**Installation Instructions**

**GENERAL SAFETY WARNING!**

Dangerous voltages exist within these fixtures and all precautions usually observed in handling high voltage equipment should be observed when replacing lamps, installing or otherwise servicing these fixtures.

**WARNING!**

To reduce fire and shock hazard: Disconnect power before servicing. Install and maintain fixture to meet all applicable codes. Ensure that fixtures and wiring are properly grounded. Read and follow all instructions, electrical data markers, lamp carton warnings and wiring labels before installing. Installation of fixture is to be preformed by a qualified, licensed electrician only. The installer of this fixture is responsible for safe, secure mounting suitable for the application. Once fixture is installed, give these instructions to the equipment owner.

**CAUTION!**

- High temperature tempered glass sometimes ruptures spontaneously.
- Install to minimize hazard of falling diced glass.
- This product is shipped in multiple cartons. Ballast/socket housings are shipped one per carton while reflector/lens assemblies and protective hulls are each shipped five to one per carton.
- To identify individual NEMA beam spreads the following cross reference chart is provided. "I.D." labels are located on the top of each reflector.

### Unpacking Instructions:

While unpacking, it is important to verify the location of all parts before discarding any packaging materials.

### Assembly Instructions: (See figures 1a, 1b, 1c, 1d)

Prior to assembly, use a marker to mark the optical assembly I.D. number on the ballast housing (or cover) for later reference.

1. **PROTECTIVE HULL INSTALLATION** (If no hull is included in your installation, go to step #3) Place keyhole slots in hull (A) over the mounting screws (B) and rotate the hull in a counter-close wise direction until it stops.
2. Place the gasket (D) (supplied with the hull) over the mounting screws inside the hull.
3. Place keyhole slots in reflector (B) over the mounting screws (E) and rotate the reflector in a counter-clockwise direction until it stops.
4. **1000 WATT HIGH PRESSURE SODIUM UNIT ONLY** (If fixture is not 1000W HPS go to stop #6) Remove the top two(2) (E) and the bottom two(2) (E) screws from the socket housing (C).
5. Place the black baffle (F) (supplied with reflector) into the reflector over the holes and loosely install the top and bottom screws to retain the baffle.
6. Place lamp support bracket (G) (provided in ballast housing hardware bag) directly under (2) screw heads inside the reflector (or baffle if 1000W HPS).
7. Tighten the (6) mounting screws (E). Minimum of 20 Inch lbs.
8. Install lamp.
9. Remove the lens assembly retaining screw (AD) & nut (AE) from the lens ring hinge.
10. Attach the lens assembly to the reflector by installing the screw through the clearance holes in the reflector bracket and lens ring bracket. Drive the screw (AD) into the nut (AE) until the end of the screw goes totally through the nut. Otherwise the nut may fall off.

### Mounting Instructions (See Figure 2)

This unit is supplied with a 5/8" or 3/4" x 2" bolt, nut, slit washer, and toothed washer for mounting to crossarm style (flat surface) mounting brackets. The bolt is captive but may be replaced with a longer, hex head bolt if required. A 5/8" bolt, S.A.E. 5 minimum or a 3/4" bolt, S.A.E. 2 minimum is required. A tenon adapter (Cat. No. 40245LS) is available for pole top mounting.

1. Use the aiming plate as a template and mark the center of the small hole on the crossarm (L). Note: Position the forward edge parallel to the crossarm mounting bracket.
2. Drill a .219” dia. hole through the steel crossarm at the location just marked. DO NOT drill through the aiming plate.
3. Using the supplied screw and nut, attach the aiming plate to the large galvanized nail to attach the aiming plate.
4. Remove the nut (AC), slit washer (AB), and toothed washer (AF) from the main fixture mounting bolt (M).
5. Secure the fixture to the crossarm by placing the main fixture mounting bolt through the toothed washer (AF), the horizontal aiming plate (K), and the hole in the crossarm.
6. Place the slit washer (AB) and nut (AC) on the main fixture mounting bolt and tighten to 150 ft. lbs. IMPORTANT: Parts must be assembled as shown in Figure 2.

