

# WHELEN<sup>®</sup>

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**Installation Guide:**  
**Outer Edge<sup>®</sup> Pillar Mount Lightbar**  
**2015 Chevy Tahoe**  
**2011-2016 Ford Explorer**

### 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.**
- **Any holes, either created or utilized by this product, should be made both air- and watertight using a sealant recommended by your vehicle manufacturer.**
- **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<sup>®</sup>, 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!**

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

**IMPORTANT!** It is left to the installation technician to select a path for the cables that will protect the cables from possible damage and not interfere with the operation of any other vehicle components or equipment.

#### **Installation 2015 Tahoe:**

1. When you place the lightbar onto the mounting location. The trimmed edge of the lightbar should be flush with the bottom edge and each outer edge of the D-pillar (Fig. 1).
2. On the side of the vehicle, measure 1" from the rear edge of the D-pillar (centered vertically on the D-pillar) and drill a 1" wire entry hole in this location (Fig. 2). **Be very careful not to damage any components behind the D-pillar.**
3. Feed the wire harness into this hole and out through the D-pillar into the interior of the vehicle then install the wiring and make all the wiring connections (See "Wiring" section).



**Fig. 1**

tape. Be sure the leaders are protruding from under the housing so that you can pull the tape backing off once the housing is in place.

3. **There is a driver and passenger side housing. Be sure to mount them on the correct sides.** Firmly hold the housing onto its final mounting position. While pressing the whole housing against the D-pillar, (being very careful not to move the housing) slowly remove the tape backing from the top and leading edge of the housing and then from the rear.
4. With the tape backing removed, press the housing firmly against the mounting surface where the tape is to secure it.  
**WARNING! The adhesive used in this procedure is fully bonded after 72 hours @ 70°F (21°C). During this period, do not expose housing to unnecessary force, such as a high-pressure car wash.**
5. Locate the two factory-drilled holes in the Outer Edge housing. Using a 1/8" drill bit drill two holes into the D-pillar in these two locations. Using the two supplied #8 x 1/2" black oxide phillips truss screws, secure the Outer Edge housing to the D-pillar.

#### **Installation 2011-2016 Explorer:**

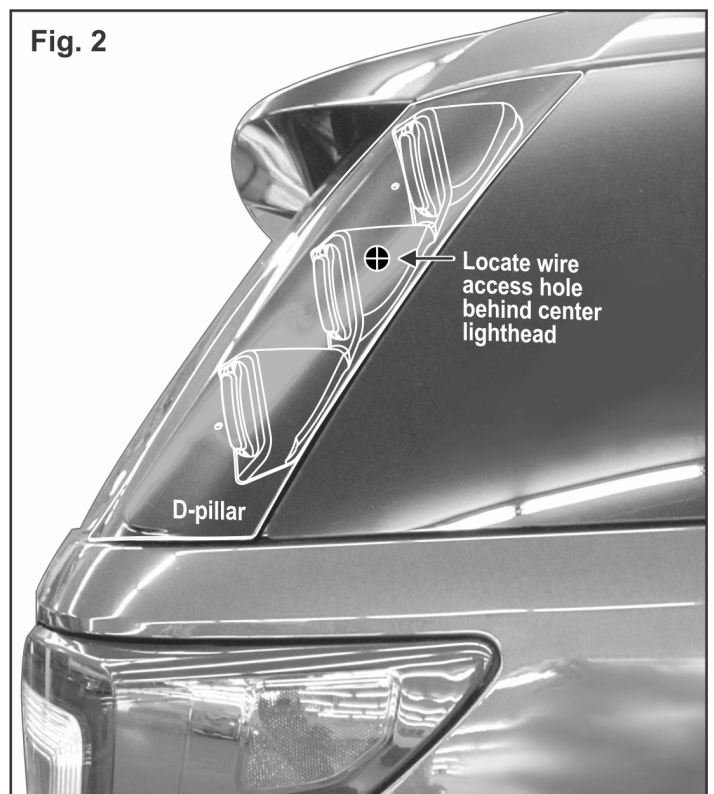
1. Place the lightbar housing onto the D-pillar. The trimmed edge of the housing should be flush with the bottom edge and each outer edges of the D-pillar (Fig. 1).
2. Note the location of the center lighthouse, remove the housing and drill a 3/4" wire entry hole into the D-pillar in this location (Fig. 2). **Be very careful not to damage any components behind the D-pillar.**
3. Tuck the lighthouse wires into the housing and secure them using masking tape so they do not interfere with contact of the D-pillar to the



