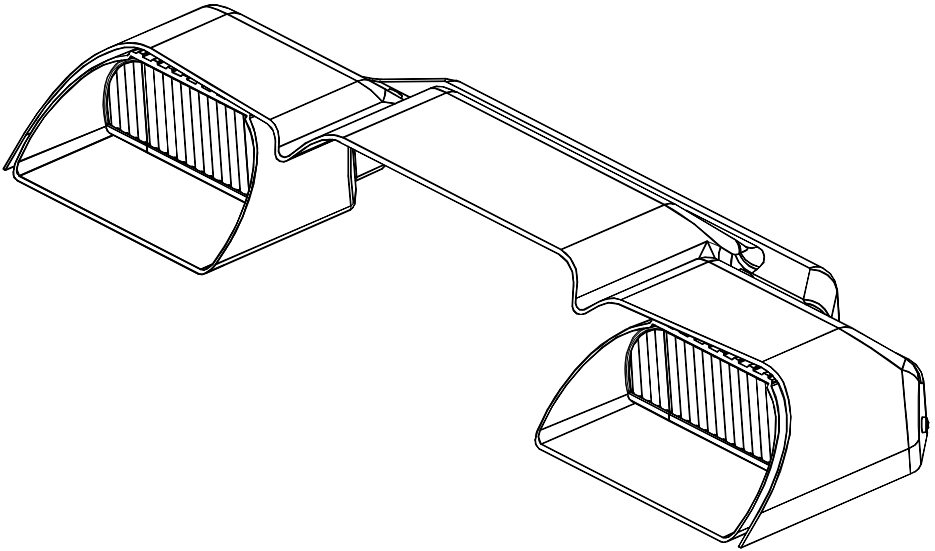




# MODEL DL35-CV LED REAR DECK LIGHT



PROUDLY MADE IN THE USA  
An ISO 9001 Certified Company

**STAR**  
WARNING  
SYSTEMS

**Star Headlight & Lantern Co., Inc.**

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**Signal**  
VEHICLE PRODUCTS

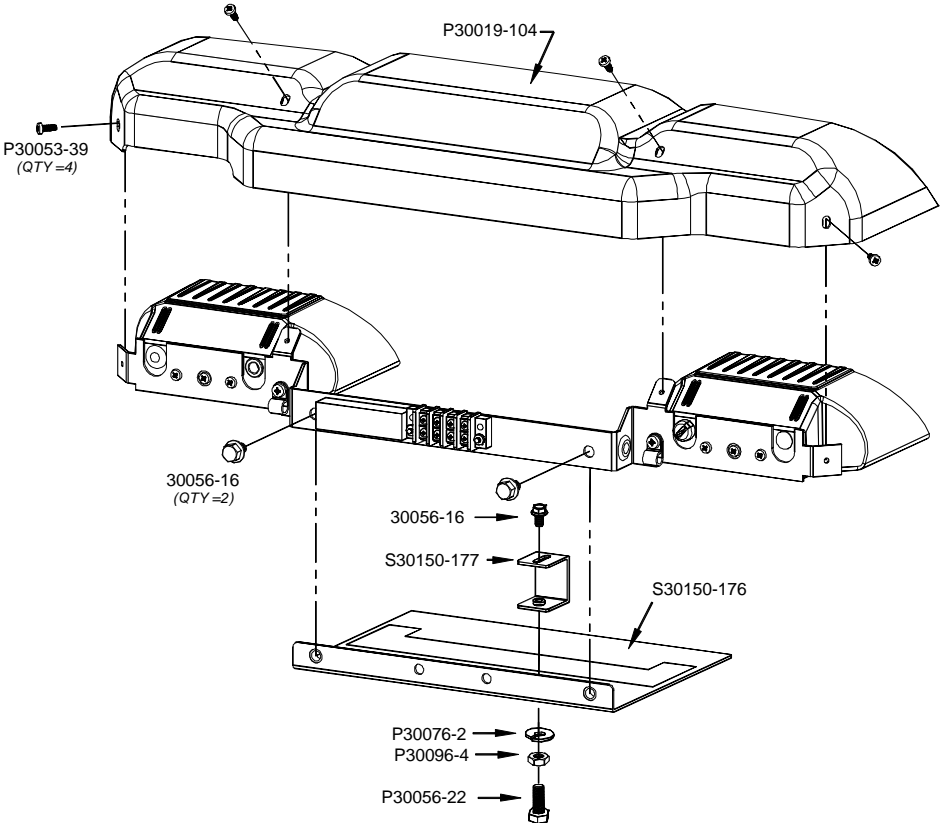
**Please Note:** These instructions are provided as a general guideline only. Specific mounting, wiring, and/or weather-sealing may be necessary and are the sole responsibility of the installer. Star Headlight & Lantern Co., Inc. assumes no responsibility for the integrity of the installation for this or any of its products.



