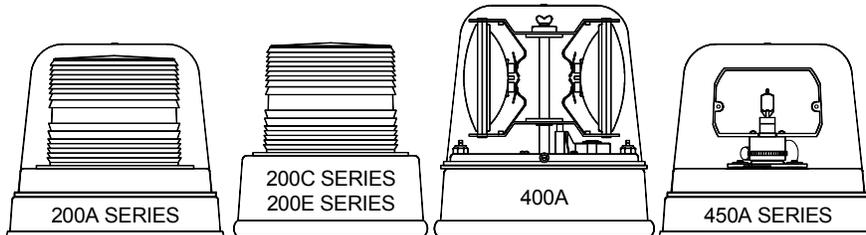


## INSTALLATION AND INSTRUCTION MANUAL



**CAUTION:** All of our DC powered warning lights are polarity sensitive. These lights are polarity protected *only if the appropriate fuse* is used. All wires connected to the positive terminal of the battery should be fused at the battery for their rated load. **Testing the light before this fuse is properly installed will void the warranty on the light.**

These lights are standard **negative ground**. Isolated or floating units for positive ground vehicles are clearly labeled and are available upon request. In this case connect the power to the proper polarity as marked on the wires.

### ONE YEAR LIMITED WARRANTY

The manufacturer warrants each new product against factory defects in material and workmanship for one year after the date of purchase. The owner will be responsible for returning to the Service Center any defective item(s) with the transportation costs prepaid. The manufacturer will, without charge, repair or replace *at its option*, products, or part(s), which its inspection determines to be defective. Repaired or replacement item(s) will be returned to the purchaser with transportation costs prepaid from the service point. A copy of the purchaser's receipt must be returned with the defective item(s) in order to qualify for the warranty coverage. Exclusions from this warranty include, but are not limited to, bulbs, strobe tubes, domes, and/or the finish. This warranty shall not apply to any light, which has been altered, such that in the manufacturer's judgment, the performance or reliability has been affected, or if any damage has resulted from abnormal use or service.

There are no warranties expressed or implied (including any warranty of merchantability or fitness), which extend this warranty period. **The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages, including costs of any labor, are not covered.** The manufacturer reserves the right to change the design of the product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights. You might also have additional rights that may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts. Some states do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitation(s) or exclusion(s) may not apply to you.

If you have any questions concerning this or any other product, please contact our **Customer Service Department** at (585) 226-9787.

If a product must be returned for any reason, please contact our Customer Service Department to obtain a Returned Materials Authorization number (RMA #) before you ship the product back. Please write the RMA # clearly on the package near the mailing label.

## Star Headlight & Lantern Co., Inc.

455 Rochester Street Avon, NY 14414

Phone: 585-226-9787 FAX: 888-478-2797

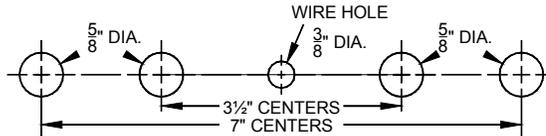


[www.starheadlight.com](http://www.starheadlight.com)

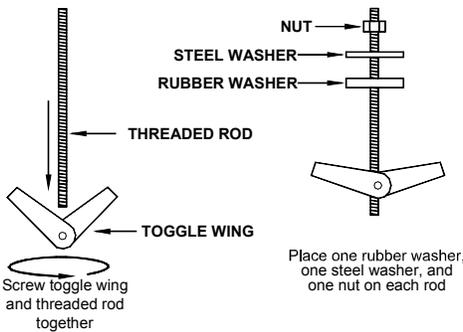
PLITSTR101 REV. E 9/16/11

## Mounting Toggle Wing Models

1. Your new warning light comes complete with a rubber mounting gasket, 2 toggle wings, 2 threaded rods, 2 neoprene washers, 2 steel washers, 2 nuts, and 2 self-locking nuts.
2. Mark two mounting holes on 7" centers for the 400A, and 450A Series or 3 1/2" centers for the 200C or 200E series and mark a spot for the wire hole centered directly between them.

