



**SOLAR PARK LIGHT  
INSTALLATION MANUAL**  
& GUIDE FOR PROPER USE OF EQUIPMENT

# SOLAR PARK LIGHT INSTALLATION INSTRUCTIONS

## TOOLS NEEDED FOR INSTALLATION (Varies by type of install)

- Standard Hammer
  - Wrench Set
  - Drill
  - 8" Long 1/2" Masonry Drill Bits (if bolting to existing concrete)
  - Concrete Anchor Bolts or L Bolts for Concrete
  - Tamper Proof Hardware Tool Bits and Concrete Drill
- 
- Install the Solar Light within 3 months of delivery. Sealed lead acid batteries will self-discharge in storage. It is strongly advised that installation occur as soon as possible to insure maximum battery life is achieved.
  - Products stored outside must be fully covered with tarp. Wooden crates, cardboard boxes and identifying labels are not weatherproof and will deteriorate in the elements.
  - Be cautious when handling batteries as they are capable of generating hazardous short-circuit currents. Remove all jewelry (bracelets, metal watches, rings) before attempting to handle or disassemble batteries.
  - Batteries should be stored indoors at a recommended 68 degrees Fahrenheit for maximum shelf life.
  - Batteries should be installed no later than 3 months of delivery or battery warranties will be void.

### IMPORTANT

Fuses must be installed prior to raising solar light. See #'s 3 and 4.

## ASSEMBLY

Your Solar Light comes mostly assembled and is pre-wired for easy installation. See attached assembly drawings and follow the below steps for removing the top tray from the light housing and making the necessary connections. The Solar Light should operate the first night, however it may require a full day of peak sun and a week of "learning" to fully program the system for optimal performance.

### Be careful to protect the assembly when you are handling it.

1. Remove six (6) #10 x 3/4" SS Pan Head Torx Tamper-resistant screws.
2. Gently remove the top assembly (solar panel tray) and lay it next to the light housing. Keep in mind that the two components are attached by wires. (Figure 1.)
3. You will find two (2) 10AMP fuses in a bag taped to the top assembly - remove the fuses from the bag.(Figure 1A.)
4. **IMPORTANT:** Install the fuse into the holder attached to the battery. (Figure 1A.)
5. Install the fuse into the holder attached to the solar panel. (Figure 1A.) Make sure they are pressed in tightly. **WARNING:** If exposed to sunlight, solar panel is an active power source.
6. Press the test button on the controller and then press the Pole-Mounted push button. (Figure 2.)
7. The Solar Light™ light will activate and remain on for 5 minutes.
8. If there is sufficient daylight, the green light on the controller will light up, indicating the panel is providing a charge to the battery.
9. Set time on light on the Lighting Control Setting. See controller on page 10.
10. The Solar Light should be anchored to a minimum 4" thick concrete pad and the base plate edges should be located a minimum of 6" from the edges of the concrete slab. (Figure 3.)
11. Reference Figure 4 for concrete anchoring guidelines and Figure 5. for concrete anchoring steps.

## BATTERY

Be cautious when handling the battery as it is capable of generating hazardous short-circuit current. Remove all jewelry (bracelets, metal watches, rings) before attempting to handle or disassemble the battery from the unit. Consult your local municipal laws for information on recycling the battery. Do not place used batteries in the garbage.

## MAINTENANCE OF YOUR SOLAR LIGHT

Solar panels need to be clean and free from debris. Clean on an annual basis (or more often as needed) with water and a soft cloth or sponge using a mild non-abrasive soap and rinse well.

Figure 1.