This light utilizes high-intensity LED Lamps. DO NOT stare directly into the light while it is on, as momentary blindness and/or permanent eye damage may occur.

This light uses state-of-the-art Light Emitting Diode (LED) technology. This warning light is comprised of ultra-high intensity LEDs that are operated by a micro-controller to efficiently produce light output with lifetimes up to 100,000 hours.

## Parts

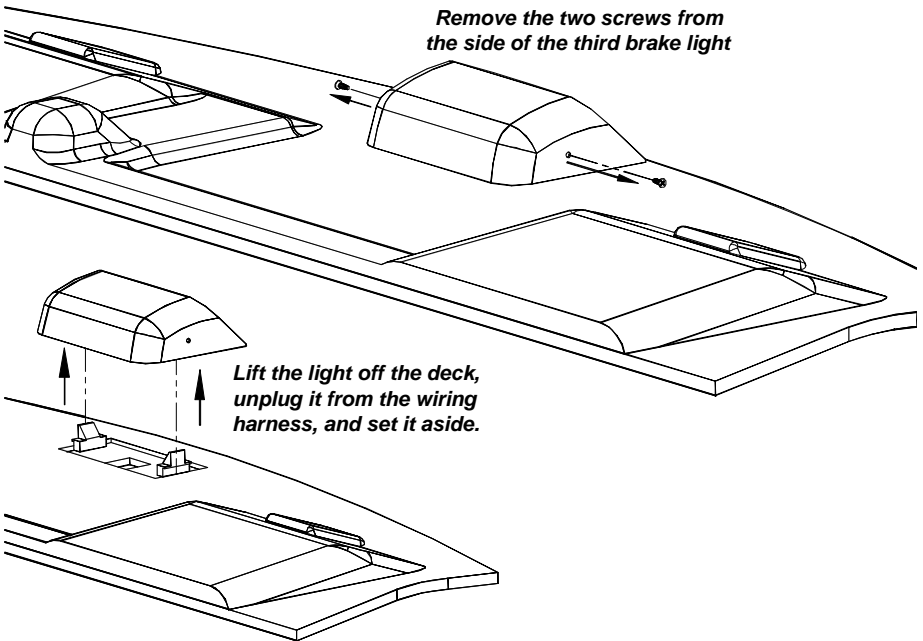


<b>QTY</b>	<b>Part</b>	<b>Description</b>
1	P30019-104	Vacuum Formed Brake Light Cover
4	P30053-39	8 x ½" Philips Head Screw
1	N/A	Light Sub Assembly w/Two Heads
3	30056-16	¼-20 x 3/8" Serrated Flange Bolt
1	S30150-177	"C" Bracket
1	S30150-176	Third Brake Light Mounting Plate
1	P30076-2	¼" Lock Washer
1	P30096-4	¼-20 Hex Nut
1	P30056-22	¼-20 x 1" Hex Head Bolt

