

WHELEN[®]

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Installation Guide: Inner Edge[®] Split Interior Lightbar 2006 Chevy Impala

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.
- This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the outer 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

IMPORTANT AIR BAG WARNING! 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.

Specifications:

Input Voltage: 12.8 VDC +/- 20%
Input Current: 2.25 Amps
Input Scan-Lock™: +12 VDC @ 20 ma

Installation:

IMPORTANT! The lightbar should be located a minimum of 16" from any radio antennas!

Note: When routing the wires, it is important to choose a path that will keep the wires away from excessive heat or any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.)

1. Locate and install the rubber window seal (included) onto the lower, leading edge of the housing (see next page).
2. Using an appropriately sized Torx head screwdriver, loosen the three screws securing the Passenger-side visor swivel bracket to the vehicle. Do not remove these screws.
3. Remove the screws securing the visor clip to the vehicle. Remove and retain the clip and all hardware.
4. Locate the passenger-side mounting bracket (indicated with a "P" label) and orient as shown (See Fig.1).
5. Slide the mounting bracket fingers between the loosened swivel bracket and the headliner. The bracket fingers should straddle the inner section of the swivel bracket when properly oriented.
6. Position the keyed opening of the mounting bracket directly under the mounting location for the visor clip removed in step 2. With the bracket in this position, remount the visor clip in its original location using the original hardware.
7. Firmly tighten any hardware loosened in this procedure.
8. Repeat this procedure for the driver-side assembly and mounting bracket (indicated with a "D" label).
9. Position the lightbar as shown in Fig. 1. Using the hardware provided, secure the lightbar to the mounting bracket.
10. When properly mounted, the appropriate edges of this product will be in full contact with the vehicle windshield and roof. This is to prevent light output from entering the passenger compartment. When this has been achieved, tighten the mounting hardware firmly so as to maintain this contact.
11. Route the lightbar cable down the vehicle A-pillar and to your control head.
12. Make all necessary wiring connections using the wiring information provided.

Wiring:

Refer to the wiring diagram on the next page for specific wiring information.

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!**

Operation:

Green - Low Power

TO ACTIVATE LO POWER OPERATION: Apply +12 volts to the GREEN wire.

TO RESTORE HIGH POWER OPERATION: Remove the GREEN wire from +12 volts.

White - Scan-Lock™

TO CYCLE THROUGH ALL PATTERNS: Apply +12 volts to the WHITE wire for less than 1 second and release to cycle forward. Apply +12 volts to the WHITE wire for more than 1 second and release to cycle backward.

TO SET A PATTERN AS DEFAULT: When the desired pattern is displayed, allow it to run for more than 5 seconds. The lighthouse will now display this pattern when active.