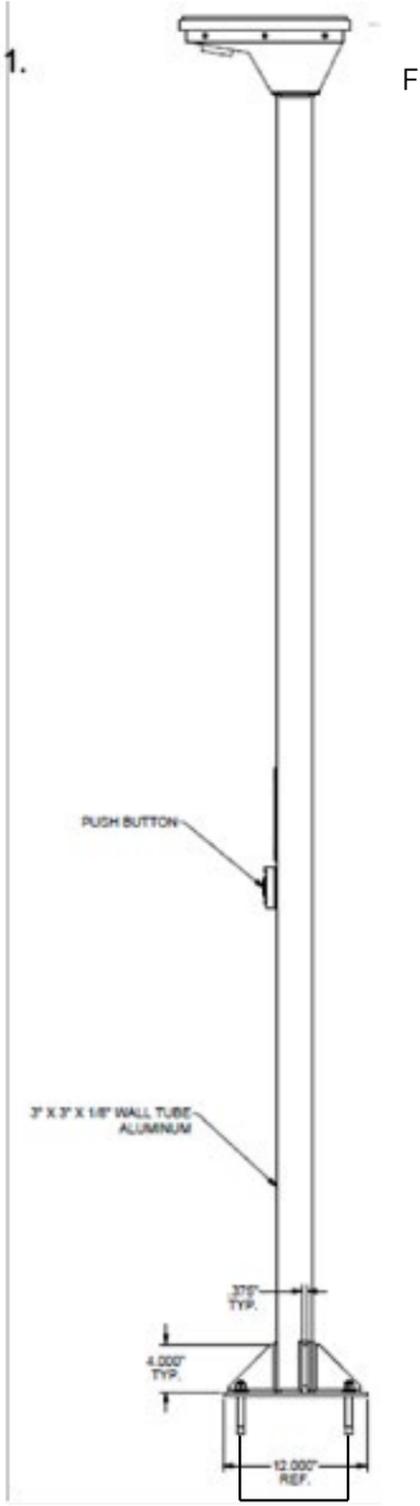
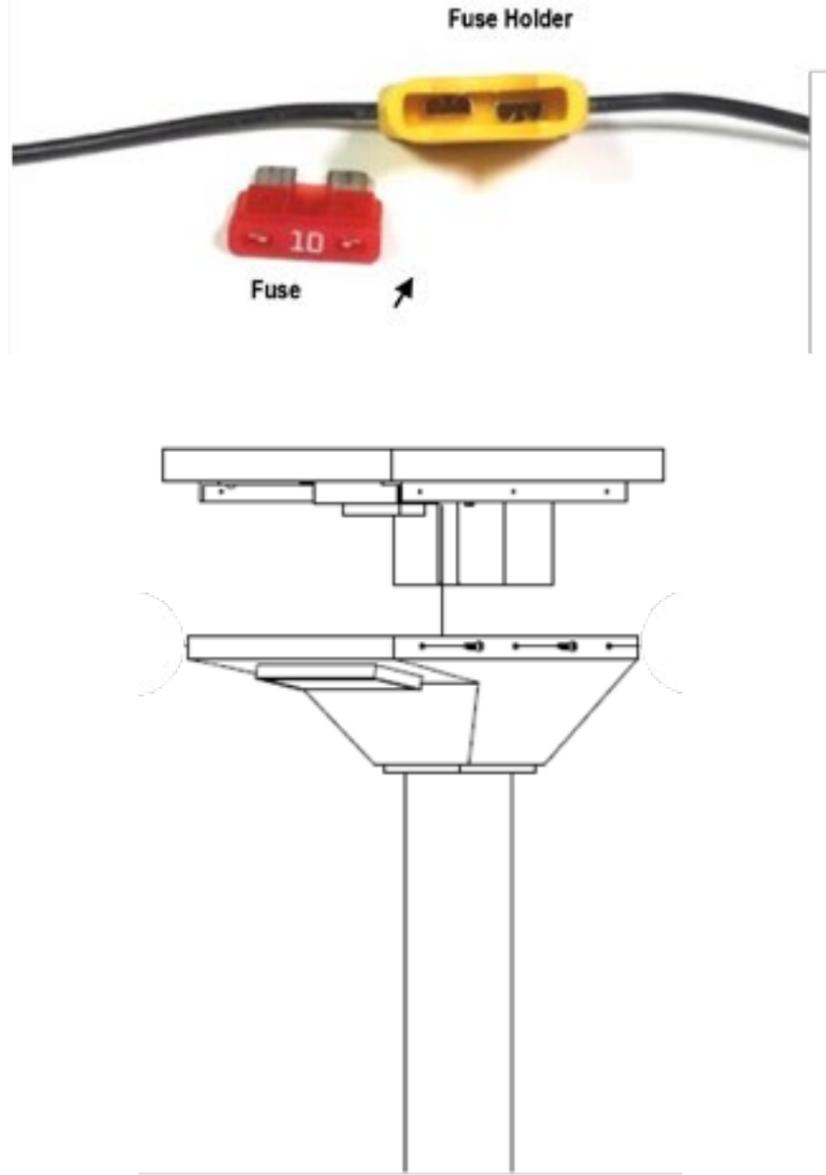


Figure 1A. Install two (2) fuses.



