

WHELEN[®]

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Installation Guide: Towman's™ Series Liberty™ Lightbar Models: SL0TCA04 & SL0TCA14 (California Special)

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 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.
- 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

Mounting your Lightbar:

This lightbar mounts with 1/2" bolts, affixed to mounting plates that slide into the track on the bottom of the lightbar base. Figures 1 and 1a show how the slide bolt assembly slides into your lightbars base and mounts onto the vehicle. Use an appropriately sized drill bit sized for a 1/2" bolt, to drill the mounting holes. When you secure the slide bolts to the bottom of the lightbar base, be sure the outside bolts are spaced far enough apart and near enough to the ends of the vehicle roof.

Lightbar Cables:

Extend the cables towards your switch panel and refer to the wiring diagram below. Refer to the instructions included with your switches for switch 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!

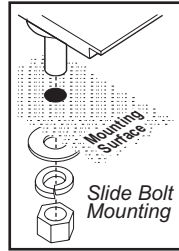
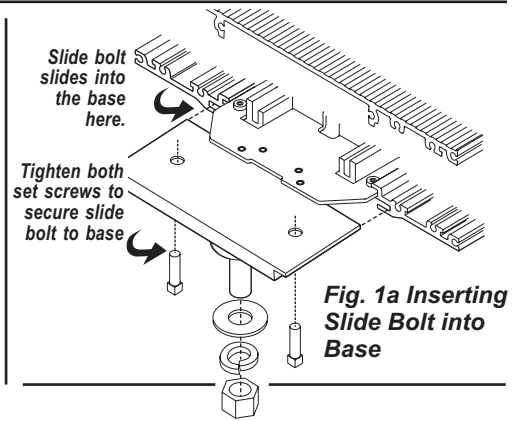


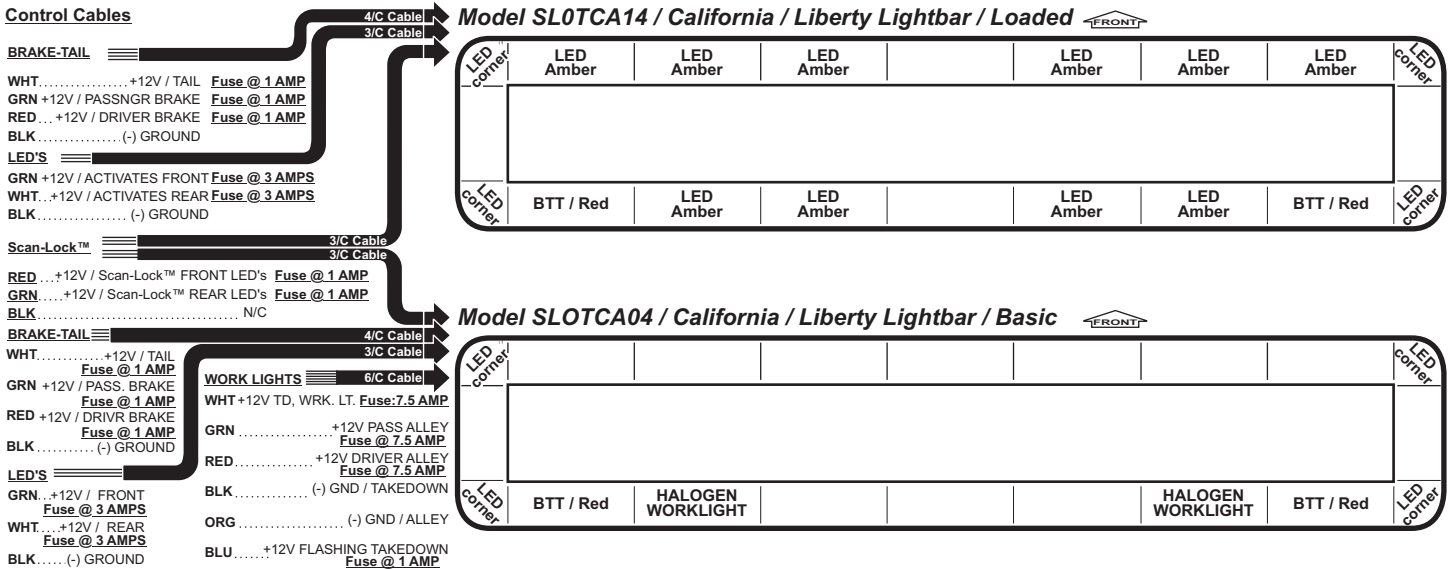
Fig. 1 Slide Bolt Mount:

1. Remove one lightbar endcap.
2. Insert slide bolts into base, slide them across to their mounting position and secure with set screws
3. Position the lightbar onto the vehicle and mark the bolt hole locations on the mounting surface
4. Drill the bolt holes with an appropriately sized drill bit
5. Replace end cap and insert bolts into their mounting holes and secure the lightbar with supplied hardware



IMPORTANT WARNING!
CAUTION! DO NOT LOOK DIRECTLY AT THESE LED'S WHILE THEY ARE ON. MOMENTARY BLINDNESS AND/OR EYE DAMAGE COULD RESULT!

Control Cables



Operation:

Operation of the function wires in the cables exiting the lightbar is outlined below. Applying +12 volts DC to these wires will activate their function.

- LED CABLE:** 3 conductor
GREEN: Activates the FRONT LED's.
WHITE: Activates the REAR LED's.
- WORK LIGHTS:** 6 conductor:
WHITE: Activates the WORKLIGHTS
- BRAKE-TAIL:** 4 conductor
WHITE: Activates the TAIL LIGHTS
GREEN: Activates the PASSENGER SIDE BRAKE LIGHT
RED: Activates the DRIVER SIDE BRAKE LIGHT
- SCANLOCK:** 3 conductor
RED: Flash pattern selection for the FRONT LED's
GREEN: Flash pattern selection for the REAR LED's

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Available Flash Patterns:

1. SignalAlert™ 3 cycles of 1A and 3 cycles of 1S
2. SignalAlert™ 1 Alternates with 2
3. SignalAlert™ 1 & 2 Simultaneous
4. CometFlash® 1 Alternates with 2
5. CometFlash® 1 & 2 Simultaneous
6. CometFlash® 3 cycles of 2A and 3 cycles of 2S
7. DoubleFlash 1 Alternates with 2
8. DoubleFlash 1 & 2 Simultaneous
9. DoubleFlash™ 3 cycles of 3A and 3 cycles of 3S
10. 10.SingleFlash 1 Alternates with 2
11. SingleFlash 1 & 2 Simultaneous
12. SingleFlash 3 cycles of 4A and 3 cycles of 4S
13. SteadyFlash 1 & 2 Steady / 3 & 4 SingleFlash
14. Steady 1, 2, 3 & 4 Steady
15. Steady: Full power 1 sec., then slow ramp to 40

Scan-Lock™ / Flash Pattern Selection:

LED's must be on for Scan-Lock™ to work. The RED wire is the Scan-Lock™ wire for FRONT LED's. The GREEN wire is the Scan-Lock™ wire for REAR LED's

TO CHANGE PATTERNS: To cycle forward to the next available pattern: Apply +12 volts to the "Scan-Lock™ wire" for less than 1 second and release. To cycle back to the previous pattern: Apply +12 volts to the RED wire for more than 1 second and release.

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

TO RESTORE THE FACTORY DEFAULT PATTERN: With power to the lighthouses off, apply +12 volts to the "Scan-Lock™ wire". While still applying +12 volts to the "Scan-Lock™ wire", turn power back on. The factory default pattern will be displayed.

Use a Normally Open momentary switch to control Scan-Lock™