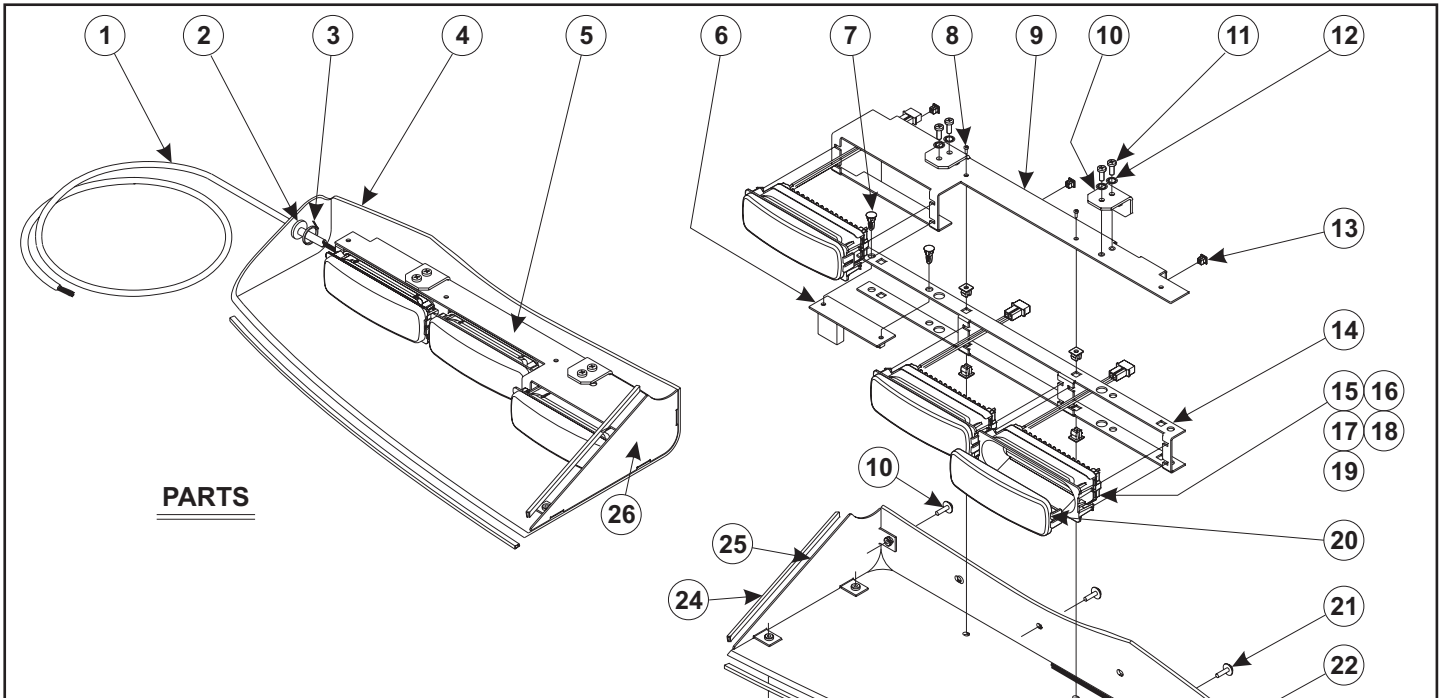
TO RESET TO THE FACTORY DEFAULT PATTERN: Turn off power, apply +12 volts to the WHITE wire, then turn power on.

Note: If the owner wishes to connect the Scan-Lock™ wire (WHITE) to a switch, an momentary switch (normally open) is recommended.

Available Scan-Lock™ Flash Patterns:

- | | |
|--------------------|---|
| 1. SignalAlert™ A | Inboard alternates with Outboard |
| SignalAlert™ B | Center alternates with ends |
| SignalAlert™ C | 3 Cycles of A then 3 Cycles of B |
| SignalAlert™ D | All Simultaneous |
| 2. CometFlash® A | Inboard alternates with Outboard |
| CometFlash® B | Center alternates with ends |
| CometFlash® C | 3 Cycles of A then 3 Cycles of B |
| CometFlash® D | All Simultaneous |
| 3. DoubleFlash A | Inboard alternates with Outboard |
| DoubleFlash B | Center alternates with ends |
| DoubleFlash C | 3 Cycles of A then 3 Cycles of B |
| DoubleFlash D | All Simultaneous |
| 4. SingleFlash A | Inboard alternates with Outboard |
| SingleFlash B | Center alternates with ends |
| SingleFlash C | 3 Cycles of A then 3 Cycles of B |
| SingleFlash D | All Simultaneous |
| 5. SteadyFlash 120 | Center Steady, ends alternate SingleFlash 120 |
| 6. SteadyFlash 90 | Center Steady, ends alternate SingleFlash 90 |
| 7. SteadyFlash 75 | Center Steady, ends alternate SingleFlash 75 |
| 8. SteadyFlash 60 | Center Steady, ends alternate SingleFlash 60 |

