

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

Route 145, Winthrop Road,  
Chester, Connecticut 06412

Phone: (860) 526-9504

Fax: (860) 526-4078

Internet: [www.whelen.com](http://www.whelen.com)

Sales e-mail: [autosale@whelen.com](mailto:autosale@whelen.com)

Canadian Sales e-mail: [autocan@whelen.com](mailto:autocan@whelen.com)

Customer Service e-mail: [custserv@whelen.com](mailto:custserv@whelen.com)

## Installation Guide SFCV98CC Strobe System (HA239 with CS220 Power Supply)

### Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**
- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr the holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**
- **If this manual states that this product may be mounted with suction cups, magnets, tape or Velcro™, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.**
- **Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owners manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.**
- **For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post.**
- **If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.**
- **Do not attempt to activate or control this device in a hazardous driving situation.**
- **If this product contains strobe light(s), halogen light(s) or high-intensity LEDs, do not stare directly into these lights at a close distance. Momentary blindness and/or eye damage could result.**
- **If this product contains strobe light(s), halogen light(s) or high-intensity LEDs, use only soap and water to clean the lamp lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.**
- **It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.**
- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

## Introduction...

Before starting the installation procedures outlined herein, the installation technician should read through this entire manual, **paying careful attention to all warnings!**

This manual will outline the procedures for installing a system comprised of two (2) HA-239 strobe lights and a CS220 strobe power supply. These lights may be installed into your existing headlight/side marker or taillight housings. Procedures for either installation are outlined in this manual.

The location of the installed lights are critical to achieving a proper installation. Always check all measurements before any drilling or cutting.

### Installing a strobe lamp into an automotive composite housing:

1. Select the mounting location for the strobe lamp, keeping in mind the following:
  - **The strobe lamp will share the same reflector as the headlight, taillight or signal light. Make sure that the strobe lamp does not interfere with the proper operation of these lights (Fig. 2).**
  - **There must be a minimum of 1 (one) inch of space between the strobe lamp and the lens.**
  - **The strobe lamp must not be installed above the horizontal centerline of the reflector.**
  - **The strobe lamp must not be installed above any OEM-supplied light.**
2. Remove the "Composite" reflector assembly from the vehicle. Choose a surface in the rear or bottom of the "Composite" housing which is as flat as possible. Using a hole saw, cut a 1" hole (+0.030"/-0.000" tolerance) for the strobe lamp in the housing as shown in Fig. 1. Be sure to de-burr this hole completely. Mount the thermal disc onto the strobe lamp assembly with the disc holes aligned with the lamp ears as shown.
3. Using a twisting motion, insert the lamp/thermal disc assembly into the reflector housing until it snaps into its proper position. Do not force the lamp into position. Mark the location for the two mounting holes (0.105" DIA.). Remove the lamp ass'y and drill the holes in this area.
4. Re-install the lamp ass'y and using the hardware provided, secure the lamp to the reflector assembly as shown.

**WARNING: High Voltage on glass tube. This strobe lamp unit is an open flash tube with no protective lens. Proper installation is required. Do not touch the strobe tube assembly while in operation.**

**Refer to the CS220 manual included with this system for specific information regarding power supply installation and wiring.**

