

INSTRUCTION SHEET FOR CUDA TRIOPTIC™ MODEL 760003 SURFACE MOUNT LED MOTORCYCLE LIGHT

SAFETY MESSAGE TO INSTALLERS AND USERS

WARNING

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:

- To properly install this light, you must have a good understanding of automotive systems, along with proficiency in the installation and use of safety warning equipment.
- DO NOT install equipment or route wiring in the deployment path of an air bag.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything that could be damaged.
- In order for the light to function properly, a separate ground connection must be made. If practical, it should be connected to the negative battery terminal. At a minimum, it may be attached to a solid metal body or chassis part that will provide an effective ground path as long as the light system is to be used.
- Locate light control so the VEHICLE and CONTROL can be operated safely under all driving conditions.
- Do not attempt to activate or deactivate light control while driving in a hazardous situation.
- 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 LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.
- The light should be frequently inspected to ensure that it is operating properly and that it is securely attached to the vehicle.
- 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 to you or others.

A. GENERAL.

The Cuda TriOptic Model 760003 is an LED light head designed for use in conjunction with all Federal Signal switch controllers. This light head is designed for mounting on a vehicle's interior, exterior, or on a motorcycle. The housing is comprised of a cast and polished aluminum profile with a front high-impact polycarbonate protective lens. The unit is supplied with #10 stainless steel mounting hardware and a five-foot cable. This unit has an operating temperature of -30°C to +65°C (-22°F to +149°F). It may be mounted only in the horizontal position with the cabling exiting from the gasketed rear. The physical dimensions of this unit are 7-inches long by 2.17-inches wide by 3.45-inches high. The front lens cover is compression sealed to the extruded housing by means of neoprene gasketing.

B. INSTALLATION.

WARNING

This product is intended for supplemental warning and for use in conjunction with an approved primary warning light system. Consult local codes and regulations to determine if the power supply/ light head combination complies with the horizontal or vertical mount positioning desired in your application.

WARNING

When installing equipment inside air bag equipped vehicles, the installer MUST ensure that the equipment is installed ONLY in areas recommended by the vehicle manufacturer. Failure to observe this warning will reduce the effectiveness of the air bag, damage the air bag, or potentially damage or dislodge the equipment, causing serious injury or death to you or others.

NOTE

For adequate condensate drainage, the horizontally mounted unit MUST be mounted with the drain hole facing down (see figure 1).

CAUTION

Before drilling holes in ANY part of vehicle, be sure that both sides of the mounting surface are clear of parts that could be damaged; such as brake lines, fuel lines, electrical wiring or other vital parts.

A 7/32" diameter mounting hole is recommended for the two #10 x 1" mounting hardware screws. The recommended holes center to center spacing should be 5-15/16". In addition, two #10 keps nuts are also provided for securing the assembly to the mounting surface.

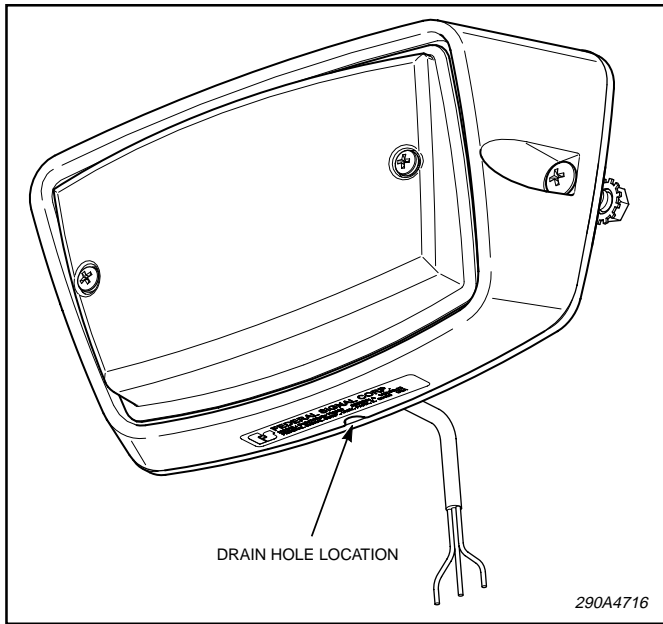


Figure 1.

CAUTION

After prolonged operation, the unit dissipates heat and can cause burns. Do not hold the unit in your hands for extended periods of time. Do not touch the unit during, or shortly after, operation. Always allow the unit to cool before handling.

