

SAVE THESE INSTRUCTIONS

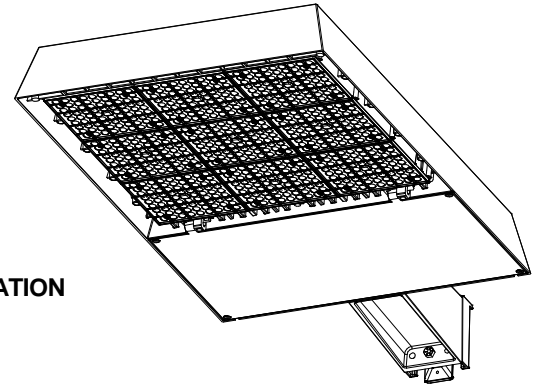


HUBBELL
Outdoor Lighting

**INSTALLATION
INSTRUCTIONS
RATIO AREA**

**RAR1
RAR2
RAR3**

READ THOROUGHLY BEFORE INSTALLATION



WARNING! Fixtures must be grounded and installed in accordance with the National Electrical Code and all local codes. Failure to do so may increase the **RISK OF PERSONAL INJURY, PROPERTY DAMAGE, FIRE AND DEATH**. Install and use so fixture failures do not cause a hazard and use only in environments for which the product is specifically marked.

WARNING! This product contains chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm. Thoroughly wash hands after installing, handling, cleaning, or otherwise touching this product.

CAUTION! Follow ALL luminaire recommendations, product markings, instructions, restrictions and warnings regarding luminaire operation and burning position. Luminaire label shows electrical and environmental requirements and restrictions.

All electrical work must be done by a qualified electrician.

Turn off electric power to all affected circuits and allow to cool before servicing.

A regularly scheduled maintenance program should be established to retain optimum light output and reduce heat retention. Dusting with a soft, clean, dry cloth is normally sufficient for the optical system. Any accumulation of dust or dirt should be removed regularly.

Carefully read these instructions before installing product. If you do not understand these instructions, before starting any work, contact your Hubbell Lighting distributor or techsupport@hubbell-ltg.com or (864) 678-1000

Give instructions to facility owner/manager for future reference.

NOTE:

This luminaire is designed for outdoor lighting applications with ambient temperatures not exceeding 40°C

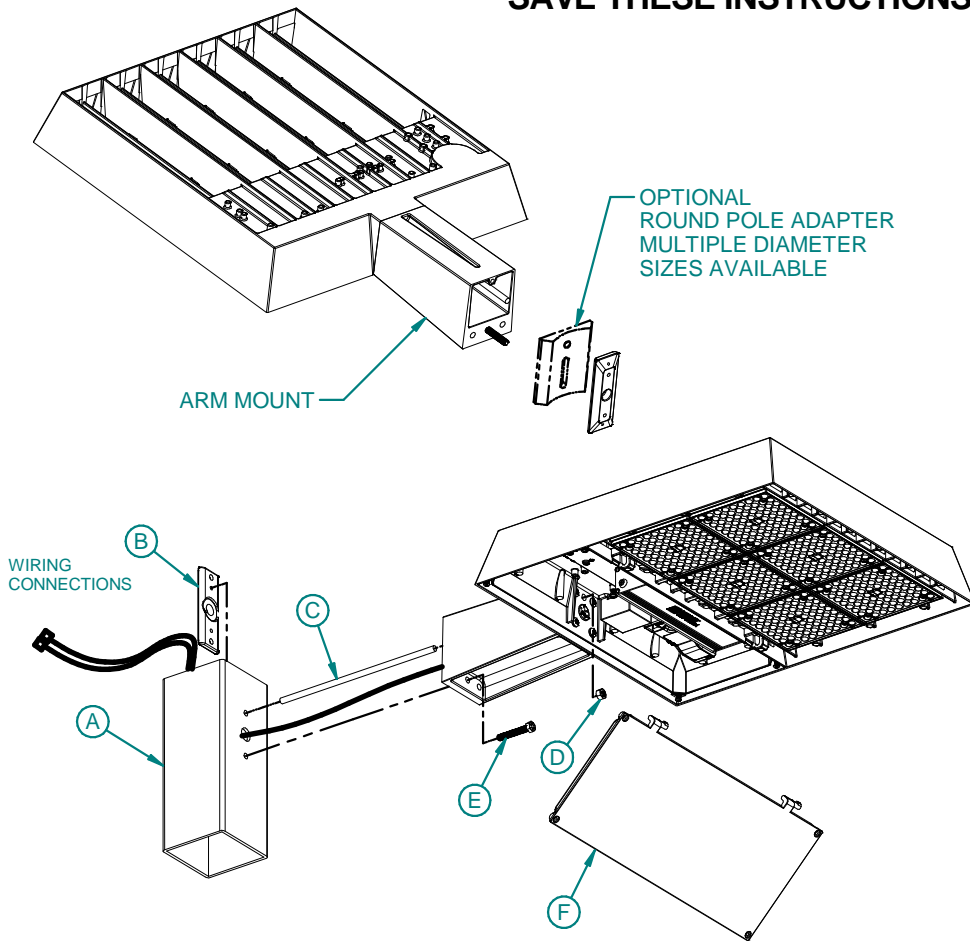
WARNINGS:

Dangerous voltage exist within the unit and all precautions usually observed in handling high voltage equipment should be observed when replacing light engine or otherwise servicing luminaires. Disregarding this warning could result in electrical shock and possible injury to the individual installing or servicing this equipment. Installation and servicing should be done by qualified personnel.

Tools Required: (check tools required to install specific mount type)

- Hex (Allen) Wrench - 3/16
- Hex Socket - 1/2 & 3/4
- Torx Driver - T-20
- Screwdriver - Flat Blade & Phillips

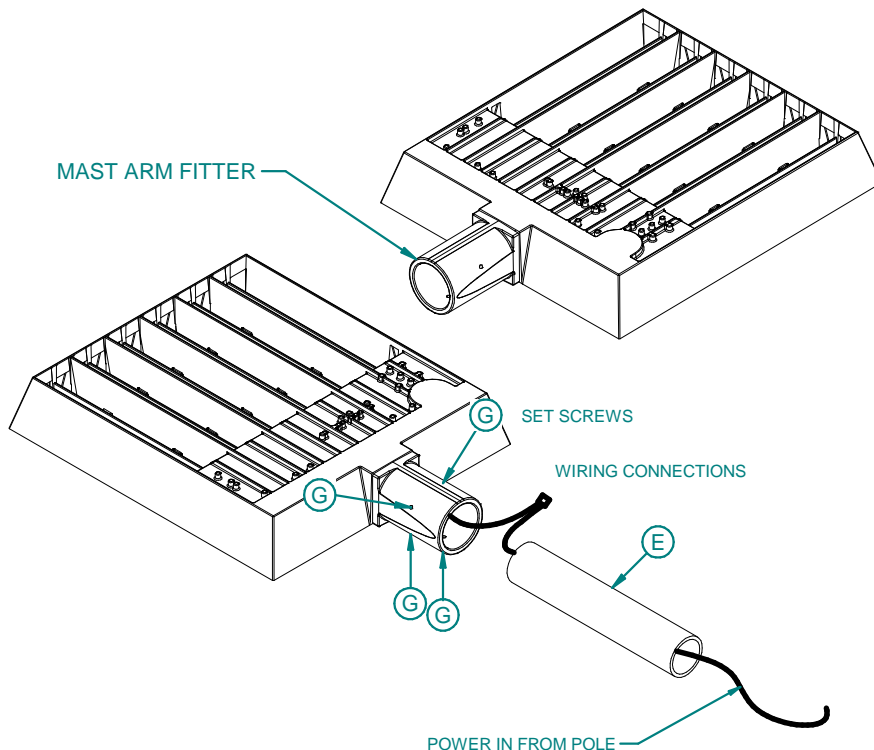
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Ratio Area Arm Mount