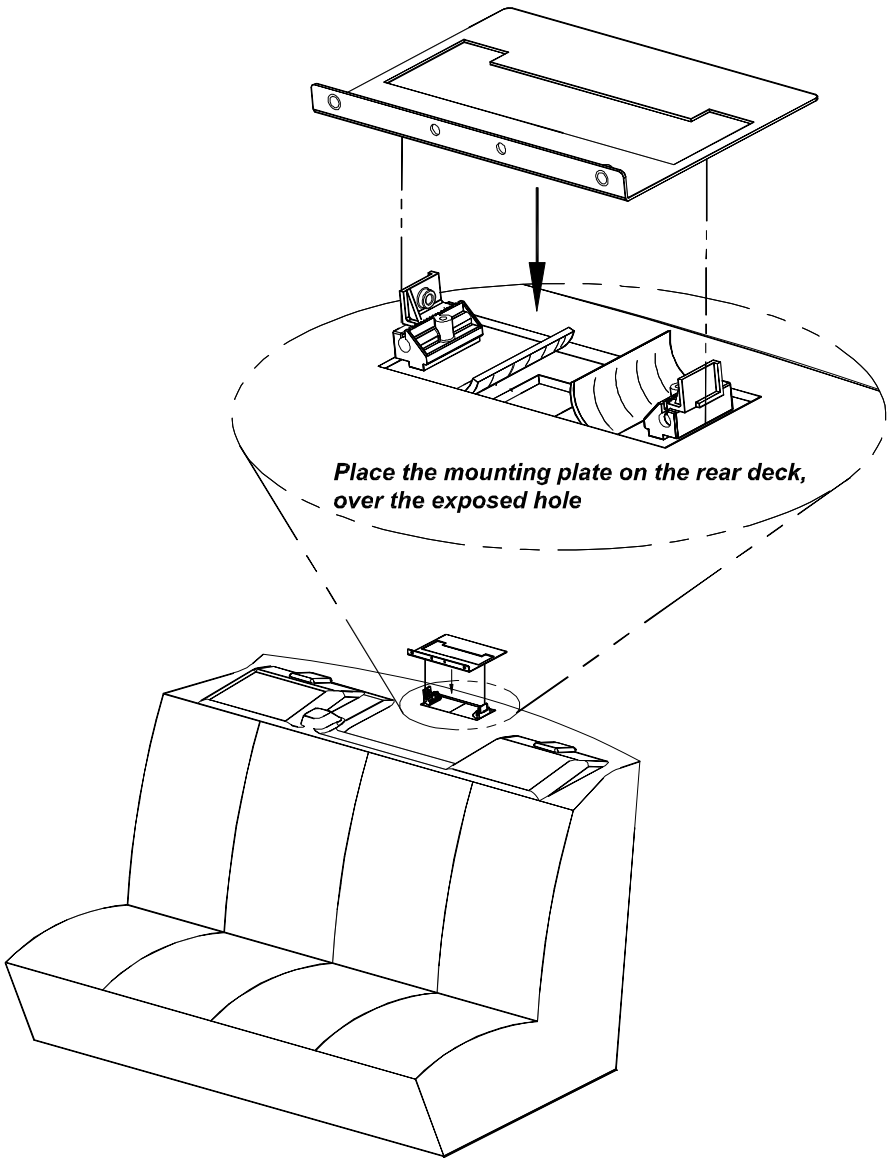
## **Assembly and Mounting**

The *M-Tech™* DL35-CV is designed to be mounted in a Ford Crown Victoria on the rear deck over the third brake light. This mount is designed to work in conjunction with the third brake light and no drilling through the rear deck should be necessary. Only a small 7/16" hole in the rear brake light housing is required.

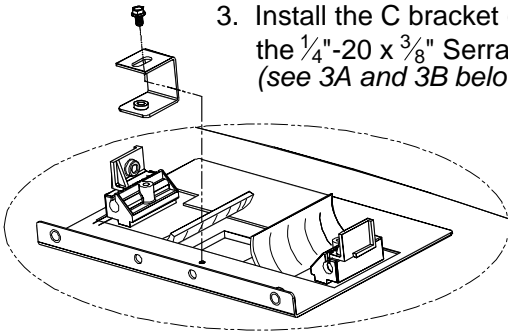
1. The first step is to temporarily remove the third brake light. To do this, first remove the screw in each side of the brake light and lift the brake light off of the rear deck. Unplug the light from the wiring harness and set it aside.



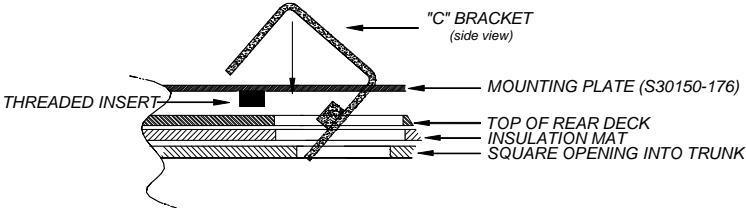
2. Place the mounting plate (S30150-176) over the exposed hole as shown in the diagram below.