**Fig. 1**



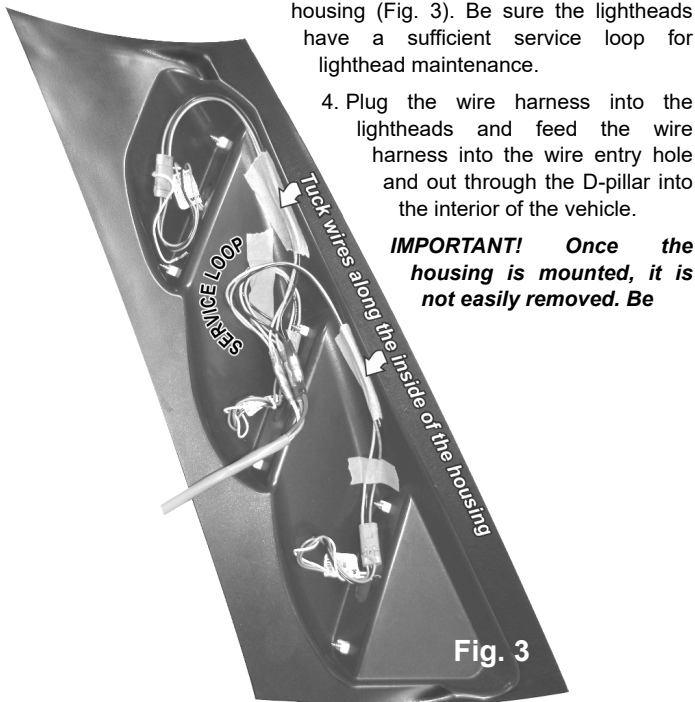
**Fig. 2**



**Fig. 2**

#### **Mounting the housing:**

1. Place the housing onto its mounting location on the vehicle to be sure the lighthouses have a sufficient service loop for maintenance.  
**IMPORTANT! Once mounted, the housing is not easily removed.**
2. Using isopropyl alcohol wipes (included), clean the vehicle where it comes in contact with the mounting tape then prime those areas with the supplied 3M Keel Primer. Ready the leaders on the pre applied



housing (Fig. 3). Be sure the lighthoods have a sufficient service loop for lighthouse maintenance.

4. Plug the wire harness into the lighthoods and feed the wire harness into the wire entry hole and out through the D-pillar into the interior of the vehicle.

**IMPORTANT!** Once the housing is mounted, it is not easily removed. Be

**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**

**Wiring:**

- BLACK - Ground** - Extend the *GROUND* wire to Chassis Ground.
- RED - Positive (+)** - Extend the Positive wire to +VBAT via an SP/ST switch. Fuse @ 5 AMPS.
- WHITE - SYNC** - Connect the **WHITE** wire from each side of the lightbar together to enable SYNC. You can also connect the SYNC wire to other SYNC capable lights in the vehicle.

**Operation:**

The lighthoods come programmed with the default flash pattern (SignalAlert™75). If you wish to change the flash pattern you must program each lighthouse separately. The ScanLock (WHT/VIO) wire can only be accessed separately in each lighthouse.

**Scan-Lock™ (WHT/VIO)** In order to change flash patterns, the light must be on.

- To advance to the next flash pattern apply +VDC to the *WHT/VIO* wire for less than 1 second and release.
- To cycle back to the previous pattern apply +VDC to the *WHT/VIO* wire for more than 1 second and release.

Allow the selected pattern to run for more than 5 seconds to set it as the default pattern.

To restore the factory default pattern, with the light turned off, apply power to the WHT/VIO wire. With power applied to the WHT/VIO wire, turn light on. Allow the unit to run for 3 seconds before removing power from the WHT/VIO wire.

**Mounting the housing:**

1. Place the housing onto its mounting location on the vehicle to be sure the lighthoods have a sufficient service loop for lighthouse maintenance and the wires do not interfere with mounting.
2. Using isopropyl alcohol wipes (included), clean the vehicle where it comes in contact with the mounting tape then prime those areas with the supplied 3M Keel Primer. Ready the leaders on the pre applied tape. Be sure the leaders are protruding from under the housing so that you can pull the tape backing off once the housing is in place.
3. **There is a driver and passenger side housing. Be sure to mount them on the correct sides.** Firmly hold the housing onto its final mounting position. While pressing the whole housing against the D-pillar, (being very careful not to move the housing) slowly remove the tape backing from the top and leading edge of the housing and then from the rear.
4. With the tape backing removed, press the housing firmly against the mounting surface where the tape is, to secure it.  
**WARNING! The adhesive used in this procedure is fully bonded after 72 hours @ 70°F (21°C). During this period, do not expose housings to unnecessary force, such as a high-pressure car wash.**
5. Locate the two factory-drilled holes in the Outer Edge housing. Using a 1/8" drill bit drill two holes into the D-pillar in these two locations. Using the two supplied #8 x 1/2" black oxide phillips truss screws, secure the Outer Edge housing to the D-pillar.