9" center on center

FIGURE 2

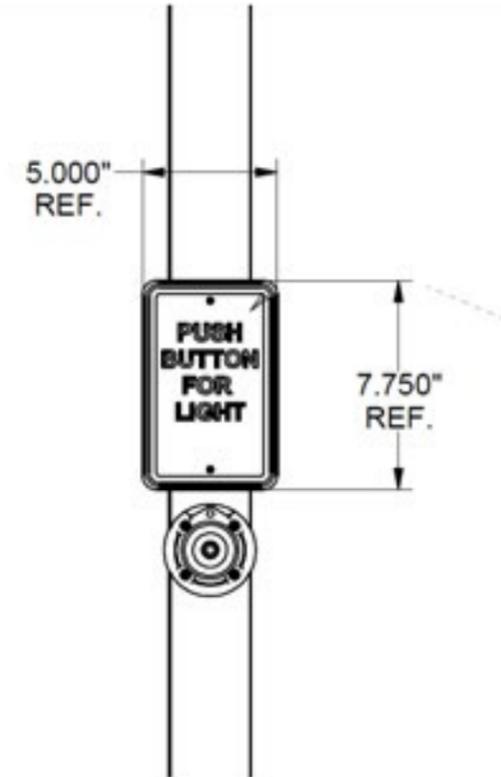
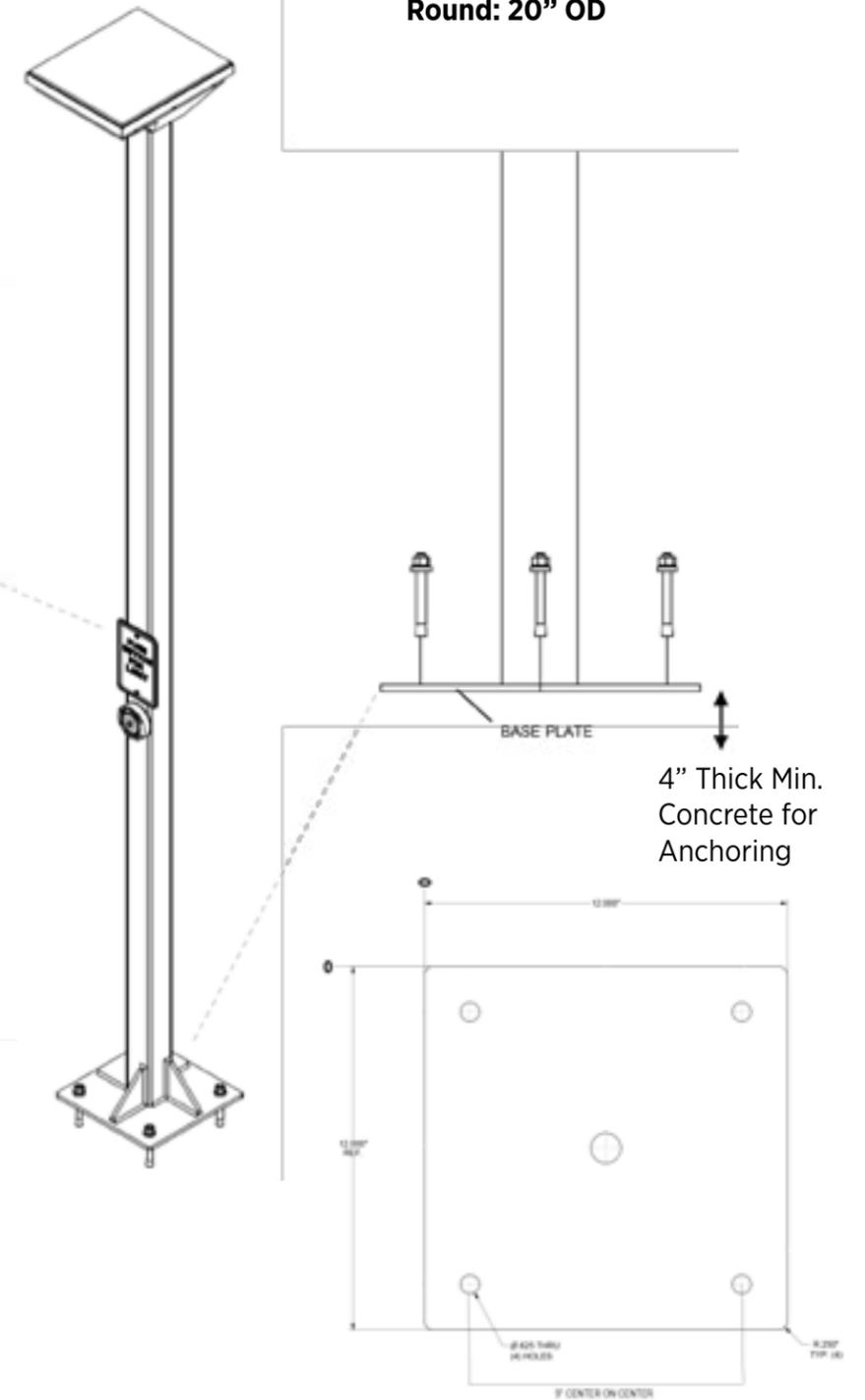