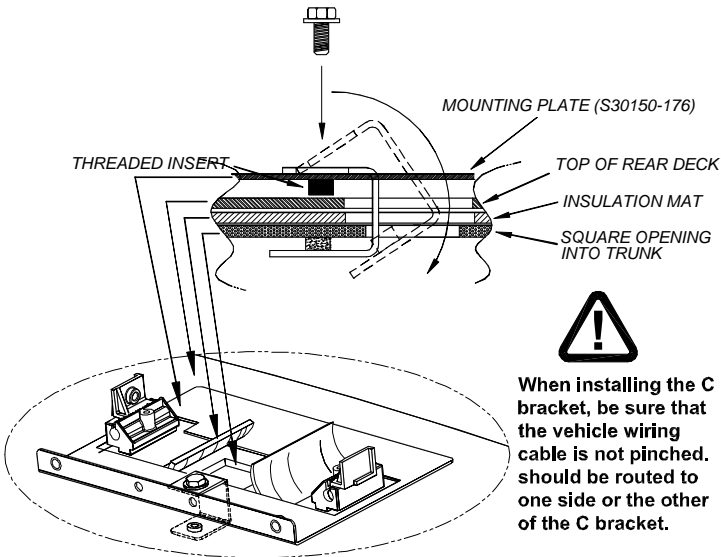
3. Install the C bracket (S30150-177) using the  $\frac{1}{4}$ "-20 x  $\frac{3}{8}$ " Serrated Flange Bolt (30056-16). (see 3A and 3B below)



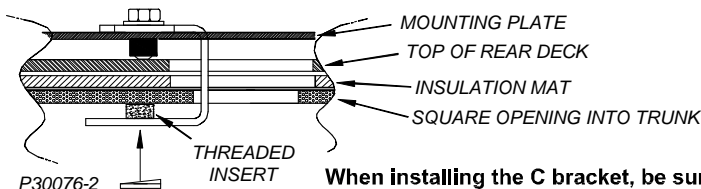
- 3A. Pivot the C-Bracket over the threaded hole in the mounting plate, through the trunk opening, and around all the layers, so that it is resting on the inside of the trunk.



- 3B. Install the  $\frac{1}{4}$ -20 x  $\frac{3}{8}$ " Serrated Flange Bolt (30056-16) through the "C"-bracket and into the threaded insert in the mounting plate. Tighten the bolt to secure the "C" bracket to the mounting plate.

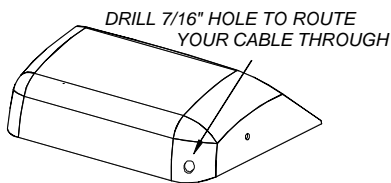


- Screw the 1/4-20 hex nut (P30096-4) all the way onto the 1/4-20 x 1" Hex Head Bolt (P30056-22).
- Insert the 1/4-20 x 1" Hex Head Bolt with the nut through the 1/4-20 split washer and into the threaded insert in the "C" bracket. Tighten the bolt to secure the "C" bracket to the rear deck. Once the bolt is screwed in as far as possible, tighten the hex nut against the "C" bracket to prevent the bolt from loosening.



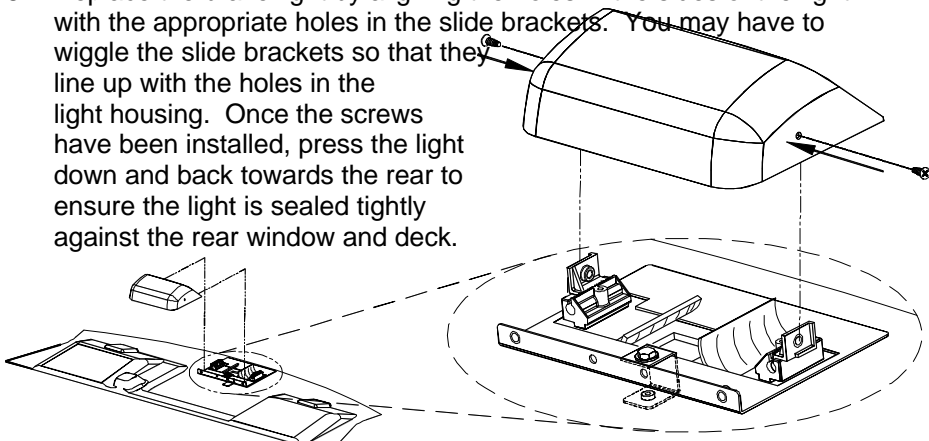
**When installing the C bracket, be sure that the vehicle wiring cable is not pinched. It should be routed to one side or the other of the C bracket. DO NOT OVERTIGHTEN THE BOLT!! You only need to snug it up. Overtightening can crush and/or deform your rear deck.**

