

# INSTALLATION AND ASSEMBLY INSTRUCTIONS

## XARL Series

**WARNING:** Failure to follow instructions could result in damage to product and void warranties.

**WARNING:** Risk of fire or electrical shock. Disconnect power before installing or servicing.

### POLE INSTALLATION

The width and depth of the pole foundations for specific installations can best be furnished by consulting engineers familiar with local soil conditions. NOTE: The concrete foundation should be reinforced for the full depth below grade. Concrete should be poured in undisturbed soil; soil should not be fresh fill.

### ANCHOR BOLT INSTALLATION - SEE TABLE

Anchor bolts provided should be set into the foundation on an 11" diameter bolt circle (See Fig. 1). The bolts should project above the top of the foundation. Two nuts are provided for each anchor bolt for pole leveling. Stand pole on anchor bolts and plumb using the nuts and washers provided (See Fig.2). Install base cover, if provided.

ANCHOR BOLT INSTALLATION TABLE				
Configuration	Anchor Bolt Size	Anchor Bolt Projection	Base Plate	Base Plate Thickness
Single	3/4" x 30"	3-1/4"	10-1/8"	3/4"
D70, D180, Quad	1" x 36"	4"	10-1/8"	1"

### DIRECT BURIAL INSTALLATION

The pole shaft should be set to a depth of 4 feet into the concrete foundation. A hand hole, as well as a 3/4" half coupling, are provided for wiring (See Fig. 3).

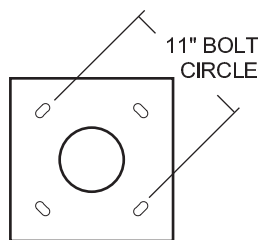


Figure 1

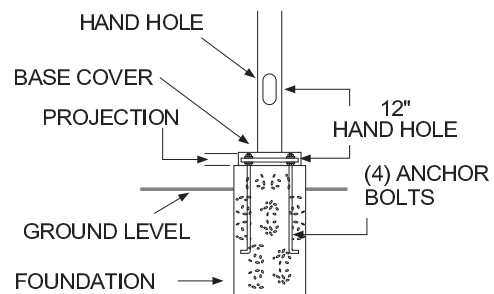


Figure 2

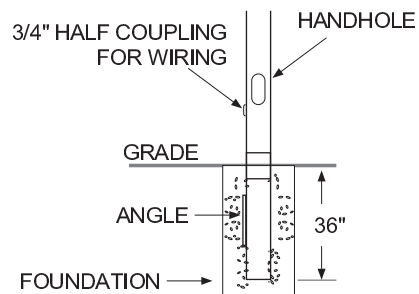


Figure 3

**WARNING:** Risk of electrical shock. Make certain supply wiring is not "hot" before wiring fixture.

- Connect wiring according to local codes and the National Electrical Code (NEC).
- Make certain line voltage corresponds with ballast's primary voltage. See ballast label.

**Note:** Field mounting connections are to be made in such a manner as to exclude water from wireway!

**TOOLS REQUIRED:** Socket wrench, 3/4" and 9/16" sockets, 6" socket extension, Phillips-head screwdriver, 1/4" socket-type Allen-head socket, torque wrench, fish tape, duct tape, clean cloth.

**PARTS IN KIT:** Arm, hub, 2 boot castings, 2 gaskets, hole plugs, and various fasteners.

## XARL Series, cont'd.

**WARNING:** Failure to follow instructions could result in damage to product and void warranties!

**WARNING:** Risk of fire or electrical shock. Disconnect power before installing or servicing.

**WARNING:** Verify the existing input voltage and ensure it matches input rating on luminaire's product label, located on inside of access cover.

**WARNING:** Before proceeding, read all instructions carefully to ensure proper and safe installation.

**WARNING:** Warranty is void if luminaire is tilted above or below horizontal!

**IMPORTANT:** This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

These tools are required: Size T-20 Torx driver, 3/4" socket & ratchet.

### LUMINAIRE PREPARATION

1. Remove top insert and place insert on work surface to protect finish.
2. Place luminaire - lens facing upward - onto work surface.
3. Remove access panel by turning access cover screw CCW (counterclockwise). Swing upwards, then remove from hinge at opposite end of cover. See Figure 1.