FIGURE 3

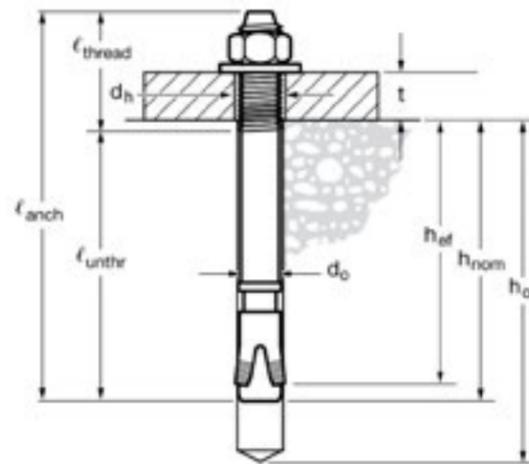


Footer Minimums:  
Square: 20" x 20"  
Round: 20" OD

Template size of plate

## Guidelines for Anchoring Expansion Anchors into Concrete

Expansion Anchor Installed

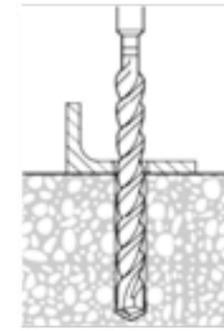


Expansion Anchor Technical Reference Chart

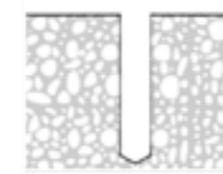
Setting information	Symbol	Units	Nominal anchor diameter $d_a$							
			1/2		5/8					
Nominal bit diameter	$d_h$	in.	1/2	5/8	5/8	5/8				
Minimum nominal embedment	$h_{nom}$	in. (mm)	2-3/8 (60)	3-5/8 (91)	3-9/16 (91)	4-7/16 (113)				
Effective minimum embedment	$h_{eff}$	in. (mm)	2 (51)	3-1/4 (83)	3-1/8 (79)	4 (102)				
Min. hole depth	$h_o$	in. (mm)	2-5/8 (67)	4 (102)	3-3/4 (95)	4-3/4 (121)				
Min. thickness of fixture	$t_{min}$	in. (mm)	1/8 (3)	n/a	1/8 (3)	n/a				
Max. thickness of fixture	$t_{max}$	in. (mm)	4 (101)	2-3/4 (70)	5-5/8 (143)	4-3/4 (121)				
Installation torque	$T_{inst}$	ft-lb (Nm)	40 (54)		60 (81)					
Fixture hole diameter	$d_h$	in. (mm)	9/16 (14.3)		11/16 (17.5)					
Available anchor lengths	$l_{anch}$	in. (mm)	3-3/4 (95)	4-1/2 (114)	5-1/2 (140)	7 (178)	4-3/4 (121)	6 (152)	8-1/2 (216)	10 (254)
Threaded length including dog point	$l_{thread}$	in. (mm)	1-5/8 (41)	2-3/8 (60)	3-3/8 (86)	4-7/8 (125)	1-1/2 (38)	2-3/4 (70)	5-1/4 (133)	6-3/4 (171)
Unthreaded length	$l_{unthr}$	in. (mm)	2-1/8 (54)		3-1/4 (83)					