- Carefully drill a 7/16" hole in the corner of the third brake light as pictured to the right. Route your DL35 cable through it. Feed the cable through the bottom of the light housing and down into the opening into the trunk.

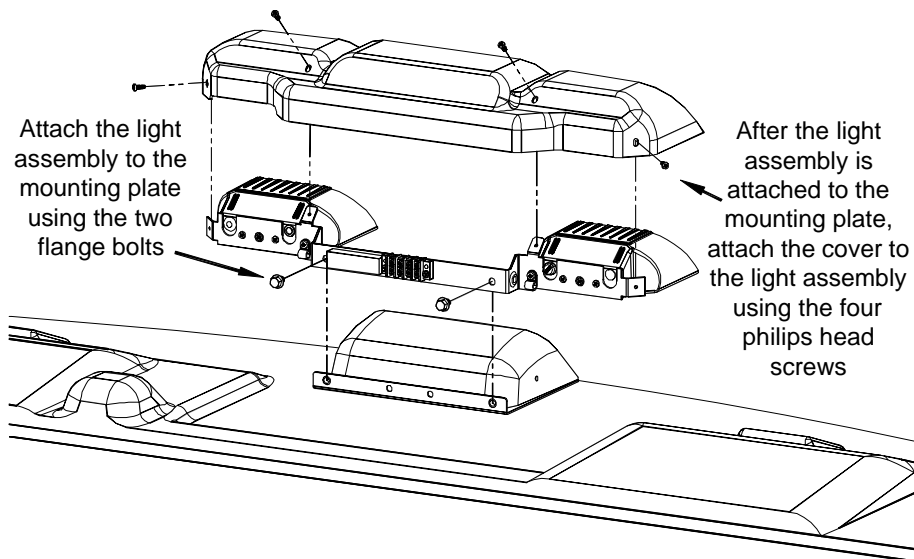


- Once the mounting plate and "C" bracket have been installed, and you have routed your cable through a drilled hole in the brake light, you should reconnect the brake light wire harness.

- Replace the brake light by aligning the holes in the sides of the light with the appropriate holes in the slide brackets. You may have to wiggle the slide brackets so that they line up with the holes in the light housing. Once the screws have been installed, press the light down and back towards the rear to ensure the light is sealed tightly against the rear window and deck.



9. After the third brake light has been reinstalled, check the mounting plate to be sure it is secure. Please note that the plate will not be completely fixed. Minor plate movement is acceptable.
10. Mount the lights to the plate using the two flange bolts (30056-16). Take care to feed the cable through the grommet so that it is not pinched.
11. Once the light is attached to the plate, place the cover (P30019-104) over the entire assembly and use the four Philips head screws (P30053-39) to secure the cover to the assembly.



*It is the sole responsibility of the owner to ensure the warning light is secure. Check your light every time you enter the vehicle to ensure that it is mounted securely. Star Headlight and Lantern Co. assumes no responsibility for the secure mounting of this light.*

*These lights are designed to be mounted on the inside of your vehicle. They are not intended for exterior applications.*

## Wiring

The DL35-CV is powered through the 4-wire harness that comes pre installed on the light. Connect the four wires as follows:

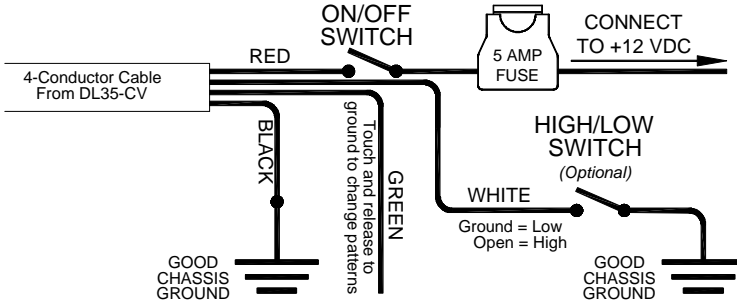
- Black** - *Ground*                      Connect to a good chassis ground
- Red** - *Power (+12 VDC)* Connect to your On/Off switch (not supplied)
- Green** - *Pattern Select*    Touch to a ground to change patterns  
(see below)

### **White** - *High/Low*

Low Only:    Connect the white wire to a good chassis ground if you wish to run the light on low power.