Fixture Installation:

1. Open the driver compartment door (F) by removing (4) 8-32 T-20 Torx fasteners.
2. Remove pole cap (not shown) and position nut plate (B) inside pole (A) at pre-drilled hole locations.
3. Insert 5/16-18 threaded rod (C) through the arm and fasten on the interior of the housing with a 5/16-18 nut, washer, and lockwasher.
4. Insert the opposite end of the threaded rod into the top hole of the pole drill pattern and thread into the top hole of the nut plate (B). Torque nut (D) to 10 ft-lbs.
5. Route fixture wire from the arm through the wireway hole into the interior of the pole, and then out the top of the pole.
6. Insert 5/16-18 hex bolt, washer, and lockwasher set (E) through the center hole located in the bottom surface of the arm, through the lower hole of the pole drill pattern and into the nut block (B).
7. Reinstall (if removed) the driver compartment door (F), close and secure (4) 8-32 fasteners.
8. Make power connections at the top of the pole and replace pole cap.
9. Ensure power is supplied to LEDs.



Ratio Area Mast Arm Mount

Fixture Installation:

1. Make power connections from the fixture wiring to the power feed wires. Route connected wiring into the pole mast arm and pole interior.
2. Attach fixture by sliding the mast arm fitter over the pole mast arm (E). Ensure wiring is not pinched between the Mast Arm Fitter and the pole mast arm.
3. Secure housing to arm by tightening (4) 3/8-16 set screws (G) using a 3/16 Allen Wrench. Torque to 12 ft-lbs.
4. Ensure power is supplied to LEDs.

NOTES:

For replacement LED Assemblies and Drivers please contact Hubbell Lighting for any replacement parts. Contact your local distributor or agent to confirm parts availability prior to ordering replacement parts.

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Ratio Area Knuckle Mount

Fixture Installation:

1. Make power connections from the fixture wiring to the power feed wires. Route the connected wiring into the interior of the pole through the tenon.
2. Attach the Knuckle to pole (E) by sliding the Knuckle onto the tenon. Tighten each of the (4) 3/8-16 set screws (G) using a 3/16 Allen wrench to approximately 12 ft-lbs.

Aim Adjustment:

1. Determine the desired vertical aim angle before attempting adjustments.
2. Notice that there are tick marks are at 15° intervals, plus long tick marks at 0°, 45° and 90°. The knuckle will actually allow finer adjustments to 4° per step.
3. Remove the center hub cover (H)
4. Notice the large 1/2-13 hex head bolt in the center of the hub acts as a pivot and should be loosened slightly for adjustment, but never removed.
CAUTION: secure housing assembly or obtain help holding and positioning the fixture while adjusting the aim.
5. Aim the fixture to the desired angle.
6. Once the aim angle has been completed, tighten the 1/2-13 Hex Head pivot bolt to 35 ft-lbs.
7. Replace the Knuckle cover (H).

