INSTALLATION INSTRUCTIONS FOR APOLLO 8 GEN 3 <u>LED WARNING LIGHT</u> 8 SELECTABLE LIGHT PATTERNS MODEL 3080PPM-A, 3085PPM-B, 3090PPM-R, 3095PPM-C & 3097PPM-G

Your purchase of a Wolo warning light is the perfect choice to compliment your vehicle. Our warning lights are manufactured with the finest of materials and each light is tested before it is packaged. Quality workmanship and components are Wolo's assurance of a product that will provide years of dependable service.

Before installation of this warning light is attempted, it is important to read these instructions completely. The lives of people are dependent on proper installation. The person installing this light must have advanced knowledge of the proper method of installing warning lights to a vehicle, as well as, knowledge of the vehicle's electrical system. Again, read this manual completely and note any messages marked "**IMPORTANT**" or "**WARNING**". A safe installation will prevent serious injury and/or damage to the vehicle.

IMPORTANT: Installation of this warning light may require drilling to the vehicle. The installer must carefully inspect both sides of any location that will be drilled to ensure that there are no components, wires and/or any vehicle parts that could be damaged when drilling.

IMPORTANT: Always de-burr any drilled holes to ensure that there are no sharp edges. Install the plastic grommet into the hole that the wires are being routed through. Always refer to the vehicle's shop manual for the deployment location of the air bags. Never install the on/off switch, wires and/or components in the deployment area of any air bag. Improper installation could reduce the effectiveness of the vehicle's air bag system and/or project an object that could cause serious personal injury or death to the driver or passenger. The user/installer assumes all responsibility to properly access a safe mounting location for the switch to provide ultimate safety to the driver and passengers inside the vehicle.

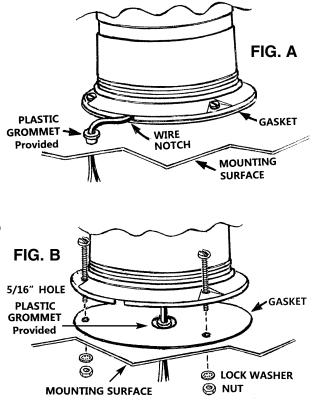
WARNING: This warning light contains GEN 3 high intensity LEDs. To prevent permanent eye damage, DO NOT stare into the light beam at close range.

MOUNTING WITH SCREWS (FIG. A & B)

- 1. Select the location you wish to mount the warning light. For best results, the installer should make sure the lens is unobstructed so that the light can be seen at 360 degrees.
- Using the holes in the warning light's base, mark the three (3) hole locations for mounting the light. Lift the light from the mounting location and drill holes using a 3/16" drill bit.
 NOTE: There are two methods to route the warning lights wires:

2A. Route the wires through the notch in the base of the light. 2B. Route the wires through a hole directly under the base of the warning light.

- 3. If needed, drill a hole for the wires using a 5/16" drill bit. Deburr the drilled hole and insert the provided plastic grommet into the hole. The plastic grommet will ensure that there are no sharp edges that could damage the wires. **IMPORTANT:** If waterproofing is required, use silicone sealant around wires and plastic grommet.
- Secure the base of the warning light to the vehicle using only the hardware provided. To prevent vibration and water leaks always use the rubber gasket provided.



PIPE MOUNTING (Fig. C)

The base of the warning light is designed to secure onto a threaded pipe 1 inch (25.4 mm) NPT.

5. Before you attempt to secure the warning light to a pipe, you will need to determine the length of extension wire that will be connected to the warning lights' RED and BLACK wires. For wire lengths up to 15 ft. use 18-AWG wires and for lengths greater than 15 ft. use 16-AWG wires.

IMPORTANT: Do not make any electrical connections to the vehicle until the light has been secured to the pipe.

- **RED WIRE:** Is connected to 12-60 volts (+) positive, such as the vehicles' fuse block or (+) positive battery post.
- BLACK WIRE: Is connected to the on/off control switch, (switch not provided).
- 6. Cut the extension wires that will be connected to the warning light to length.
- 7. Strip back the plastic insulation of the warning light's RED wire and the extension wire so that 1/4" of wire is exposed. Insert the warning lights RED wire and the extension wire, fully into the butt connector. Crimp the butt connector and make sure that both wires are securely held in the connector by lightly pulling on each wire while holding the butt connector.
- 8. Repeat the same procedure for the warning light's BLACK wire.

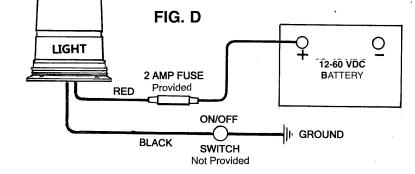
IMPORTANT: If the extension wires are not RED & BLACK note the colors that are connected to the light so to ensure correct polarity when wiring to the power source.

9. Route the extension wires through the pipe.

10. The warning light is threaded onto the pipe. Tighten by turning the metal base clockwise until tight. **CAUTION:** When threading the warning light to the pipe make sure that the wires freely move with the light so not to become pinched.

WIRING WARNING LIGHT (Fig. D)

- RED WIRE: Is connected to 12-60 volts (+) positive. Using the inline fuse provided, connect the red wire to the vehicles fuse block or (+) positive battery post. Remove fuse from the inline fuse holder until all wiring is completed.
- 12. **BLACK WIRE:** Is connected to the on/off switch (not provided).

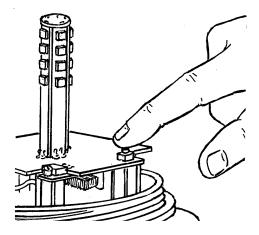


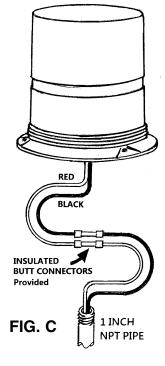
- 13. Connect the other terminal or wire from the on/off switch to ground, by placing the wire under the battery's (-) negative post or any metal body bolt that is clean of paint and rust.
- 14. Insert the fuse into the fuse holder and position the switch to ON. The light will turn on and operate.

SELECTING THE LIGHT PATTERN (Fig. E)

There are eight (8) different light patterns to choose from

- 15. With the warning light turned off, remove the lens by turning the lens counter-clockwise.
- 16. There is a small black push button on the side of the PC Board that you depress and release to change the light pattern.
- 17. Turn on the warning light. Press and release the push button selector switch. The light pattern selected will remain as the default pattern until you wish to change it.
- 18. Install the lens back onto the light and make sure it is tight to prevent dirt and water from entering inside the housing.





PATTERN	DESCRIPTION	AMPS
1	SINGLE FLASH	.23 at peak
2	SINGLE FLASH (FAST)	.23 at peak
3	DOUBLE FLASH	.23 at peak
4	DOUBLE FLASH (FAST)	.29 at peak
5	TRIPLE FLASH	.30 at peak
6	TRIPLE FLASH (FAST)	.30 at peak
7	QUAD FLASH	.29 at peak
8	QUAD FLASH (FAST)	.48 at peak