**IMPORTANT!** It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment!

**Flash Patterns (SYNC Capable)**

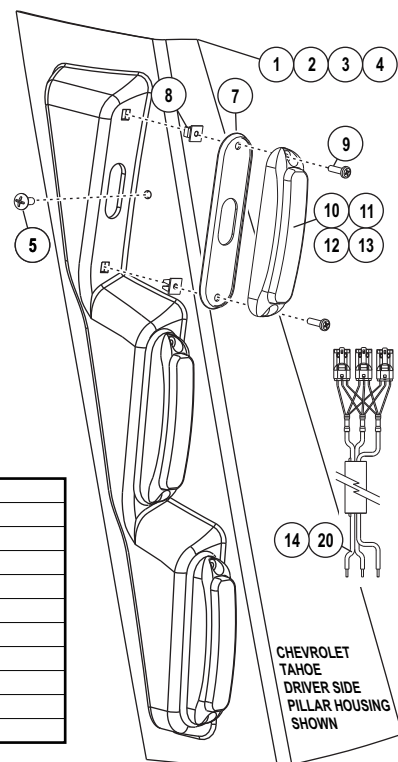
1. SignalAlert™ 75 **PH1**
2. SignalAlert™ 75 **PH2**
3. CometFlash® 75 **PH1**
4. CometFlash® 75 **PH2**
5. DoubleFlash 75 **PH1**
6. DoubleFlash 75 **PH2**
7. SingleFlash 75 **PH1**
8. SingleFlash 75 **PH2**

9. ComAlert™ 75 **PH1**
10. ComAlert™ 75 **PH2**
11. LongBurst™ 75 **PH1**
12. LongBurst™ 75 **PH2**
13. PingPong™ 75 **PH1**
14. PingPong™ 75 **PH2**
15. SingleFlash 60
16. SingleFlash 90
17. SingleFlash 120
18. SingleFlash 300
19. DoubleFlash 150
20. ComAlert™ 150
21. ActionFlash™ 50
22. ActionFlash™ 150
23. ModuFlash™
24. ActionScan™
25. Steady

**Flash Patterns (REGULAR)**

**SYNC:** To SYNC 2 sides of the lightbar, configure the lighthoods on both sides to display the same Phase 1 (Simultaneous) pattern. Turn power off and connect the WHITE wire from each side together. Activate the lightbar and their patterns will be synchronized. To configure both sides to alternate their patterns, advance either sides lighthoods to Phase 2 (Alternating) of the current pattern.

**NOTE: ALL SWITCHES AND FUSES ARE CUSTOMER SUPPLIED**



QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0687817-00	PILLAR EDGE MICRON 2011-16+ EXPLORER
	*		01-0687817-01	PILLAR EDGE MICRON 14+ TAHOE
-	1	1	11-488075-L00	HOUSING, DRIVER MICRON PILLAR EDGE 2016 EXPLORER
-	1	2	11-488075-R00	HOUSING, PASS. MICRON PILLAR EDGE 2016 EXPLORER
1	-	3	11-487816-L00	HOUSING, DRIVER, MICRON PILLAR EDGE 14+ TAHOE
1	-	4	11-487816-R00	HOUSING, PASS. MICRON PILLAR EDGE 14+ TAHOE
4	4	5	15-081C1B-081	SCREW, 8 X 1/2 PHIL TRUSS SS, BLACK
6	6	6	66-0416678-00	TAPE, VHB DOUBLE STICK BLACK .062 X 3/4"
6	6	7	38-046F990-00	GASKET, FLANGE FLUSH MT MICRON
12	12	8	13-062C40-16J	SCREW GROMMET, #6/#8 FASTEX
12	12	9	15-06521B-080	SCREW, 6 X 1/2 PPH PLASTI-LOK 410 S/S BLACK

A/R	A/R	10	01-026G281-10	SUB ASSY, LTHD FLUSH MT MICRON AMB
A/R	A/R	11	01-026G281-20	SUB ASSY, LTHD FLUSH MT MICRON BLU
A/R	A/R	12	01-026G281-30	SUB ASSY, LTHD FLUSH MT MICRON WHT
A/R	A/R	13	01-026G281-50	SUB ASSY, LTHD FLUSH MT MICRON RED
2	-	14	46-0787851-00	ASSY, CABLE REAR PILLAR LT 20'
1	1	15	66-0716725-00	PRIMER, 3M #94 6 ML APPLICATOR
A/R	A/R	16	66-0110008-01	ALCOHOL, ISOPROPYL
1	1	17	10-0523957-**	LABEL, PNMH MICRON PILLAR EDGE
6	6	18	25-0910223-05	BUTT TAIL, 22-14 GS INS
6	6	19	11-76E994-001	FLANGE, MICRON FLUSH MOUNT BLACK
-	2	20	46-0787851-01	ASSY, CABLE REAR PILLAR LT 20' EXPLORER