Minimum thickness of fixture is a concern only when the anchor is installed at the minimum nominal embedment. When KWIK Bolt TZ anchors are installed at this embedment, the anchor threading ends near the surface of the concrete. If the fixture is sufficiently thin, it could be possible to run the nut to the bottom of the threading during application of the installation torque. If fixtures are thin, it is recommended that embedment be increased accordingly.

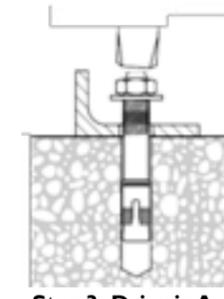
## Steps for Anchoring Expansion Anchors into Concrete



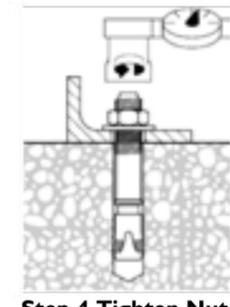
**Step 1. Drill hole.**  
Hammer drill a hole to the same normal diameter as the Kwik Bolt TZ. The hole depth must exceed the anchor may be used as a drilling template proper anchor location.



**Step 2. Clean Hole**  
Remove all debris and dirt from hole.

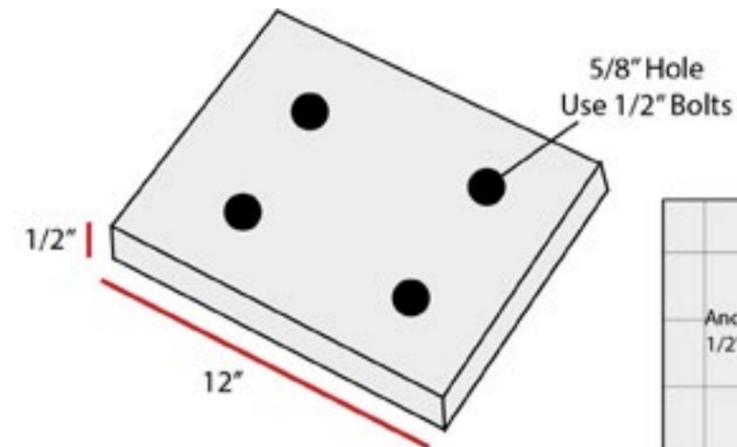


**Step 3. Drive in Anchor**  
Drive the Kwik Bolt TZ into the hole using a hammer. The anchor must be driven until at least 4 threads are below the surface of the fixture.

