

WHELEN[®]

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Installation Guide: Model SSF5150D Brake/Back-up Light Flasher

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 any 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 owner's 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.**
- **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

IMPORTANT! The use of a Brake/Back-up Light Flasher System may be regulated by state, county or municipal authorities. It is the responsibility of the end user to comply with these regulations.

WARNING! The installation of a Brake/Back-Up Light Flasher System requires a modification to the vehicle's brake light wiring harness. This modification may not only effect the warranty of your vehicle, but may also have an adverse effect on the operation of some of the safety features installed on your particular vehicle's Brake Warning and Anti-Lock Braking Systems. Variations can exist between identical vehicles within a given model year. It is the responsibility of the end user to not only verify the warranty conditions with the vehicle manufacturer, but also verify that this device is compatible with the specific vehicle into which it is being installed. The use of a Brake/Back-Up Light flasher System may shorten bulb life.

WARNING! Disconnect the battery from electrical system before attempting any part of this installation.

Installation:

Position the flasher onto its proposed mounting surface. Do not select a location where it will be exposed to water or extreme heat. Using the unit as a template, mark the area where the mounting holes are to be drilled. Secure the unit using appropriately sized hardware.

Caution: Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

Wire the unit as follows:

- BLACK (Ground)** - Connect the black wire to a good chassis ground. This wire may be extended with an 18 AWG wire.
- ORANGE (Flasher On/Off Control)** - Connect this wire to a customer supplied SP/ST ON/OFF switch rated for at least 200ma. The switch must be connected to positive (+) 12 volts D.C. This wire may be extended with an 18 AWG wire.
- YELLOW (Left Brake Light Output)**
- GREEN (Right Brake Light Output)**
- WHITE/BLUE (Back-Up Light Input)**
- BLUE WIRE (Back-Up Light Output)**

- RED (POWER)** - Connect the red wire to a high current positive (+) 12 volt D.C. power source. Fuse this circuit with a customer supplied 20 amp fuse as close to power source as possible. This wire may be extended with a 14 AWG wire.

WARNING! All customer supplied wires that connect to the positive (+) terminal of the battery, must be sized to supply at least 125% of the maximum operating current, and **FUSED** "at the battery" to carry that load! **DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

- WHITE/GREEN (Right Brake Input).**
- WHITE/YELLOW (Left Brake Input).**
- RED/BLACK (Auxiliary Output)** - Provides +12VDC for optional decklight.
- WHITE/VIOLET (Pattern Control)** - Connect this wire to a customer supplied momentary switch (normally off) rated for at least 200ma. The switch must be connected to positive +12VDC. This wire may be extended with an 18 AWG wire.

Operation:

When activated, the SSF5150D will flash the brake lights and the reverse lights in one of 5 different patterns:

- SingleFlash 90 **ALT** (Brake lights alternating with Reverse lights).
- SingleFlash 150 **ALT**.
- DoubleFlash 75 **ALT**.
- SingleFlash 150 **ALT** > DoubleFlash 75 **SIM** (Brake and Reverse lights flash simultaneously).
- ActionScan™ (Cycles all patterns)

Pattern control is accomplished as follows:

To Cycle Forward Thru Patterns -Apply +12VDC to the WHT/VIO wire for less than 1 second.

To Cycle Back Thru Patterns - Apply +12VDC to the WHT/VIO wire for more than 1 second.

Allow a pattern to run for more than 5 seconds to make it the default pattern.

Before returning the vehicle to active service, visually confirm the proper operation of the flasher system and all vehicle components/equipment.