Note 1: No Low Power operation for patterns 5 thru 8



PARTS

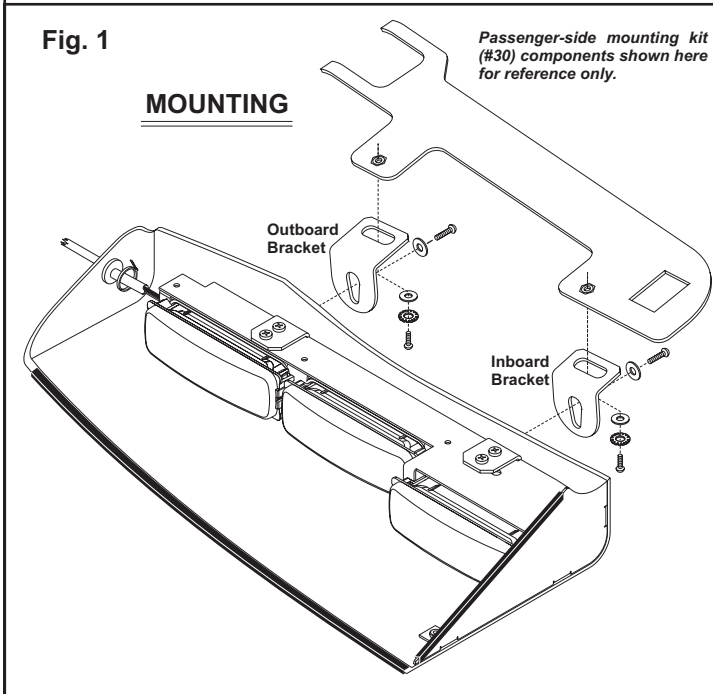


Fig. 1

MOUNTING

Passenger-side mounting kit (#30) components shown here for reference only.

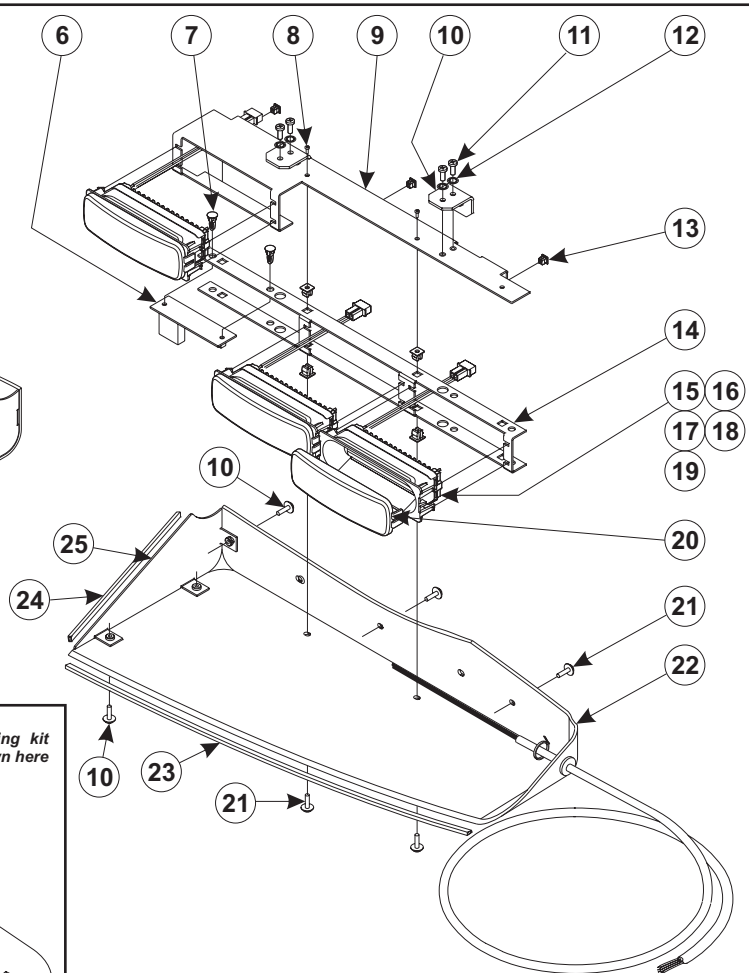
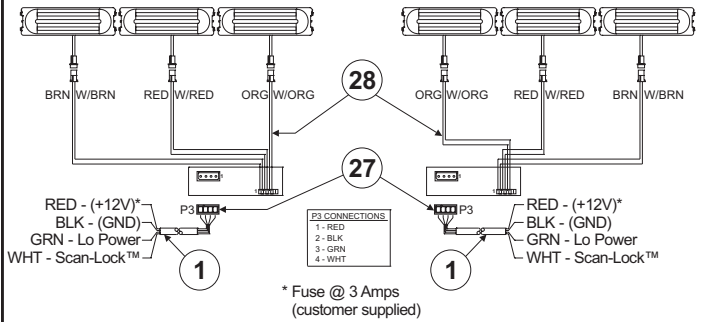