C. ELECTRICAL SPECIFICATIONS AND FEATURES.

NOTE

Powering multiple devices with a common control lead may cause one or more units to briefly remain functional after signal power is removed. For example, due to the high input filter capacitance, a strobe supply can briefly supply the current required to operate a low current device such as a Cuda TriOptic™. If necessary, use a relay to isolate devices with large filter capacitors. See figure 2 for the schematic; all components/wires are user-supplied.

The unit is intended to operate on a 12.8 VDC system. It includes a 3 conductor connecting cable housed in a black jacket. The 3 conductors are: red (positive), black (negative) and green (switching). This unit is intended to work in conjunction with all Federal Signal switch controllers.

This unit features 8 flash patterns that are selected by applying the switching wire (green) to the ground wire (black). These wires are all within the black cable attached to the unit. The flash patterns are as follows:

1. Steady On
2. 120 FPM
3. 165 FPM
4. 240 FPM
5. 300 FPM
6. Combo 1:
4 intervals @ 120 FPM
10 intervals @ 300 FPM
7. Combo 2:
2 intervals @ 120 FPM
3 intervals @ 165 FPM
6 intervals @ 240 FPM
3 intervals @ 165 FPM
2 intervals @ 120 FPM
10 intervals @ 300 FPM
8. Combo 3:
1 inactive interval @ 120 FPM
2 intervals @ 120 FPM
6 intervals @ 240 FPM
14 intervals @ 480 FPM
6 intervals @ 240 FPM
2 intervals @ 120 FPM
1 inactive interval @ 120 FPM

NOTE

When using an external flashing device, unit must be on pattern #1 - Steady On.

After the desired pattern has been selected, the green wire must be connected directly to the red power lead.

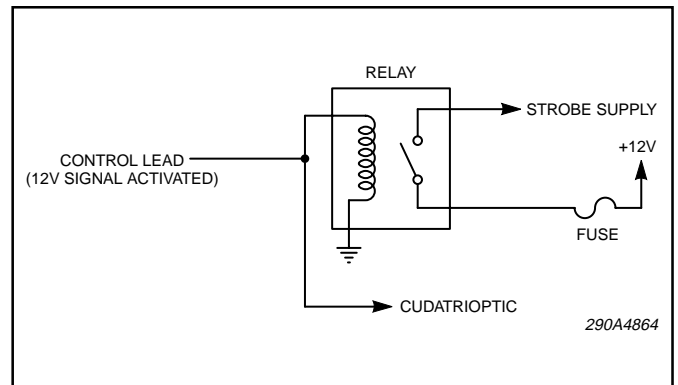


Figure 2.

This unit is designed to return to the last flash pattern selected before it was de-energized. For example, if the unit is de-energized at the seventh flash pattern and then re-energized, the seventh flash pattern illuminates. However, there is a two-second delay for the unit to remember the last pattern. So, if the unit is energized and functioning on the third flash pattern and the unit is switched to the fourth flash pattern and de-energized *within* a two second time limit, the unit will return to the third flash pattern.

SAFETY MESSAGE TO OPERATORS

WARNING

People's lives depend on your safe use of our products.

Listed below are some important safety instructions and precautions you should follow:

- **Although your warning system is operating properly, it may not be completely effective. People may not see or heed your warning signal. You must recognize this fact and continue driving cautiously.**
- **Also, situations may occur which obstruct your warning signal when natural or manmade objects are between your vehicle and others, such as: raising your hood or trunk lid. If these situations occur, be especially careful.**
- **This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.**
- **At the start of your shift, you should ensure that the light is securely attached and operating properly.**

Failure to follow these safety precautions may result in property damage, serious injury, or death to you, to passengers, or to others.

RETAIN AND REFER TO THIS MESSAGE

D. MAINTENANCE.

1. *General.*

WARNING

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

Ordinary cleaning of the plastic lenses can be accomplished by using 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 paste cleaner/wax and soft cloth.

2. *Replacement Parts.*

Description	Part No.
Lens, Clear	8559D043
Lens, Red	8559D043-01
Lens, Amber	8559D043-02
Lens, Blue	8559D043-04
Lens Gasket	8559160

Consult the factory regarding warranty repairs/replacement issues.

Manufactured by:
Federal Signal Corporation
Emergency Products Group
2645 Federal Signal Drive
University Park, Illinois 60466