

# WHELEN<sup>®</sup>

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Installation Guide:  
Traffic Advisor™ (Arrow Style):  
Model(s) RF125NF1, RF125NF2,  
RF165NF1, RF165NF2

## 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. Lens 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!**

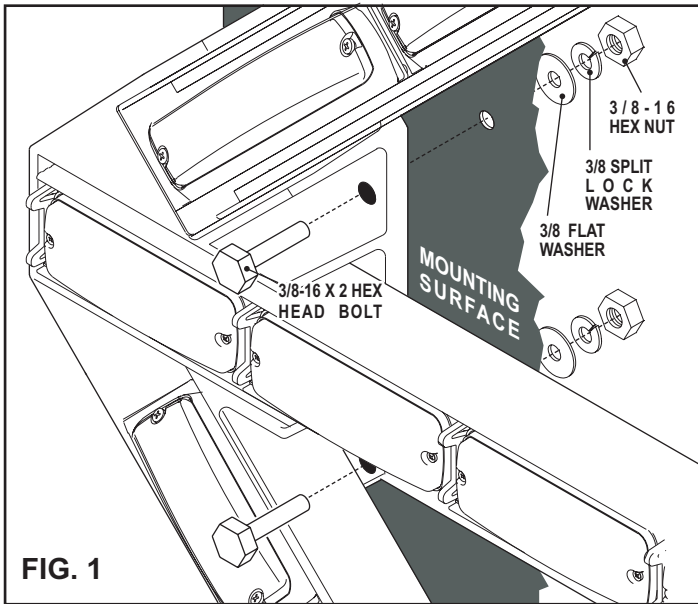
**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

**Installation:**

**Caution:** Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

**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!

1. Place the Traffic Advisor™ in its mounting position on the mounting surface making sure the arrow is level. Mark the 4 bolt locations onto the mounting surface (2 mounting bolts per side).
2. Remove the Traffic Advisor from the mounting surface and drill the 4 mounting holes using a drill sized for the 3/8" bolts.
3. Install the mounting hardware onto the bolts in the order shown and mount the Traffic Advisor™ to the vehicle (Fig. 1).



**IMPORTANT:** When you are routing wires, the existing, factory wire harness should be followed whenever possible. The existing harness has been positioned so no wires will be damaged by vehicle operation. The factory harness may include a service loop that will keep the wires from being damaged or broken by the movement of the dump body.

**Wiring:**

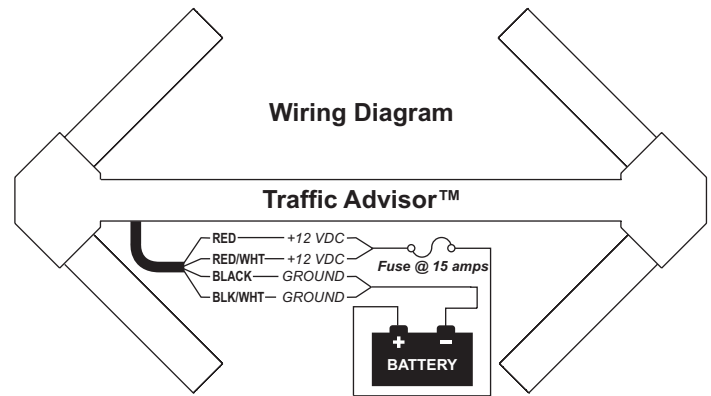
**WARNING!** All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and **FUSED** at the battery to carry that load. **DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

**Wire Connections:**

1. Splice the RED and RED/WHT wires together, then extend this single wire to the battery and install a 15 amp fuse block (customer supplied) to the end of the wire. Remove the fuse before connecting any wires to the battery. Connect the wire to the POSITIVE (+) battery terminal.

**IMPORTANT:** There must not be more than 2 feet of wire between fuse block and battery. The wire between fuse and battery is unprotected, do not allow this wire to come in contact with any other wires.

2. Splice the BLACK and BLK/WHT wires together, then extend this single wire to the battery and connect it to the battery ground. If your vehicle has a cable extending from the negative terminal of the battery to the chassis, it is best to attach the black wire at the chassis connection.