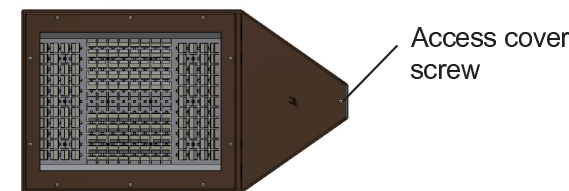
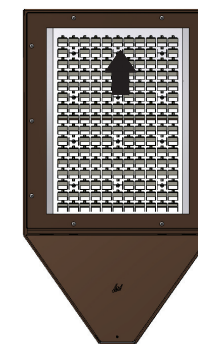


FIGURE 1

**IMPORTANT:** REFLECTORS ARE NOT ACCESSIBLE OR FIELD ROTATABLE!



XARL Type FT

FIGURE 2  
(Arrows indicate light output direction)



Listed to UL1598  
Suitable for wet locations



## XARL Series, cont'd.

### ASSEMBLING HUB & BOOT CASTING

1. The hub has seven 1/2" threaded holes, four 9/16" holes and two 3/4" holes. Plug holes not used. Place the hub on the ground on its tapered end, so the 3 threaded holes are nearest to the ground.
2. There are 2 boot castings; 1 has a stud protruding out mounting side. With this boot casting in one hand, round portion pointing upward, peel backing off one gasket and line up with holes in casting. Insert stud into top 9/16" hole of hub. Reaching inside the hub, thread a flanged nut onto stud. Insert a 1/2" bolt inside hub, and push through lower 9/16" hole, through other 9/16" hole of boot casting. The head of this bolt will fit between the ribs inside hub. Secure with flanged nut (See Fig. 4). Repeat for D180, D70, and Quad.

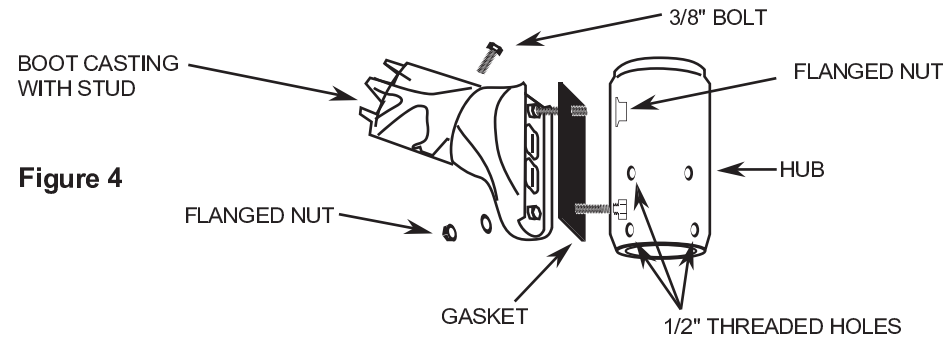


Figure 4

3. Place hub/boot casting assembly over top of pole, making sure stop inside hub bottoms out on pole end. Tighten the seven 1/2" set screws on outside of hub to 250 IN-LB. with 1/4" Allen-head socket and torque wrench.
4. Thread a 3/8" bolt to threaded hole on top of boot casting, so that 7-10 threads are still showing. Place arm over boot casting, sliding arm until it bottoms out on exposed bolt threads.

**Note: Make sure holes in arm are facing up!**

5. Locate hole in bottom of boot casting, on round portion near arm. Starting at this point, run fish tape through arm, out top. Note: Do not run fish tape through boot casting hole. Hook fish tape to arm end at approximately 2:00 o'clock position looking into arm end (See fig.5).

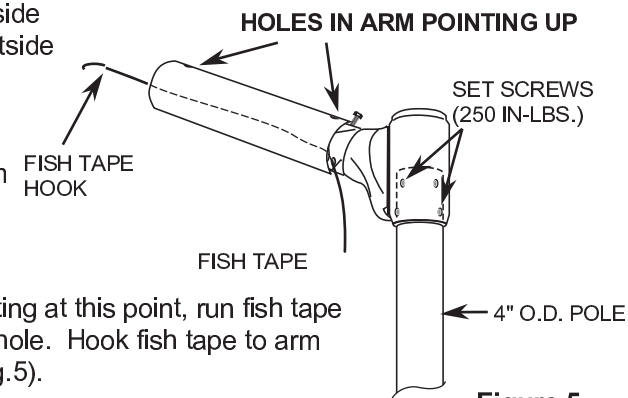


Figure 5

### PREPARING LUMINAIRE

1. With the other boot casting in hand, round portion facing upward, peel backing off gasket and line up with holes in casting. Feed fixture pigtail wires through center hole of boot casting. Slide boot casting over 2 studs from fixture arm. Secure boot casting to fixture with flanged nuts. Note: You will need to insert a flanged nut onto the 3/4" socket, onto the 6" socket extension, to reach the top stud inside boot casting. Thread a 3/8" bolt into threaded hole on top of boot casting, so that 7-10 threads are still showing. See Fig. 6. Repeat for each fixture.