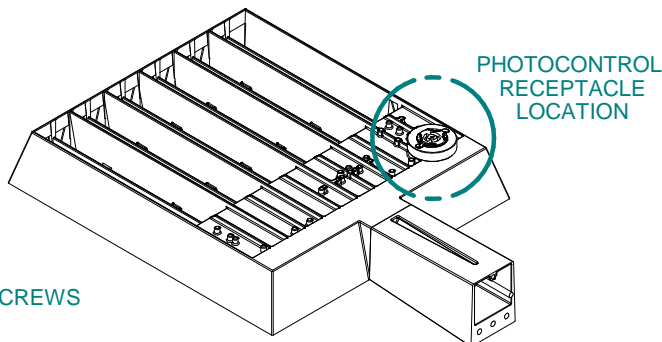
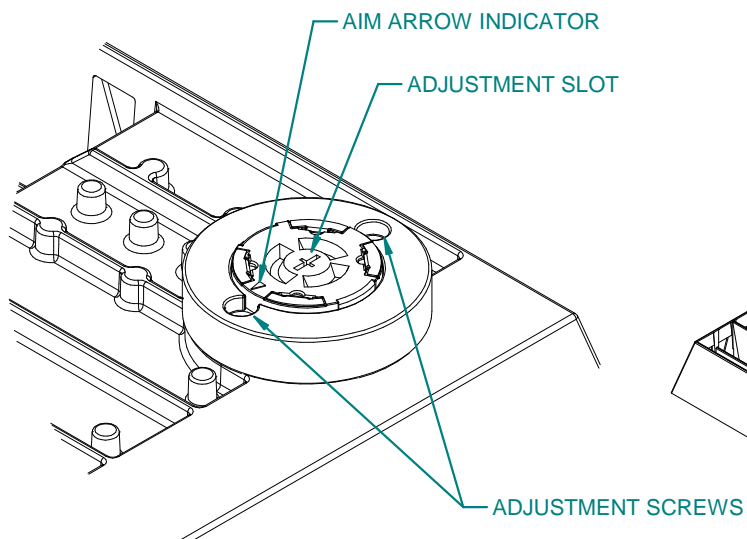
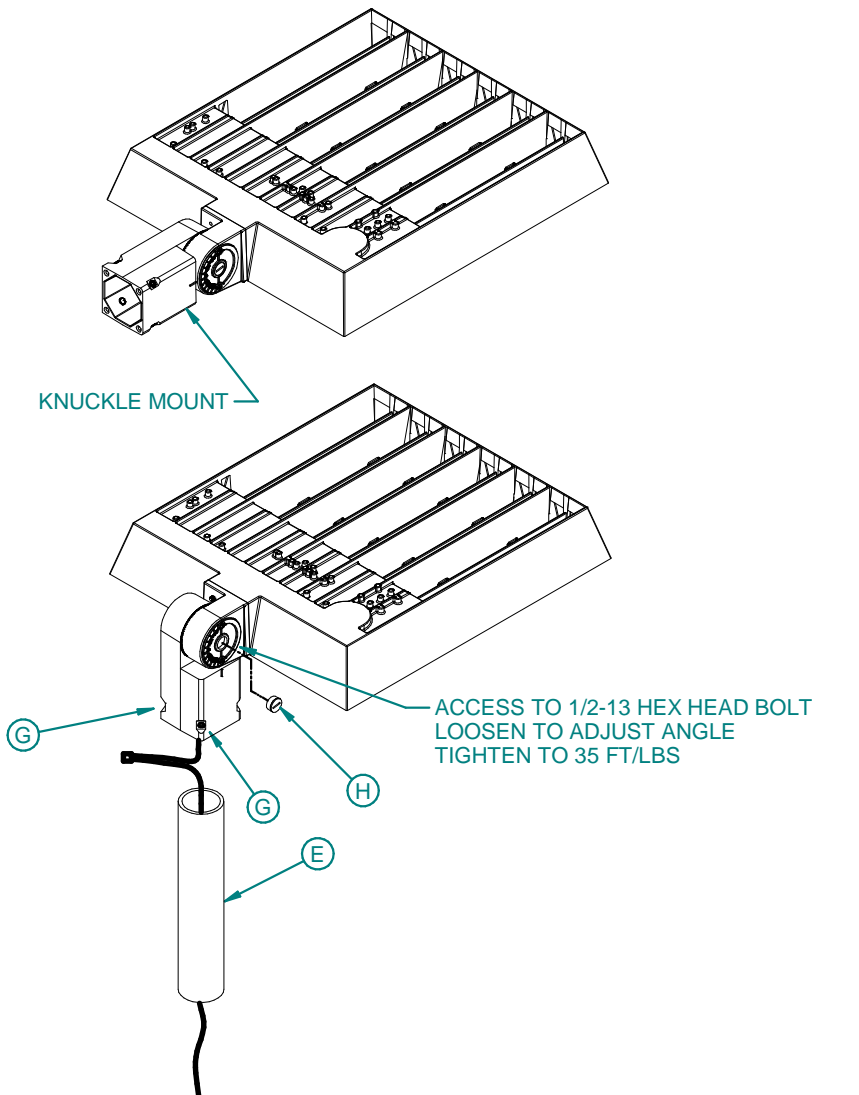
Photocontrol Orientation

NOTE: A photocontrol is not included with this fixture.