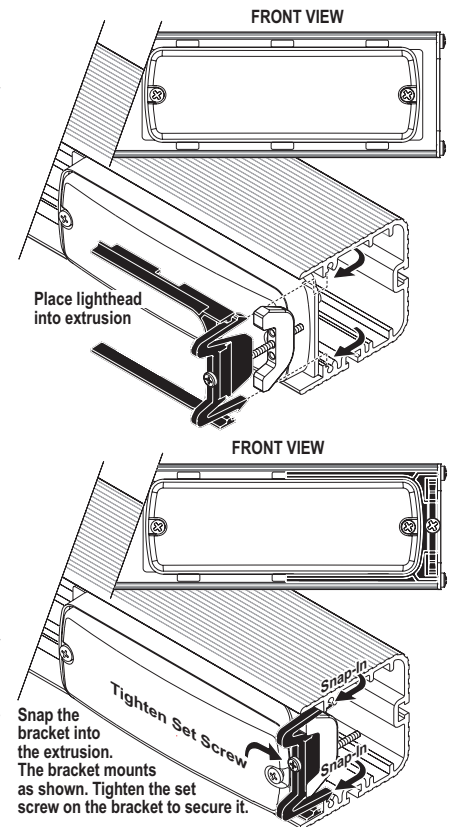


**Operation:**

The operation of this TA is controlled by the Whelen wireless Traffic Advisor™ controller. Refer to the instructions that come with the controller for operation.

**Service:**

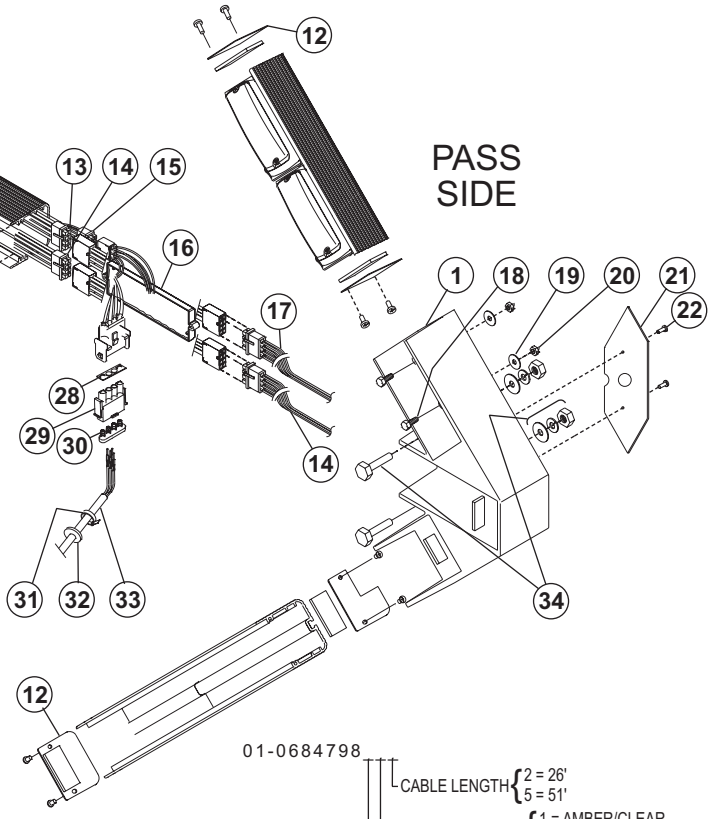
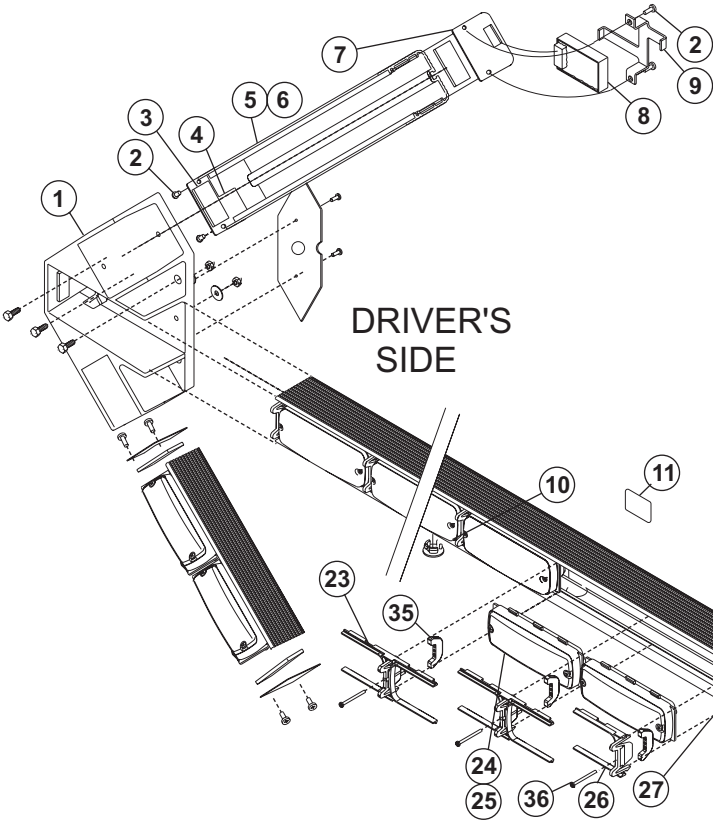
This section shows you how to access the lightbar for service or lighthead replacement. To replace a lighthead, first loosen the set screw(s) on the bracket. Now squeeze the clip together so that it disengages from the extrusion and pull the bracket straight out. With the bracket removed the lighthead lifts out and can be unplugged from the harness and removed from the lightbar.