Fig. 2

WIRING DIAGRAM



| QTY | QTY | ITEM | PART NUMBER | DESCRIPTION |
|-----|-----|------|---------------|---|
| | * | | 01-0684490-** | INNER EDGE® / LINEAR-LED® / IMPALA / DRIVER |
| * | | | 01-0684490-** | INNER EDGE® / LINEAR-LED® / IMPALA / PASS. |
| 1 | 1 | 1 | 46-0743278-00 | INPUT CABLE (4C / 18 AWG / 20') |
| 1 | 1 | 2 | 21-11091202-0 | 3/8" GROMMET |
| 1 | 1 | 3 | | TY WRAP |
| 1 | - | 4 | 11-484345-R00 | INNER EDGE® HOUSING / IMPALA / PASSENGER |
| 1 | - | 5 | 07-784473-023 | MOUNTING PLATE / LINEAR-LED® / PASSENGER |
| 1 | 1 | 6 | 02-0164414-00 | PC BOARD |
| 2 | 2 | 7 | 20-0017569-00 | PC BOARD MOUNTING SPACER |
| 4 | 4 | 8 | | #6 X 3/8 PPH PLASTI-LOK SS BLAK OX. |
| - | 1 | 9 | 07-784478-023 | MOUNTING PLATE / LINEAR-LED® / DRIVER |
| 2 | 2 | 10 | 07-243216-023 | MOUNTING BRACKET |
| 7 | 7 | 11 | | #8 X 32 X .312 PPHMS SS BLACK OX. |
| 4 | 4 | 12 | | #8 INTERNAL TOOTH LOCKWASHER |
| 6 | 6 | 13 | 13-062C40-16J | #6 - #8 SCREW GROMMET |
| 1 | 1 | 14 | 07-284472-023 | LINEAR-LED® MOUNTING BRACKET |
| A/R | A/R | 15 | 01-0264260-52 | LINEAR-LED® LIGHTHEAD / RED / STEADY |

| QTY | QTY | ITEM | PART NUMBER | DESCRIPTION |
|-----|-----|------|---------------|---|
| | * | | 01-0684490-** | INNER EDGE® / LINEAR-LED® / IMPALA / DRIVER |
| * | | | 01-0684490-** | INNER EDGE® / LINEAR-LED® / IMPALA / PASS. |
| A/R | A/R | 16 | 01-0264260-42 | LINEAR-LED® LIGHTHEAD / GREEN / STEADY |
| A/R | A/R | 17 | 01-0264260-32 | LINEAR-LED® LIGHTHEAD / WHITE / STEADY |
| A/R | A/R | 18 | 01-0264260-22 | LINEAR-LED® LIGHTHEAD / BLUE / STEADY |
| A/R | A/R | 19 | 01-0264260-12 | LINEAR-LED® LIGHTHEAD / AMBER / STEADY |
| 3 | 3 | 20 | 68-3963604-30 | LENS / CLEAR / SNAP-ON / NON-OPTIC |
| 4 | 4 | 21 | | SCREW / M4.2 X 10MM PWHMS BLACK OX. |
| - | 1 | 22 | 11-484345-L00 | INNER EDGE® HOUSING / IMPALA / DRIVER |
| REF | REF | 23 | 38-0543284-18 | WINDSHIELD SEAL / 18" |
| REF | REF | 24 | 38-0543284-05 | WINDSHIELD SEAL / 5" |
| - | 1 | 25 | 07-264606-023 | BRACKET ENDCAP / IMPALA / DRIVER |
| 1 | - | 26 | 07-264608-023 | BRACKET ENDCAP / IMPALA / PASSENGER |
| 1 | 1 | 27 | 39-0404023-04 | 4-POSITION CONNECTOR / AMP |
| 1 | 1 | 28 | 46-0764645-00 | HARNESS ASSEMBLY |
| - | 1 | 29 | 01-0484490-00 | MOUNTING KIT / IMPALA / DRIVER |
| 1 | - | 30 | 01-0484490-01 | MOUNTING KIT / IMPALA / PASSENGER |