This orientation procedure is only necessary if adjustment is required to aim the photocontrol in a certain direction. Otherwise, the photocontrol will function properly with no adjustment required to the photcontrol receptacle.

Angle Adjustment:

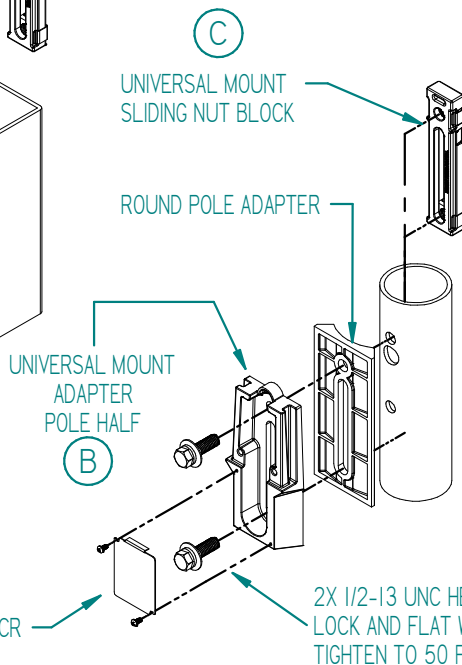
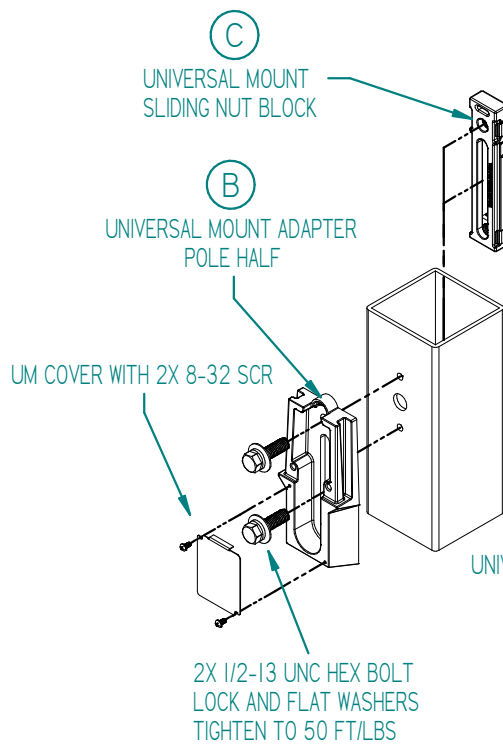
1. Remove shorting cap or photocontrol if installed.
2. Slightly loosen the two screws to allow rotation of the center section of the receptacle.
3. Insert a screwdriver tip into the adjustment slot located in the center of the the receptacle and rotate so that the arrow indicator points in the desired direction (usually north)
4. Sufficiently tighten two screws.
5. Install photocontrol into receptacle, twist and lock into position. Check to ensure photocontrol is pointing in the desired direction.