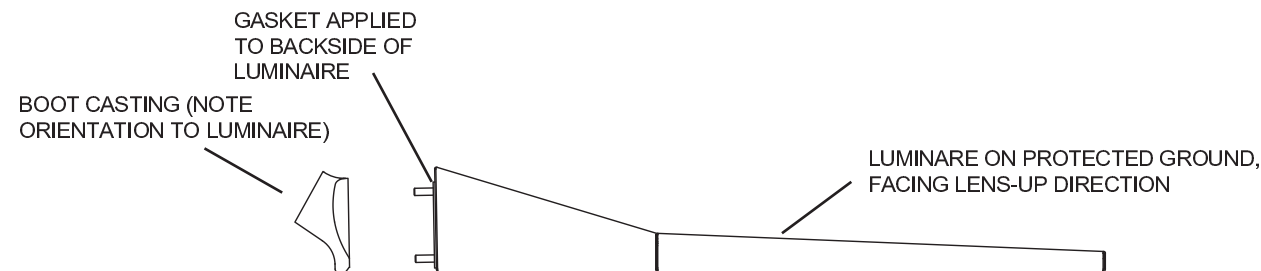


Figure 6

## XARL Series, cont'd.

### FINAL ASSEMBLY

1. Pick up luminaire/boot casting assembly, and flip so the luminaire lens is pointing towards the ground. Place round portion of boot casting into open end of arm, allowing the exposed bolt threads to rest on arm.
2. Pull fish tape further out arm. Using duct tape, secure end of pigtail wires to fish tape hook. Pull wires through arm from pole end. Remove duct tape, and feed wires through boot casting hole, through pole, and exit out top of hub. Make wiring connections. Press cap onto hub top hole.
3. Remove the two 3/8" bolts from the top hole in boot castings. Slide assembly together, so the arm ends bottom out against the boot casting ends. Rethread bolts in same holes with lockwashers, this time tightening with socket wrench and 9/16" socket. See Fig. 7.

**Note! Make sure 3/8" arm bolts are on top of arm, not bottom! Assembly will sag if bolts are on bottom!**

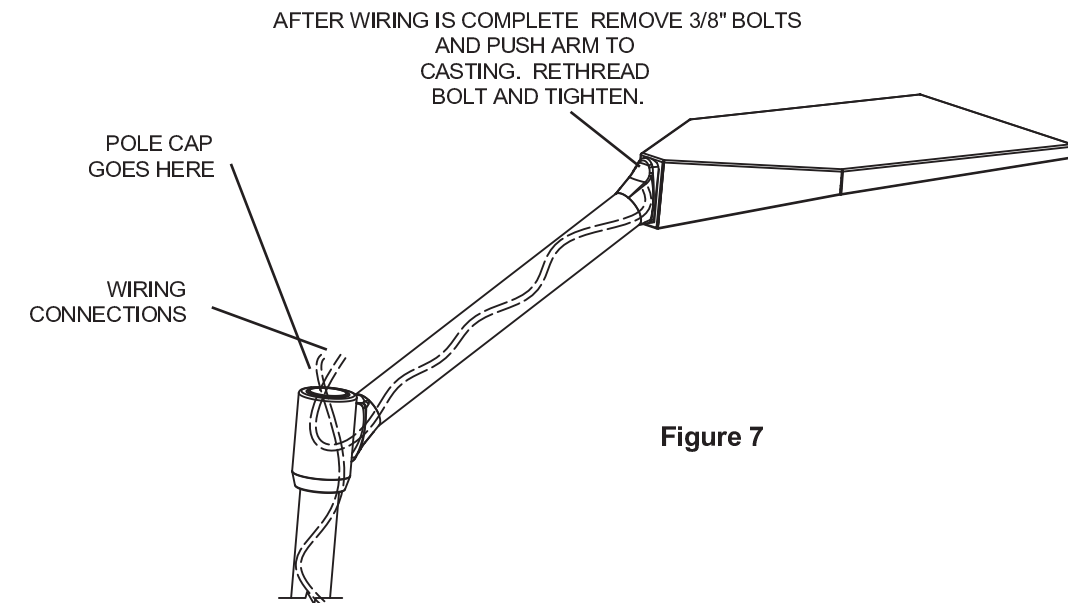


Figure 7

### FINISHING UP

1. Make supply wiring connections at handhole in pole. See Fig. 7.
2. Insert wiring connections into pole top.
3. Install pole cap to top of Hub.

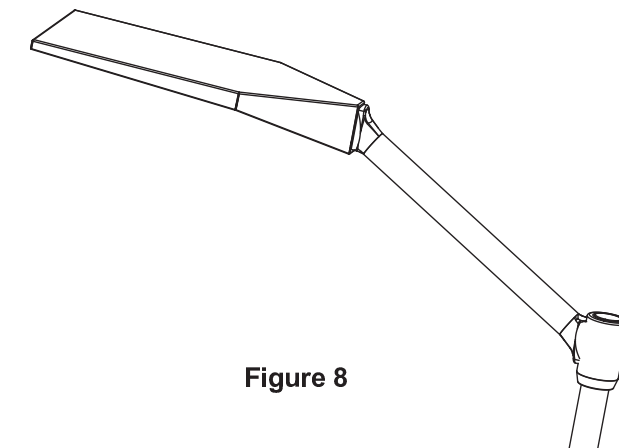


Figure 8



**Installation Questions?**  
Call LSI Field Service Department at:  
1-800-436-7800 Ext. 3300  
Fax: 1-877-861-1368