MAINTENANCE

**WARNING**
Always disconnect primary power source before opening fixture for inspection or service other than relamping.

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 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 globe and reflector should be cleaned periodically to ensure continued lighting performance. To clean, wipe the reflector, then the globe with a clean, damp, soft cloth. If this is not sufficient, use a mild soap or liquid cleaner such as Colinite NCF or Duco #1. Do not use an abrasive, strong alkaline or acid cleaner. Damage to the reflector may result.

- Relamp high pressure sodium and metal halide fixtures as soon as possible when 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.

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AMV Adjustable H.I.D. Lighting Fixtures

**APPLICATION**

The AMV Adjustable H.I.D. Lighting Fixture may be used in areas classified as Class I, Division 2, 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.

AMV Adjustable H.I.D. Lighting Fixtures are designed for use in wet locations, industrial locations, indoors and outdoors where moisture, dirt, corrosion, vibration and rough usage may be a problem.

**INSTALLATION**

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

1. Install the mounting module in its support position. The mounting module can be pendant, ceiling (surface) or thru-feed mounted (wall and pole mounting is also possible when accessory AMV-KS is ordered).

2. Pull supply and ground wires through conduit and into mounting module.

3. The supply wire must be temperature rated as indicated on the fixture nameplate.
4. Check the ballast wiring and compare to the system wiring. Multi-volt (MT) and dual-volt (DT) ballasts are pre-wired for 277V. Tri-volt (TT) ballasts are pre-wired for 347V. Select line voltage lead of ballast that matches the field wiring voltage lead.

For multi-volt or dual-volt ballasts, if the line voltage is 277V, no changes need to be made. If other than 277V, cut insulation off 1/2" from end of proper line and strip insulation on wire to expose 1/2" of bare wire. Insulate the 277V lead.

For tri-volt ballasts, if the line voltage is 347V, no changes need to be made. If other than 347V, cut insulation off 1/2" from end of proper line and strip insulation on wire to expose 1/2" of bare wire. Insulate the 347V lead.

5. Connect fixture leads located in mounting module to incoming conductors using methods that comply with the National Electrical Code® or Canadian Electrical Code® and applicable local codes. Connect supply ground to fixture ground (green) lead. See Wiring Diagram section.

6. Engage ballast housing to mounting module by bringing one of the latches to the latch cavity of mounting module and using it as a hinge. The mounting module has four latch receiver seats so that the ballast housing can be attached at any 90 degree increment. Let ballast housing hang from the one hinge. (See Figure 4.)

7. Make the male connector from the mounting module to the female connector in the ballast housing. (See Figure 4.)

8. Swing the ballast housing up and engage the second latch into the latch cavity. Before closing latches inspect to ensure that no wires are pinched between the mounting module and ballast housing. (See Figure 5.)

9. Bring ballast housing up into mounting module so that it is evenly seated inside mounting module.

10. Close both latches at the same time by using a downward motion. (See Figure 6.)

11. Install lamp as specified on the fixture nameplate. AMV fixtures are supplied with a medium base lamp socket.

12. Install globe by placing over lamp and hand tightening onto threaded globe holder.

13. Slide reflector over globe.
14. Align the arrow on the rear of the reflector with the top center mark above the globe mounting ring and push to snap the reflector into place.

15. Rotate reflector by placing hands on both sides of the reflector and rotating the reflector to desired position. Reflector rotates 65 degrees from vertical in either direction.

16. Align the arrow on reflector with the top center mark or either of the 45 degree marks above the globe. Grasp reflector from behind and then carefully pull the reflector straight off. (See Figure 7.)

INTERLOCK SWITCH

The AMV fixture is provided with an interlock switch as a standard feature. This explosion proof rated switch disconnects electrical power to the fixture when the ballast housing is unlatched from the mounting module. The ballast mounting bracket depresses the switch plunger when the ballast housing is properly latched to the mounting module, closing the circuit.

WARNING

DO NOT DEFECT the switch(es) since this will result in the fixture being electrically alive when the person servicing the fixture believes it is electrically disconnected.

RELAMPING

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

1. Remove reflector following instructions under Reflector Removal section.
2. Unsnap both latches and let ballast housing hang down from mounting module, allowing switch to disconnet power.
3. Unthread globe for access to lamp.
4. Carefully remove lamp from fixture and replace with new lamp as specified on fixture nameplate.
5. Replace globe.
6. Before closing latches inspect to ensure that no wires can be pinched between the mounting module and ballast housing.
7. Bring ballast housing up into mounting module evenly so that it is evenly seated inside mounting module.
8. Close both latches at the same time by using a downward motion.
9. Replace reflector.

