

WHELEN[®]

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Installation Guide: Universal Cast Mounting Foot

Warnings to Installers

Whelen's emergency vehicle warning devices must be properly mounted and wired in order to be effective and safe. Read and follow all of Whelen's written instructions when installing or using this device. Emergency vehicles are often operated under high speed stressful conditions which must be accounted for when installing all emergency warning devices. Controls should be placed within convenient reach of the operator so that they can operate the system without taking their eyes off the roadway. Emergency warning devices can require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or vehicle damage, including fire. Many electronic devices used in emergency vehicles can create or be affected by electromagnetic interference. Therefore, after installation of any electronic device it is necessary to test all electronic equipment simultaneously to insure that they operate free of interference from other components within the vehicle. Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communication equipment. All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SRS) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SRS wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving; sudden braking or collision. Failure to follow instructions can result in personal injury. Whelen assumes no liability for any loss resulting from the use of this warning device. PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.

Warnings to Users

Whelen's emergency vehicle warning devices are intended to alert other operators and pedestrians to the presence and operation of emergency vehicles and personnel. However, the use of this or any other Whelen emergency warning device does not guarantee that you will have the right-of-way or that other drivers and pedestrians will properly heed an emergency warning signal. Never assume you have the right-of-way. It is your responsibility to proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. Emergency vehicle warning devices should be tested on a daily basis to ensure that they operate properly. When in actual use, the operator must ensure that both visual and audible warnings are not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should be familiar with all applicable laws and regulations prior to the use of any emergency vehicle warning device. Whelen's audible warning devices are designed to project sound in a forward direction away from the vehicle occupants. However, because sustained periodic exposure to loud sounds can cause hearing loss, all audible warning devices should be installed and operated in accordance with the standards established by the National Fire Protection Association.

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.**
- **Whelen Engineering requires the use of waterproof butt splices and/or connectors if that connector could be exposed to moisture.**
- **Failure to use specified installation parts and/or hardware will void the product warranty.**
- **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 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 (this does not include products that use cigar power cords).**
- **If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device 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!**

Mounting:

IMPORTANT! The lightbar must be a minimum of 16" from any radio antennas.

NOTE: There may be a roof support member that spans the distance between the driver's and passengers side. **DO NOT DRILL THROUGH THIS MEMBER!** Adjust the location until the holes can be drilled without contacting this support member.

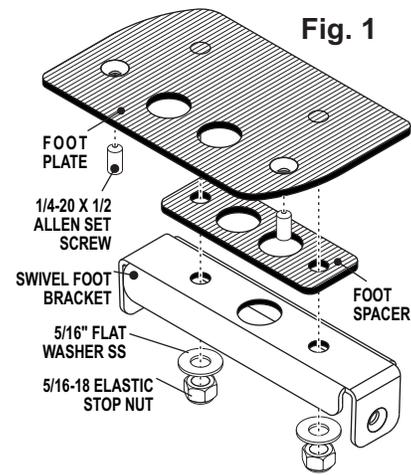


Fig. 1

1. Secure both foot plates to their swivel foot brackets. (Fig. 1) and loosely install the Allen set screws.
2. Secure the swivel foot brackets to the mounting feet (Fig. 2).
3. Install the mounting foot assembly into the lightbar by inserting the foot plate into the track on the bottom of the lightbar extrusion and twisting it into position (Fig. 3). Tighten the Allen screws in the foot plates just enough so you can slide them along the extrusion.

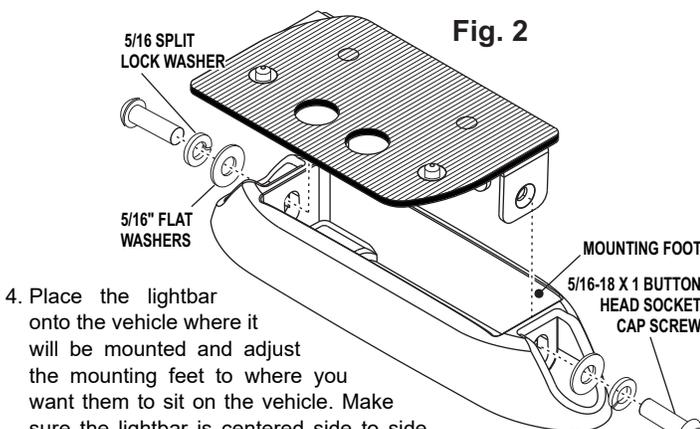


Fig. 2

4. Place the lightbar onto the vehicle where it will be mounted and adjust the mounting feet to where you want them to sit on the vehicle. Make sure the lightbar is centered side to side and the front of both mounting feet are the same distance from the windshield (Fig. 4). With the lightbar in place on the vehicle, lift one side of the lightbar off the roof and put a piece of masking tape that covers the mounting surface where the foot will sit and do the same for the other foot.