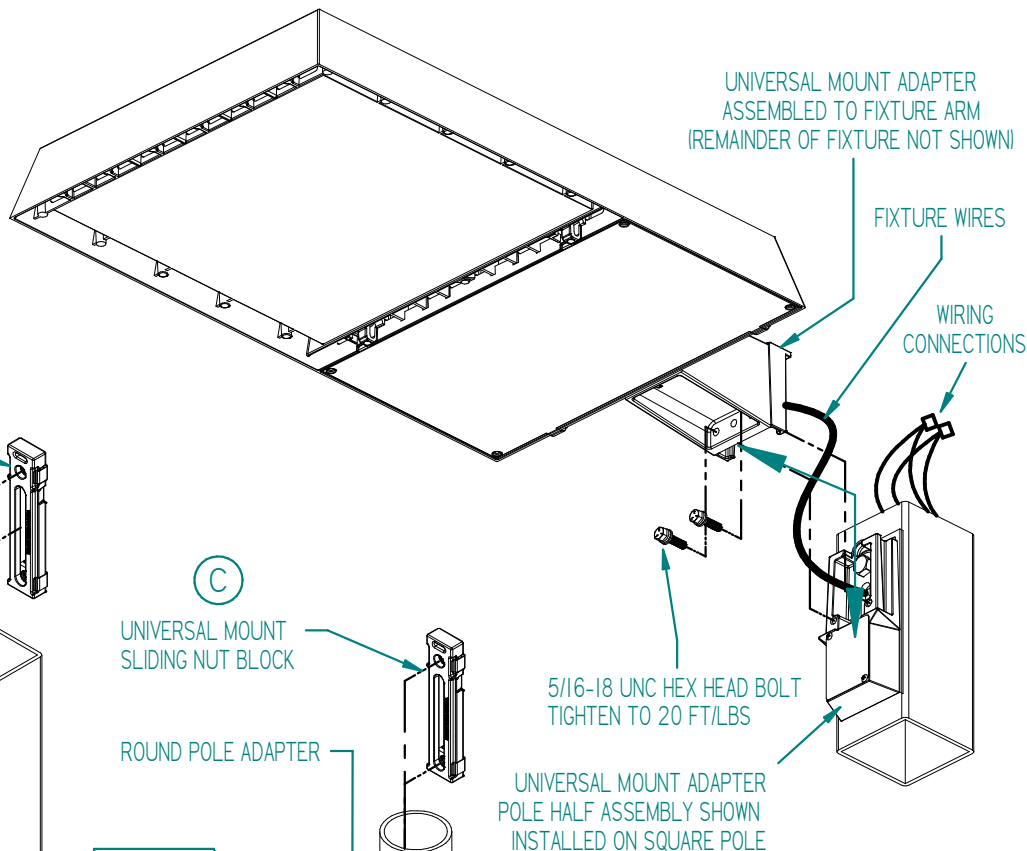
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UNIVERSAL MOUNT

SQUARE POLE



ROUND POLE



Universal Mount Assembly Instructions:

1. Feed fixture wires through wireway hole of UM adapter fixture half (A) and fasten to arm with 5/16-18 bolt and lock washer. Torque to 10 ft.-lbs.
2. Position the UM adapter pole half (B) against the pole aligning the top mounting hole to the top drill pattern hole in the pole. Position the round pole adapter (RPA) (D, previous page) as shown if required. The RPA is only required for round poles.
3. Lower the sliding nut block (C) into the inside of the pole noting the side of the block that fits against the pole wall.
4. Place one 1/2-13 bolt with lock and flat washer through the bottom hole in the adapter, RPA (optional) and pole. Finger tighten into the lower nut on the sliding nut block.
5. Place the second 1/2-13 bolt with lock washer through the top hole in the adapter, RPA (optional) and pole. Locate and tighten into the top nut on the sliding nut block.
6. Torque the (2) 1/2-13 bolts from steps 4 & 5 to 50 lb/ft.
7. Feed fixture wires through the adapter and pole so that they can be easily accessed for wiring when the arm is installed.
8. Position the fixture so that the UM adapter arm half is over the UM adapter pole half, flush against the pole so that the locking lugs in the fixture half engage the mating details in the pole half.
9. Secure with (2) 5/16-18 bolts through fixture arm and into threaded holes in the UM adapter pole half. Torque to 20 lb/ft.
10. Install the UM cover (E, previous page) and secure with (2) 8-32 button head screws. Torque to approximately 14 lb/in.
11. Consult fixture installation instructions to complete the installation.