WIRING DIAGRAMS

Mounting Module Wiring Diagrams

High Pressure Sodium (HPS) - 100 watt (120/220/240V - 50/60Hz) 50, 70 watt (120/220/240V - 50/60Hz) 70, 100 watt (220/240V taps from MT ballast, 480) Metal Halide (MH) - 70, 100 watt (120/220/240V - 50/60Hz) 70, 100 watt (220/240V taps from MT ballast)

Ballast Housing Wiring Diagrams

High Pressure Sodium (HPS) - 50, 70 watt (220/240V - 50/60Hz) 70, 100 watt (120/220/240V taps from MT ballast, 480) 100 watt (120/220/240V - 50/60Hz) Metal Halide (MH) - 70, 100 watt (120/220/240V taps from MT ballast, 480)
4. Check the ballast wiring and compare to the system wiring. Multi-volt (MT) and dual-volt (DT) ballasts are pre-wired for 277V. Tri-volt (TT) ballasts are pre-wired for 347V. Select line voltage lead of ballast that matches the field wire voltage lead.

For multi-volt or dual-volt ballasts, if the line voltage is 277V, no changes need to be made. If other than 277V, cut insulation off 1/2" from end of proper line and strip insulation on wire to expose 1/2" of bare wire. Insulate the 277V lead.

For tri-volt ballasts, if the line voltage is 347V, no changes need to be made. If other than 347V, cut insulation off 1/2" from end of proper line and strip insulation on wire to expose 1/2" of bare wire. Insulate the 347V lead.

5. Connect fixture leads located in mounting module to incoming conductors using methods that comply with the National Electrical Code® or Canadian Electrical Code® and applicable local codes. Connect supply ground to fixture ground (green) lead. See Wiring Diagram section.

6. Engage ballast housing to mounting module by bringing one of the latches to the latch cavity of mounting module and using it as a hinge. The mounting module has four latch receiver seats so that the ballast housing can be attached at any 90 degree increment. Let ballast housing hang from the one hinge. (See Figure 4.)

7. Make the male connector from the mounting module to the female connector in the ballast housing. (See Figure 4.)

8. Swing the ballast housing up and engage the second latch into the latch cavity. Before closing latches inspect to ensure that no wires are pinched between the mounting module and ballast housing. (See Figure 5.)

9. Bring ballast housing up into mounting module so that it is evenly seated inside mounting module.

10. Close both latches at the same time by using a downward motion. (See Figure 6.)

11. Install lamp as specified on the fixture nameplate, AMV fixtures are supplied with a medium base lamp socket.

12. Install globe by placing over lamp and hand tightening onto threaded globe holder.

**WARNING**

Use fixture on grounded system. Make sure that the supply voltage is the same as marked on the fixture nameplate.

**CAUTION**

Use only lamp size, type and wattage as specified on nameplate of fixture.

**REFLECTOR INSTALLATION**

Reflector MUST be installed when operated in wet locations.

1. Slide reflector over globe.

2. Align the arrow on the rear of the reflector with the top center mark above the globe mounting ring and push to snap the reflector into place.

**REFLECTOR AIMING**

Rotate reflector by placing hands on both sides of the reflector and rotating the reflector to desired position. Reflector rotates 65 degrees from vertical in either direction.

**REFLECTOR REMOVAL**

Align the arrow on reflector with the top center mark or either of the 45 degree marks above the globe. Grasp reflector from behind and then carefully pull the reflector straight off. (See Figure 7.)

**INTERLOCK SWITCH**

The AMV fixture is provided with an interlock switch as a standard feature. This explosion proof rated switch disconnects electrical power to the fixture when the ballast housing is unattached from the mounting module. The ballast mounting bracket depresses the switch plunger when the ballast housing is properly latched to the mounting module, closing the circuit.

**WIRING DIAGRAMS**

**Mounting Module Wiring Diagrams**

High Pressure Sodium (HPS) - 100 watt (120/208/240V - 50Hz)
50, 70 watt (208/240V - 50Hz)
70, 100 watt (208/240V taps from MT ballast, 480)
Metal Halide (MH) - 100 watt (120/208/240V - 50Hz)
70, 100 watt (208/240V taps from MT ballast)

**Ballast Housing Wiring Diagrams**

High Pressure Sodium (HPS) - 50, 70 watt (208/240V - 50Hz)
70, 100 watt (120/208/240V taps from MT ballast, 480)
Metal Halide (MH) - 70, 100 watt (120/208/240V taps from MT ballast, 480)
MAINTENANCE

WARNING
Always disconnect primary power source before opening fixture for inspection or service other than relamping.

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• Relamp high pressure sodium and 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.

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INSTALLATION

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

1. Install the mounting module in its support position. The mounting module can be pendant, ceiling (surface) or thru-feed mounted (wall and pole mounting is also possible when accessory AMV-KS is ordered).

If pendant mounted, tighten set screw located in conduit hub. (See Figure 1.)

2. Pull supply and ground wires through conduit and into mounting module.

3. The supply wire must be temperature rated as indicated on the fixture nameplate.