### Mounting Notes:

- Ensure that the crossarm has adequate strength to support your desire number of fixture.
- SLS5010 mounting brackets are available when obstructions will not allow center fixture mounting on three-fixture brackets.
- DO NOT mount fixtures directly to concrete.
Wiring Instructions: (See Figures 2 & 3)

**WARNING!**
Units having two or more voltage taps: Remove the wirenut from the desired voltage lead and connect lead to supply conductor. Replace wirenut on unused voltage lead. Failure to replace wirenut on unused voltage lead will result in high voltage shock hazard.

**NOTE:** All wiring is to be done in the wiring compartment (H) at the rear of the ballast housing. Use minimum 90 C. SOWA. cord. (14/3 cord is required for fixture using 1500 watt lamps when fixtures are wired for 120V).

1. Loosen (6) cover screws (I) and set cover aside. Removal of green wire tether is not recommended.
2. Feed supply cord (N) into ballast housing through the wireway hole (O) in the bottom of the wiring compartment (H), through the properly sized rubber seal (P) and the center hole in the retaining plate (Q).
3. The end of the cord's outer jacket should not extend beyond 1" into the wiring compartment.
4. Tighten the (2) screws (R) to retain the supply cord.
5. Connect supply power leads to ballast primary leads in accordance with local and NEC Codes.
6. Attach ground lead to green ground screw inside wiring compartment and replace cover (J), ensuring that no wires are pinched inside housing.

Target Aiming Instructions: (See Figures 2, 4A, 4B, 4C)

(Aiming Sight “SLSAIMINGSIGHTAXL” to be ordered separately)

1. Install aiming sight bracket (S) in the socket housing (C) as shown in Figure 4a. Ensure alignment to boss (T).
2. Loosen main fixture mounting bolt (M) add socket housing retaining bolt (U).
3. Look through the hole at the outermost end of the aiming sight bracket.
4. Align center of hole with the top left edge of lens door retaining latch (V) as shown in Figure 4b.
5. Aim the fixture by aligning the hole and the left edge of the latch with the desired aiming location. See Figure 4c.
6. Tighten the main mounting bolt (M) to 150 ft. lbs. and the socket housing retaining bolt (U) to 35-40 ft. lbs.
7. Rotate the aiming/repositioning stop bracket (X) BACKWARDS until the stop rest firmly against the tab on the socket housing and tighten the retaining screw (W). (See Figure 1c).

Fast Aim Aiming Instructions:

NOTE: Target aiming is the IES preferred aiming method. Some minor adjustments may be required as with any preset aiming system.

To position the fixture horizontally: (See Figure 2)

1. Loosen main fixture mounting bolt (M).
2. Rotate the fixture to desired position using the horizontal aiming indicator (Y) and the degree markings on the horizontal aiming plate (K).
3. Tighten the main mounting bolt (M) to 150 ft. lbs.

To position the fixture vertically: (See Figure 1c)

4. Loosen the screw (W) holding the vertical aiming/repositioning stop bracket (X).
5. Rotate the bracket to the desired position using arrow indicator (Z) on the ballast housing and degree markings on the bracket.
6. Tighten the bracket retaining screw (W).
7. Loosen the socket housing retaining bolt (U) and rotate the socket/ reflector assembly forward until it rests against the aiming stop bracket (X).
8. Tighten the socket housing retaining bolt (U) to 35-40 ft. lbs.

Up-Aiming Instructions: (See Figure 4A)

For aiming above horizontal, a drain hole knockout is provided on the back of the socket housing. To open the drain hole, place a flat blade screwdriver directly between the two indicator marks (AA) on the back of the socket housing and strike the handle of the screwdriver sharply with a hammer. The use of safety glasses is recommended.

Relamping Instructions:

1. Ensure repositioning stop (X) is set and loosen the socket housing retaining bolt (U).
2. Rotate socket/reflector assembly back to gain access to lamp compartment.
4. After relamping, reverse steps 2 & 3. Ensure proper seal of lens door gasket.
5. Tighten the socket housing bolt (U) to 35-40 ft. lbs.