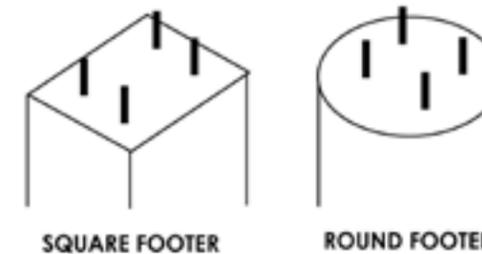


**Step 4. Tighten Nut**  
Tighten the nut to the recommended installation torque.

## Installing in New Concrete



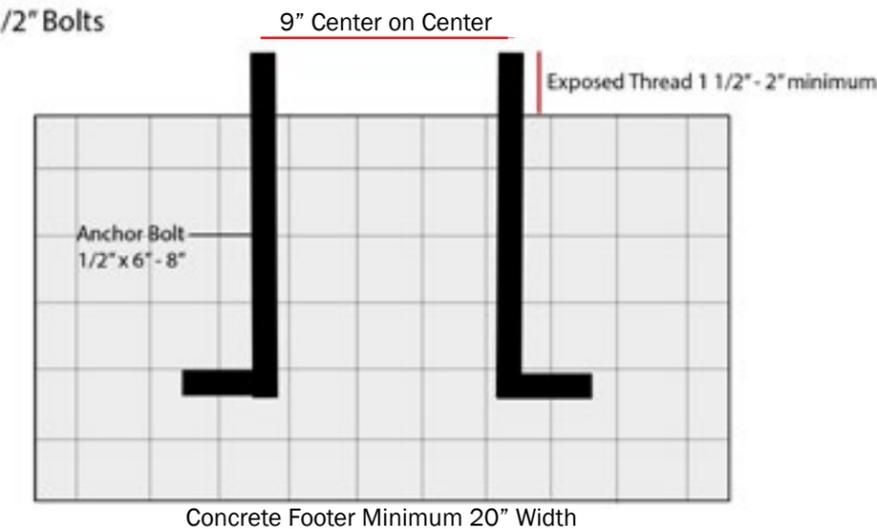
BASE PLATE TEMPLATE



SQUARE FOOTER

ROUND FOOTER

**CONCRETE MIX FOR FOOTER**  
Use a reliable high-strength (5000 psi) concrete mix.



It is advisable to use rebar mesh in the footer to reinforce and strengthen concrete.

Please consult with local engineers and architecture codes for recommended depth requirements for footers.

Depth requirements may vary based on soil conditions and foot lines.

## SOLAR PARK LIGHT START UP & TROUBLESHOOTING

Enclosed are start-up and troubleshooting instructions that need to be reviewed prior to installation or maintenance. Please use caution and follow standard safety procedures while handling your solar lighting system.

- Be cautious when handling batteries as they are capable of generating hazardous short-circuit currents. Remove all jewelry (bracelets, metal watches, rings) before attempting to handle or disassemble batteries.
- Batteries should be installed no later than 3 months of delivery or battery warranties will be VOID.
- Batteries should be stored indoors at a recommended 68 degrees Fahrenheit for maximum shelf life.



### Troubleshooting Instructions

**Step 1:** Check for a test button on the controller.

Some controllers are equipped with a test button. If you push the test button on the controller the lights should come on. If the lights come on, the unit is wired correctly. If the lights don't come on, then proceed to troubleshooting the wiring of the system further.

**Step 2:** Verify that the controller lighting setting (if equipped on your controller) is set correctly.

1. Some controllers are equipped with a switch or knob to control the lighting setting.
2. The controller should be factory preset to your requirements.
3. The controller lighting setting should never be turned to off.

**Step 3:** Check the surrounding area conditions.

Your solar lighting system needs sun. Sometimes trees, buildings, snow, streetlights or other objects interfere with solar lighting systems.

**Step 4:** Verify that the batteries are being charged and have enough power.

The battery should measure around 12.6 volts while charged and may read as much as 14 volts while it is charging. If the battery is not reading the correct voltage, the battery may need to be charged or replaced.

**Step 5:** Verify that the solar panel is sending power to the controller during the day.

The solar panel should measure around 19 volts or 20 volts while charging. If the solar panel is not reading the correct voltage, the solar panel may need to be repaired or replaced. There may also be area conditions contributing to the issue (see above Step 3). Additional troubleshooting of the wiring may be required.

**Step 6:** Verify that the light is working.

Remove the positive (+) light wire from the terminal strip and touch it to the positive (+) terminal for the battery. The light should turn on. If it doesn't turn on then the light may need to be repaired or replaced.

***The push button is a touch-sensitive button and does not require complete depression.***

**Start-up Instructions**

**Step 1.** Install the system following the proper order listed below.

If the solar lighting system that you received is not completely wired before shipping then make the appropriate connections. If the system is pre-wired, skip to step 2. Attach the (-) and (+) wires to the battery/batteries and to the proper terminals on the controller. Attach the (-) and (+) wires from the solar panel to the controller. Attach the (-) and (+) wires from the light fixture to the controller.