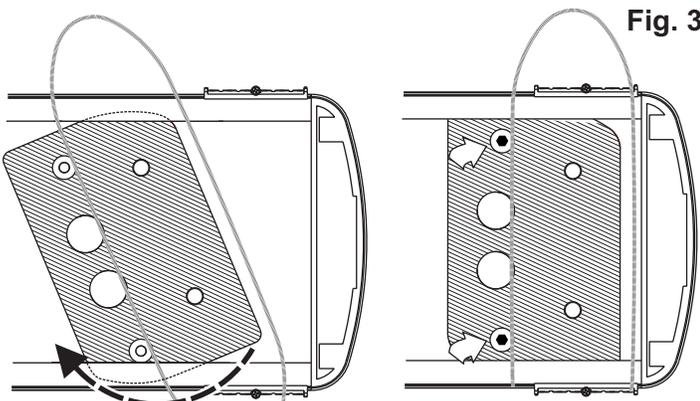
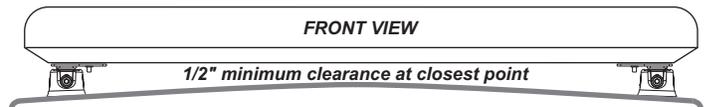


Fig. 3

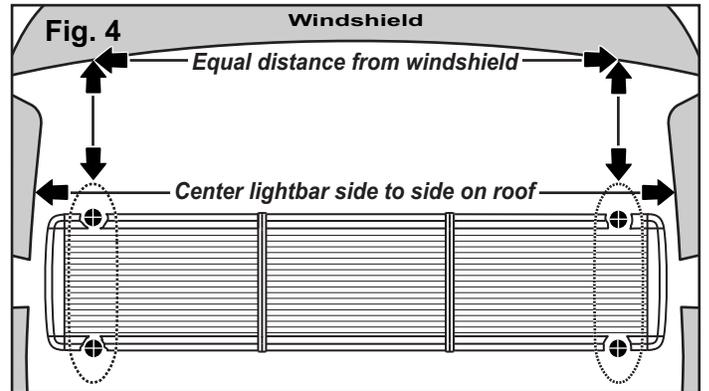
A.) Insert round side of plate under lip in extrusion and swing other side of plate under lip

B.) Secure plate with 2 Allen screws. When foot is in position, tighten Allen set screws to 14-16 In.Lbs.



Unless otherwise specified, lightbar mounting feet must be sitting as close to the edge of the roof as possible and not be hanging off the edge.

IMPORTANT: Be sure you have the right sized bar for your vehicle. The lightbar should be approximately the same width as the vehicle roof. If too large or small it will not mount properly to the vehicle and may come loose during driving.



5. Check to make sure the lightbar is still in place in its exact mounting position then draw a line around the outside of both mounting feet onto the tape you applied to indicate where each foot sits. Also mark the location you will drill the lightbar cable access hole.

6. Carefully turn the lightbar over and tighten the allen screws securing the mounting foot plates to the extrusion.

Important: The Allen screws must be tightened to 14 - 16 In. Lbs.

7. Remove both mounting feet from their foot plate assemblies leaving the foot plate/swivel foot brackets installed in the lightbar extrusion.

8. Place the mounting feet back onto the vehicle in the two places you marked off in step 5. Mark the four mounting hole locations off onto the mounting surface then remove the mounting feet from the vehicle.

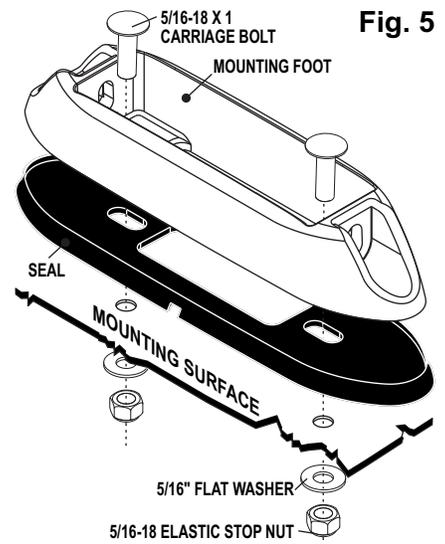


Fig. 5

9. Drop the vehicle headliner and drill the four mounting holes with a drill bit sized for the 5/16 mounting hardware. Drill the cable access hole sized for the control cable on the lightbar you are mounting.

10. Firmly secure both mounting feet (with rubber seals) to the vehicle using the supplied hardware (Fig. 5).

11. Feed the lightbar control cable into the cable access hole you drilled while remounting the lightbar to the mounting feet. A rubber grommet (customer supplied) should be installed in any cable access holes and they should be sealed with RTV sealer.

12. Extend the lightbar cable to your switch box and make all connections following the lightbar instructions.

13. Reinstall the headliner to the vehicle.