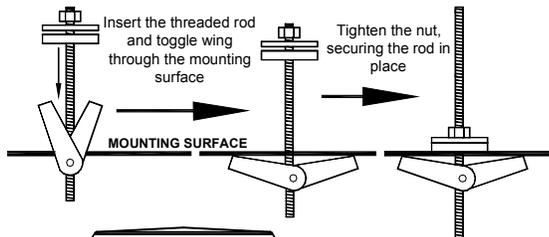


3. Drill a 5/8" hole in the outer two marked locations. Then drill a 3/8" hole in the center marked location for your wires to run through. **CAUTION:** Take care not to drill through the headliner of the vehicle.

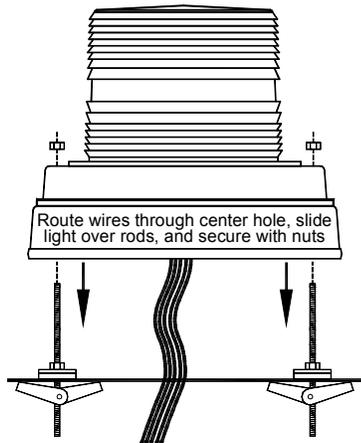


4. Attach the rubber mounting gasket around the base of the light.
5. Carefully remove the lens by removing the three screws at the base of the lens. Lift off the lens and remove it taking care to ensure you do not lose or destroy the lens gasket.
6. Attach a toggle wing to one end of one of each of the threaded rods.
7. Place the rubber and steel washers according to the diagram to the left.

8. Then push the toggle wing through the top of one of the outer holes in the mounting surface until it opens under the mounting surface.

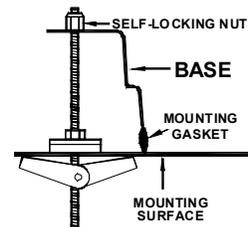


9. Tighten the nut down such that it seats the steel washer firmly against the rubber washer, and the mounting surface, holding the rod in place. Repeat this for each threaded rod.



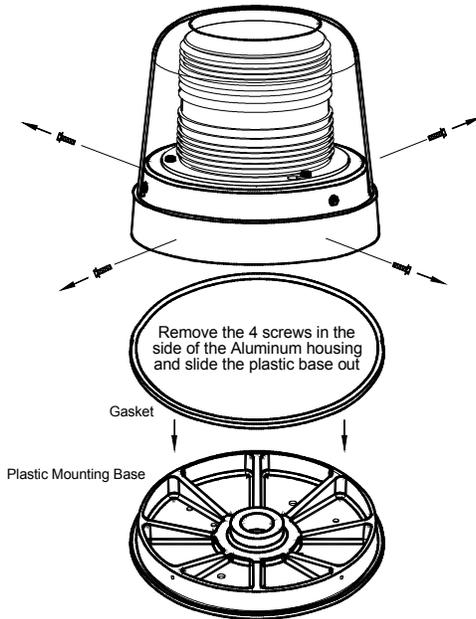
10. Route the wires through the center hole, align the outer holes in the base with the threaded rods and slide the base onto the rods.

11. Fasten one of the self-locking nuts to each of the threaded rods and tighten until snug.



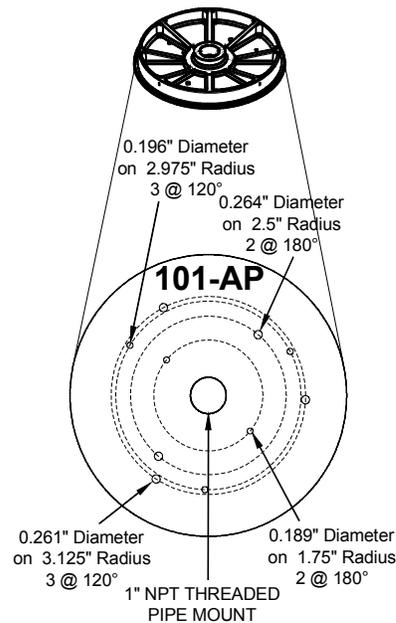
12. Once all of the nuts are tight and the base is secure, reattach the outer lens(es).