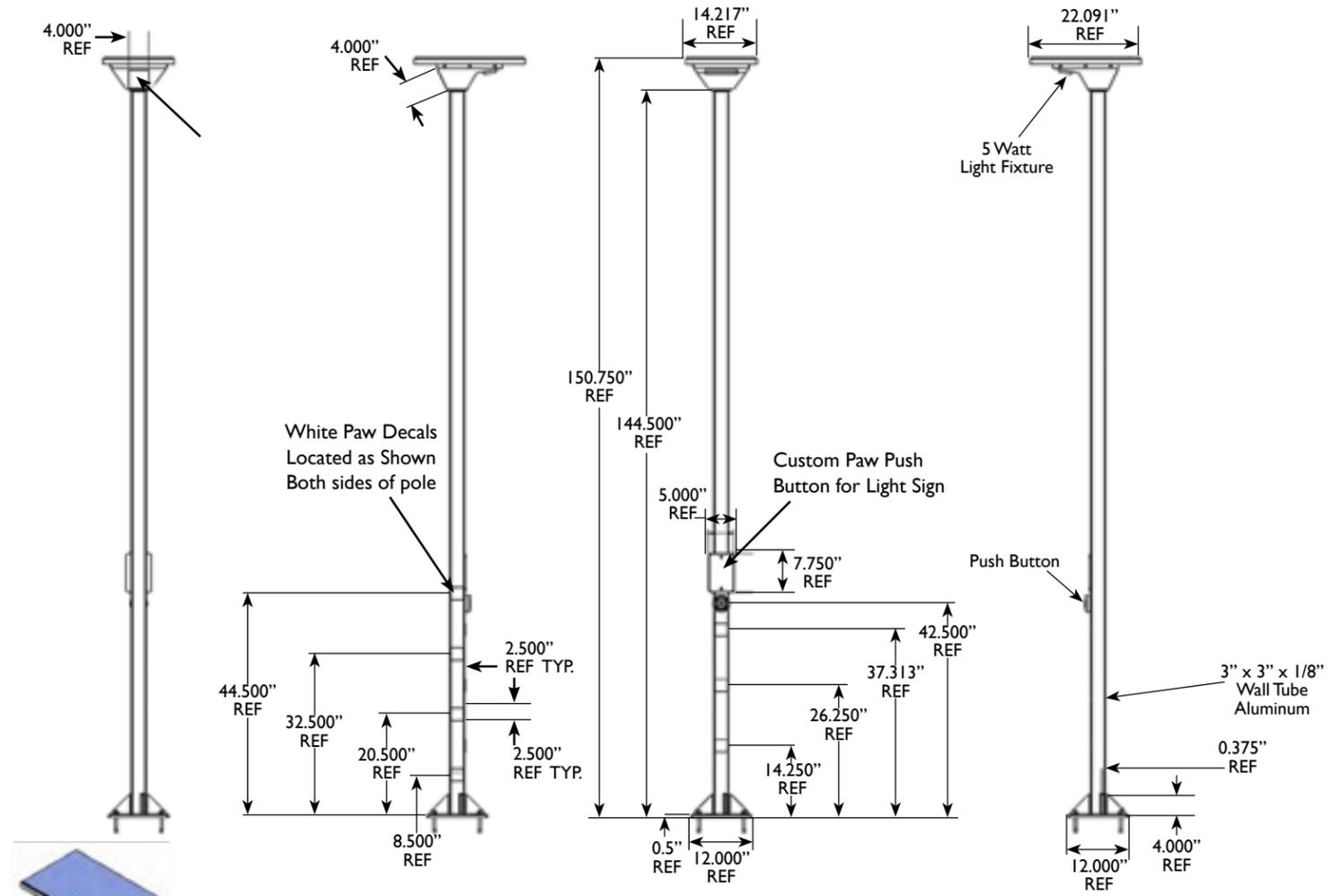


**Step 2.** Install the fuses following the proper order listed below.

Remove the fuses that are taped to the inside of the lid or box. Install a 10A fuse into the fuse holder for the battery. Install a 10A fuse into the fuse holder for the solar panel. Install a 3A fuse into the fuse holder for the light fixture. Once the fuses are installed the indicator lights on the controller should run through the start-up sequence.

The green led should be lit if it's daytime indicating that the system is charging. You can push the test button on the controller to see if the light is working properly. If the indicator led doesn't light up or the light fixture doesn't light up then proceed to the troubleshooting steps to resolve the issue.

Fuse and Fuse Holder



**SPECIFICATIONS:**

- Powder coated aluminum structure
- Push Button with sign plate (custom paw "pree light" sign decal)
- White paw decals on pole and base plate
- Custom light fixture dog park decal

ARTWORK FOR ALL DECALS TO BE PROVIDED BY CUSTOMER



For product information and other product needs, contact us:

[sales@GymsForDogs.com](mailto:sales@GymsForDogs.com)

800-931-1562

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