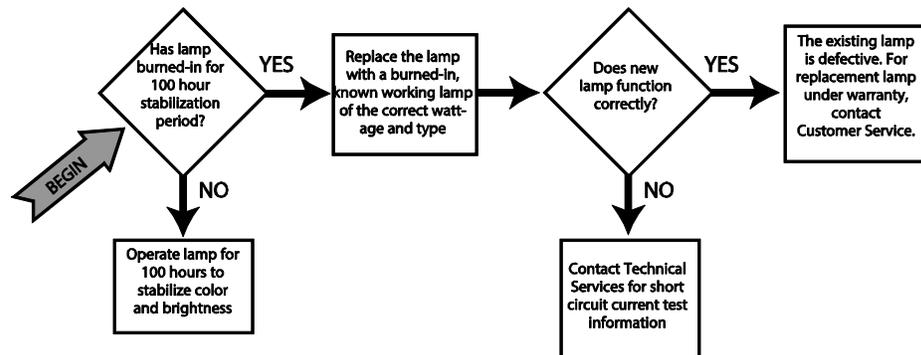
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**Problem:**  
The lamp cycles  
(turns on and off)  
after 100 hour burn-in



**Problem:**  
The lamp is too bright,  
too dim, off color, or  
is changing colors



See product catalog for warranty information

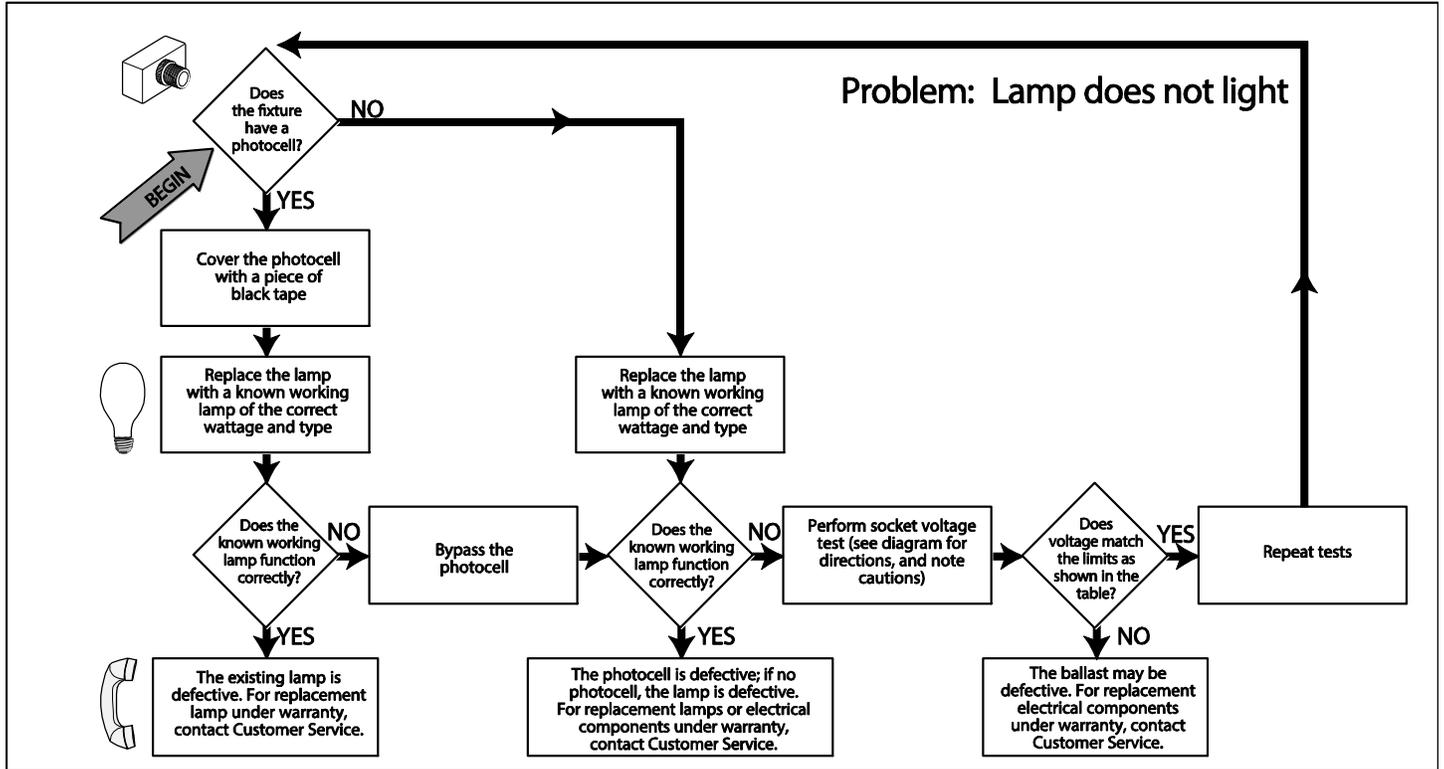
# INSTALLATION INSTRUCTIONS TROUBLESHOOTING BASICS

Document : CI308X65R0

Date: 2013-4-16

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DCR#: 2013-138

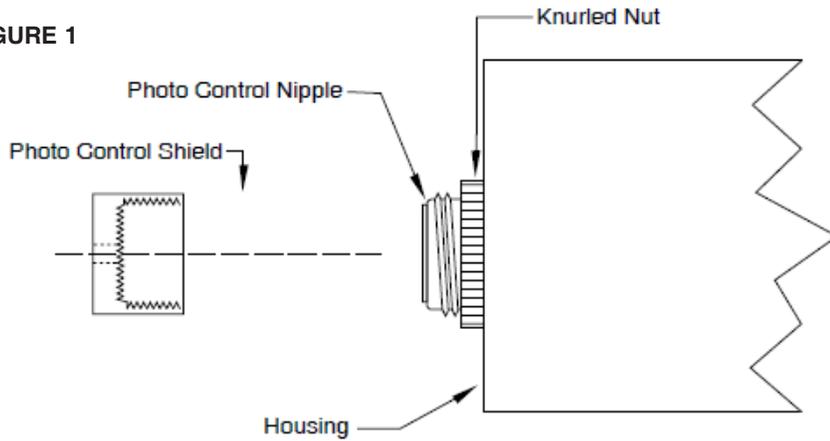


# INSTALLATION INSTRUCTIONS PHOTO CONTROL SHIELD

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Created By:	TMT	DCR#	2013-137



FIGURE 1



## CAUTIONS

### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To reduce the risk of electrical shock, turn off power supply before installation or servicing.
2. In continuously operating Metal Halide systems (24 hours/ day, 7 days/week), turn lamps off once per week for at least 15 minutes. Failure to comply increases the risk of violent lamp failure.

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE NOTES

1. Photo control, rubber "O" rings and knurled nuts are all fastened in place at manufacturing plant.
2. Photo control shield is packaged with lamp when supplied with security fixtures.

## SHIELD INSTALLATION

1. Screw photo control shield onto nipple of photo control. See Figure 1.
2. Turn shield until it is tight against photo control knurled nut.

NOTE: If fixture does not turn off, drill a slightly larger hole in the shield.