High Only:    Tape the end of the white wire off so that it does not come into contact with ground, if you wish to operate the light on high power.

Switched:     Connect the white wire through a switch to ground if you would like to have the ability to switch between high and low power.



## Pattern Programming

**PLEASE NOTE:** *The green wire is only used for programming purposes during installation.*

1. To begin the programming sequence check that your black wire is grounded.
2. Turn the light on by applying power (+12VDC) to the red wire.
3. Briefly touch and release the green wire to ground, repeating this to scroll through the patterns listed on the following page. The cycle will repeat itself after the last pattern.
4. Once you find the pattern you wish to select, leave the green wire disconnected and turn the unit off. This will program that pattern into the memory. Tape the end of the green wire so that it does not come into contact with ground accidentally.

**NOTE:** If at anytime you would like to go directly to the first pattern (*Slow Warn*), simply touch the green wire to ground for three seconds until the light blinks once. When the LEDs flash once, release the green wire and the light will be in the *Slow Warn* pattern. If you touch the green wire to ground for 6 seconds, the light will blink once at 3 seconds and then twice at 6 seconds. After it blinks twice, release the green wire and the light will be in the default pattern (*Pattern 28: Alt. Tripleflash, Alt. Pre-Pop-Triple, Flicker*).

## Pattern List

- 1 Slow Warn
2. Fast Warn
3. Superfast Warn
- 4 Warn Fade\*
- 5 Pre-Pop Warn
- 6 All Singleflash
- 7 Alt. Tripleflash
- 8 All Tripleflash
- 9 Alt. Quadflash w/Post Pop
- 10 All Quadflash w/Post Pop
- 11 Alt. Quintflash
- 12 All Quintflash
- 13 Alt. Pre-Pop Quintflash
- 14 All Flicker
- 15 Alt. PSU Flicker
- 16 One Side Pop, Other Rapid Fire
- 17 One Side Rapid Fire, Other Pop
- 18 Comet 1\*
- 19 Comet 2\*
- 20 Delta Omega (Flash Rate Sweep)
- 21 Slow Warn, Alt. Tripleflash
- 22 Slow Warn, Super Fast Warn
- 23 All Doubleflash, Alt. Doubleflash
- 24 All Doubleflash, Alt. Doubleflash, Flicker
- 25 Alt. Doubleflash, Flicker
- 26 All Double, Alt. Pre-Pop Tripleflash, Slow Warn
- 27 Alt. Doubleflash Non-Synch
- 28 Alt. Tripleflash, Alt. Pre-Pop-Triple, Flicker †
- 29 Alt. Quadflash, Flicker, Alt. Doubleflash, Flicker
- 30 Alt. Pre-Pop Quintflash, Alt. Quintflash, Flicker
- 31 One Side Steady--One Side Singleflash ‡
- 32 One Side Steady--Other Side Short-Long ‡
- 33 Medium Warn (Alternating Long Singleflash) ‡
- 34 Alternating Short - Alternating Long ‡
- 35 Demo Mode – Loop All Patterns

† *Default Pattern*

\* *These patterns do not dim under low power*

‡ *SAE and Title 13 Compliant*

The *M-Tech™* DL35-CV uses state-of-the-art Light Emitting Diode (LED) technology. This light is comprised of ultra-bright LEDs that are operated in a multiplexed mode to efficiently produce light output with lifetimes up to 100,000 hours. Under normal circumstances, you will not need to replace any LEDs in this light. If any of the LED's in your light do fail, please contact Star Headlight for arrangements to have them repaired.

## 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.

**NOTE:** Most failures can be traced to wiring and battery problems. Check "quick-connects" and wiring to insure that correct voltage/polarity is reaching the electronic strobe light/LED beacon.

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 Goods Authorization number (RGA #) before you ship the product back.

Please write the RGA # clearly on the package near the mailing label.



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