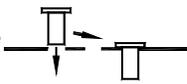
## Mounting Plastic Base Models



1. Remove the four screws in the side of the aluminum housing.
2. Slide the plastic base out of the aluminum case. Take care not to damage the gasket when separating the plastic base from the aluminum case.

3. Locate the various knockouts on the bottom of the base and determine which mounting holes will work best for your application. Clear the knockouts using a punch or other appropriate tool.
4. Using the plastic mounting base as a template, mark the appropriate holes on the mounting surface. Take care to ensure that the base does not move while you are marking each of the holes.



5. Remove the plastic mounting base and drill a 3/8" hole in the marked locations. Then, if applicable, drill a 3/8" hole for the wires in the center of the outer holes.  
**CAUTION: Take care not to drill through the headliner of the vehicle below.**
6. Push the enclosed rubber well nuts through the outer holes until the bottom side of the wider lip rests on the surface of the vehicle. 
7. Route the wires through the center hole, if applicable and align the holes with the well nuts. Install the screws through the base, into the well nuts, and tighten until snug.
8. Once the plastic mounting base is installed on the vehicle, you may replace the light on the base and reinstall the four screws that affix the light to the plastic mounting base.

## Wiring

1. For 110/120VAC models, the black and white wires may be connected either way (polarity is not important).
2. For all other models, the black or white wire on your light is the ground lead and should be connected to a good chassis ground.
3. The red wire on your light should be connected to the positive side of the power through a fused switch, checking your warning light for proper voltage and amperage.
4. If you are installing a single-flash, 12-48 VDC, or rotating model, you are now finished and may skip the remaining steps.
5. **For strobe models with a purple wire:**  
If your light comes with a purple wire, it has the ability to switch between Low and High power (if desired).

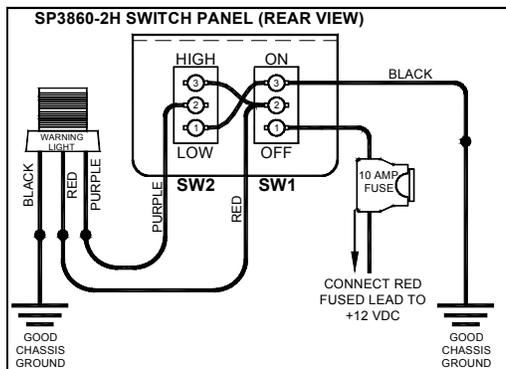
**To run on High Power Only:**

Connect the Purple wire with the Black wire to Ground.

**To run on Low Power Only:**

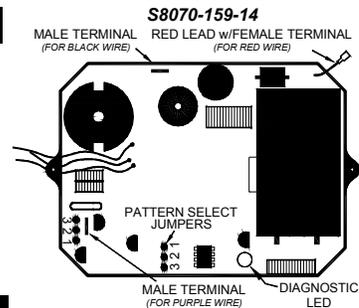
Disconnect the Purple wire (or cut it short and tape it off).

If you intend to make use of the High/Low option through a switch, refer to the wiring diagram to the right for proper connections using a two-switch switch panel available from Star. When the purple wire is grounded through your switch, the light will operate under High Power.



## LED Indicator

These lights also have an **LED Diagnostic Indicator**. The LED indicator is designed to flash when the strobe tube should be flashing. If a strobe light is not working, troubleshooting becomes easy with this new LED. Simply examine the circuit when power is applied to it. If the strobe tube is not flashing, but the LED is flashing, you have a bad strobe tube. If the LED is not flashing, the circuit is either not receiving the proper voltage, or the circuit has failed.



## Pattern Select Jumper

The circuits now found in these lights have a jumper on them allowing the end user to select the desired flash pattern (singleflash, doubleflash, or quadflash). If you wish to change the pattern, activate the light and follow the instructions below.

1. The Pattern Select Jumper is stored on pins 1 & 2.
2. To change the pattern, remove the jumper from pins 1 & 2, momentarily place it over pins 2 & 3, then remove it. The pattern should advance to the next.
3. Continue to touch and release the jumper to pins 2 & 3 to cycle through the patterns:  
**Singleflash → Doubleflash → Quadflash**
4. Once you have selected a pattern, replace the jumper on pins 1 & 2.

