

vehicle safety systems:

LED Vertex™ Hide-Away Strobe Lamp Model(s): 77931, 77932, 77933, 77935

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Safety First

This document provides all the information to allow your Grote $^{f s}$ product to be properly and safely installed. Before the installation and/or operation of your new product, the installation technician on operator must read this manual completely. Inportant information is contained herein which 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 demaged 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.
- Do not install this product or route any wires in the deployment area of your air bad. DO NOT RESEARCH THE PRODUCT OF TOLKE ANY WHEEL IN THE DEPLOYMENT APPARTY OF THE DEPLOYMENT APPAR 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 strobs 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 (ens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect andoperate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.
- 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 <u>FUSED</u> "at the battery" to carry that load. DO NOT USE CIRCUIT BREAKERS WITH THIS
- FAILURE TO FOLLOW THESE PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR

Installation of the 6 LED Hide-A-Way into a composite automotive headlight or taillight assembly:

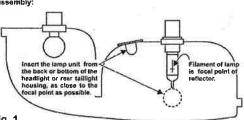


Fig. 1 Top view of automotive composite headlight or taillight housing assembly

- 1. Follow manufacturers instructions to remove the headlight (or taillight) reflector assembly from the vehicle.
- 2. Select the mounting location for the LED Hide-A-Way, keeping in mind the following
- . The LED Hide-A-Way will share the same reflector as the headlight, brake light, or signal light. Make sure the Hide-A-Way does not interfere with the operation of these
- There must be a minimum of one inch of space between the LED Hide-A-Way and the
- . The LED Hide-A-Way must not be installed above the horizontal centerline of the reflector.
- The LED Hide-A-Way must not be installed above any OEM supplied light.
- 3. Choose a surface in the rear or bottom of the housing which is as flat as possible. Using a hole saw, cut a 1" hole in the housing as shown (Fig. 1 & 2) and de-burr the hole.
- 4. Insert the LED lamp assembly into the reflector housing. Mark the location for the two mounting holes (3/32" DIA.). Remove the lamp assembly and drill the holes.
- 5. Install the lamp assembly and gasket using the two provided #4 sheet metal screws and secure the lamp to the reflector assembly
- 6. Repeat steps 1 thru 5 for the remaining light.
- 7. Remount both headlight assemblies to the vehicle and route the connector cables to their designated control switches (power and Scan-Lock™).

RED - Power (Fuse@3A) Fig. 2 **BLK** - Ground Lamp Driver GRN - SYNC -WHT - Scan-Lock (Fuse@1A) lounting 3/32" DIA **Mounting Hole** mounting screw holes.

8. The lamp driver should now be secured to the vehicle using the double-sided adhesive

IMPORTANT NOTE: If the LED Hide-A-Way is being used in an area previously occupied by an S30HA light assembly, it is important to seal the mounting holes used by the previous assembly with RTV or other suitable material.

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!

Wiring & Operation:
The LEO Hide-A-Way is powered & controlled by the 4-wire cable coming from the light assembly. Their functions are as follows:

RED: Positive - Extend the RED wire to a +12VDC power source (Fuse @ 3 amps).

BLACK: Ground - Extend the BLK wire to the negative terminal of the battery

GREEN: SYNC - Connect the GRN wire to other SYNC capable devices to synchronize their output. Cap off this wire if it is not used.

WHITE: Scan-Lock™ - Extend the WHT wire to a customer supplied momentary switch (Fuse @ 1 amp). See Scan-Lock™ section for operation.

IMPORTANT WARNING: DO NOT ATTEMPT TO USE THE LED LIGHTHEAD(S) WITHOUT THE LED DRIVER MODULE CONNECTED.

Scan-Lock®

n order to program flash patterns, the lighthead must be on. With the appropriate lighthead(s) activated:

TO CHANGE PATTERNS: To advance to the next available pattern apply +12VDC to the WHT wire for less than 1 second and release. To cycle back to the previous pattern apply +12VDC to the WHT wire for more than 1 second and release.

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

TO RESTORE THE FACTORY DEFAULT PATTERN: This will reset all patterns back to their default settings. With the light turned off, apply power to the WHT wire. With power applied to the WHT wire, turn light on. Allow the unit to run for 3 seconds before removing power from the

A Normally Open momentary switch should be used to control Scan-Lock operation.

Flash Patterns -The following is a list of all the available flash patterns:

SYNC Patterns SignalAlert™75 SignalAlert™75 SingleFlash 75
 ComAlerI™ PH.1 PH.2 PH.1 PH.2 10. ComAlert™ CometFlash®75 PH.1 CometFlash@75 PH.2 11. LongBurst™ 12. LongBurst M DoubleFlash 75 PH.1 DoubleFlash 75 13. PingPong™ 14. PingPong™ 7. SingleFlash 75

Non-SYNC Patterns

16. SingleFlash 90 17. SingleFlash 120 18. SingleFlash 300 19. DoubleFlash 150 20. ComAlert™150 21. ActionFlash™1 22. ActionFlash™2 23. ModuFlash™ 24. ActionScan™ 25. Steady

Phase Operation

Phase 1 (PH.1) flashes simultaneously with PH.1 Phase 2 (PH.2) flashes simultaneously with PH.2 PH.1 alternates with PH.2