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Safety Messages for Installers of Warning Light Equipment

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with the products. In addition, listed below are some other important safety instructions and precautions you should follow:

- Do not install equipment or route wiring in the deployment path of an airbag.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- All drilled holes should be free of burrs and sharp edges. All wire routing holes should be grommeted (user supplied) and sealed to avoid wire and/or vehicle damage.
- Locate the light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- You should frequently inspect the light to ensure that it is operating properly and that it is securely attached to the vehicle.
- This product contains high-intensity LEDs. Do not stare directly into the lights at a close range or permanent damage to your eyesight may occur.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

Product Overview

The Federal Signal QuadraFlare Warning Light is a self-contained, high intensity, LED light designed for mounting to the exterior of a vehicle. Model QL97Z-BTT is designed for rear brake, turn, and tail light vehicle applications. Model QL97Z-TURN is designed for front and rear turn signal applications. Model QL97Z-ARROW is designed for front and rear turn signal applications. Model QL97Z-BACKUP is designed for rear back-up light applications. The QL73Z-CHMSL is designed to act as a Center High Mounted Stop Light (CHMSL) on the back of a vehicle. These QuadraFlare Warning Lights are designed for operation on 12 Vdc.

Unpacking the Light

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged or is missing a part, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of the damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them. If you are missing any parts, contact Customer Support at 1-800-264-3578, 7 A.M. to 5 P.M.,

Mounting the Light

Select a location for the light assembly on the vehicle that provides maximum signaling effectiveness for your application.

- 1. Determine the mounting location for the lights and the vehicle wiring to activate them.
- 2. Position the light assembly on the selected mounting surface. Ensure that the light is level side to side. Using the light as a template and scribe the four mounting hole locations and a wiring routing location on the mounting surface.

Models QL97Z-BTT, QL97Z-ARROW, QL97Z-BACKUP, QL97Z-TURN, QL73Z-CHMSL

- 3. Drill four 1/4" (0.250) mounting holes and a wire routing hole 1" (1.00) at the scribed positions.
- **4.** Install the four supplied screw grommets into the four mounting holes.

Wiring the Models QL97Z-ARROW, QL97Z-BACKUP, QL97Z-TURN, QL73Z-CHMSL

The Quadraflare warning light assemblies are designed to operate on 12 Vdc. These models have two wires coming out of the back: one red and one black. Using 18-gauge (minimum) wire, connect the red (+) lead to the positive power source and the black (-) lead to the negative power source.

Wiring the Model QL97Z-BTT

The QL97Z-BTT has three wires coming out of the back: one white, one red, and one black. Using 18-gauge (minimum) wire, connect the white lead to the +12-volt tail light circuit. Connect the red lead to +12-volt brake circuit. Connect the black (–) lead to the negative power source.

Completing the Installation

Install user-supplied fuses and fuse holders as close to the power source as possible. The battery is recommended for all negative power source connections. When finished, check the wiring and test the lights for operation.

After completing the electrical connections, align the mounting gasket and light assembly with the screw grommets and secure with the provided stainless steel hardware. Four #8 x 1-1/2" screws are used for the 9x7 lights while four #6 1-1/2" screws are used for the 7x3 lights.

Maintaining the Light



CRAZING/CLEANING SOLUTIONS—Crazing (cracking) of lenses will cause reduced effectiveness of light. Do not use cleaning agents (which will cause crazing) such as detergents, solvents, or petroleum products. If crazing of lenses does occur, the reliability of light for emergency signaling purposes may be reduced until lenses are replaced.

Clean the plastic lenses with mild soap and a soft rag. Should fine scratches or a haze appear on a lens, they can ordinarily be removed with a non-abrasive, high quality, one-step, automotive past cleaner/wax and a soft cloth.

Getting Technical Support and Service

Federal Signal Corporation will service your equipment or provide technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization number. The RMA number can be obtained from your local distributor or Federal Signal. Please provide a brief explanation of the service requested or the nature of the malfunction. Contact your local dealer/distributor for replacement parts availability or contact the Federal Signal Service Department (7 A.M. to 5 P.M., Monday through Friday, Central Time) at:

Service Department Federal Signal Corporation 2645 Federal Signal Drive University Park, IL 60484-3167 800-433-9132 800-343-9706 (fax) www.fedsig.com