**IMPORTANT!** Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.

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

QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-06847980__	T/A, 500 LIN ARROW, W/RF, 12-LIGHT
	*		01-06847981__	T/A, 500 LIN ARROW, W/RF, 16-LIGHT
2	2	1	11-384636-002	HOUSING, ARROW
20	20	2	14-062219-06D	SCREW, #6-32 X 3/8" PPH ROLOX
10	10	3	38-0143142-00	GASKET, END CAP, LIGHTHEAD .25"
4	4	4	11-243415-027	END CAP, ARROW EXTRUSION, INSIDE
-	4	5	11-36A055-006	EXTRUSION, T/A 500 LED - 6.00"
4	-	6	11-36A055-011	EXTRUSION, T/A 500 LED - 11.50"
1	1	7	11-243415-037	ENDCAP (w/ .600 SLOT)
1	1	8	01-026A286-00	RF RECEIVER MODULE
1	1	9	07-243514-000	BRACKET, MOUNTING - RF MODULE
1	1	10	21-0050725-00	PLUG, HOLE
AR	AR	11	10-0523348__	LABEL
5	5	12	11-243415-007	END CAP, ARROW EXTRUSION, OUTSIDE
1	1	13	46-076A026-00	HARNESS, T/A 500 LINEAR LED@ - DRIVER
2	2	14	46-076A034-00	HARNESS, T/A 500 ARROW
1	1	15	46-0743526-01	CABLE, INTERNAL CONTROL, RF (36")



1	1	16	01-026A002-03	ELECT. ASSY, T/A 500 LED ARROW w/RF
1	1	17	46-076A150-00	HARNESS, T/A 500 LINEAR LED@ - PASSENGER
14	14	18	14-104436-080	SCREW, 10-24 X 1/2" HEX HD MS SS
14	14	19	16-1011320-20	LOCKWASHER, #10 EXT.TOOTH SS
14	14	20	13-104111-060	NUT, 10-24 X 3/8" HEX SS
2	2	21	11-243438-000	COVER, WIRING - T.A 500 ARROW
4	4	22	14-082216-083	SCREW, #8-32 X 1/2" PPH SELF TAP SS
11	7	23	07-264851-000	BRACKET, EXT. MT. 500 SNAP-IN
AR	AR	24	01-066A009211	LIGHTHEAD, 500 LINEAR LED@ STDY AMBER
AR	AR	25	01-066A009251	LIGHTHEAD, 500 LINEAR LED@ STDY RED
10	10	26	07-264851-001	BRACKET, EXT. MT., 500 SNAP-IN
1	1	27	11-36A090-045	EXTRUSION, T/A 500 LED SNAP-IN
1	1	28	39-1V17269-00	SEAL, INTERFACE - 4 POS
1	1	29	39-0917517-04	HOUSING, PLUG - 1 X 4
1	1	30	39-1V17269-01	SEAL, WIRE - 4 POS
1	1	31	26-0215001-06	TY-WRAP, 6" BLACK
1	1	32	21-11121608-00	GROMMET, 3/8" ID 3/4" OD 1/2" THK
1	1	33	46-0743485-__	CABLE, POWER - 4/C 14 GA.
1	1	34	01-0416050-00	KIT, MOUNTING - STANDARD
21	17	35	19-343555-000	CLAMP NUT, DIVIDER
21	17	36	15-04521B-220	SCREW, 4 x 1 3/8" PPH PLASTI-LOK SS

01-0684798

- CABLE LENGTH { 2 = 26"
- 5 = 51"
- LED/LENS COLOR { 1 = AMBER/CLEAR
- 5 = RED/CLEAR
- ARROW SIZE { 0 - 12 LIGHT
- 1 = 16 LIGHT