

WHELEN[®]

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Installation Guide: Val-U-Bar™ Lightbars Model(s) VB247, VB447 & VB647

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. 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:

Refer to the Lightbar mounting guide included with your lightbar.

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.

Routing your Lightbar Cable

- To protect the headliner from damage caused by drilling the cable access hole, allow a 5" to 7" distance between roof and headliner by lowering the headliner before drilling.
- Using a hole saw, drill an appropriately sized cable access hole.

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

- Use a round file to smooth and de-burr the edges of the hole, then Insert a grommet (user supplied) into the cable access hole.
- Insert the cable(s) through the cable access hole into the vehicle. Use RTV silicone to weatherproof the access hole after the cable(s) are pulled completely into the vehicle.
- Route the cable(s) down through the B-pillar. The cable(s) must make a 90° turn to enter the B-pillar. Although routing the cable in this manner may be difficult, this has been determined to be the best procedure. It is up to the installation technicians discretion whether to route the cable(s) as recommended or use an alternative route. Pull the full length of the cable(s) out of the hole at the base of the B-pillar (Fig. 1) and route towards your switch panel. Refer to the instructions included with your switches for wiring.

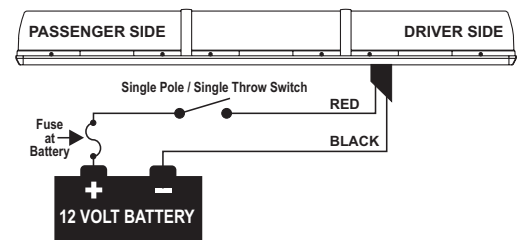
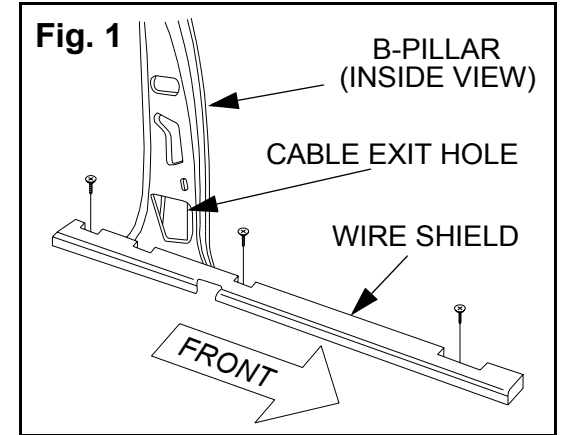
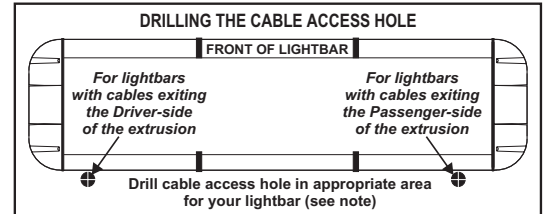
Wiring

Failure to connect your lightbar correctly may result in permanent damage. When purchasing the necessary switch, fuse and additional wire, be sure they match the recommended electrical rating. Disconnect vehicle battery before beginning any installation. The cable for your lightbar contains 2 wires. Connect the RED wire to a SPST switch. From the switch, route the wire to your vehicles battery. Deviation from any electrical specifications are at the users risk.

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!**

IMPORTANT: Connect the red wire to the appropriate fuse before connecting to the battery. Connect the black wire to the negative terminal of the battery. After the black wire has been connected, you can now connect the wire coming from the fuse to the positive terminal of the battery. It is important to follow all the rules below when installing any electrical device into a vehicle.

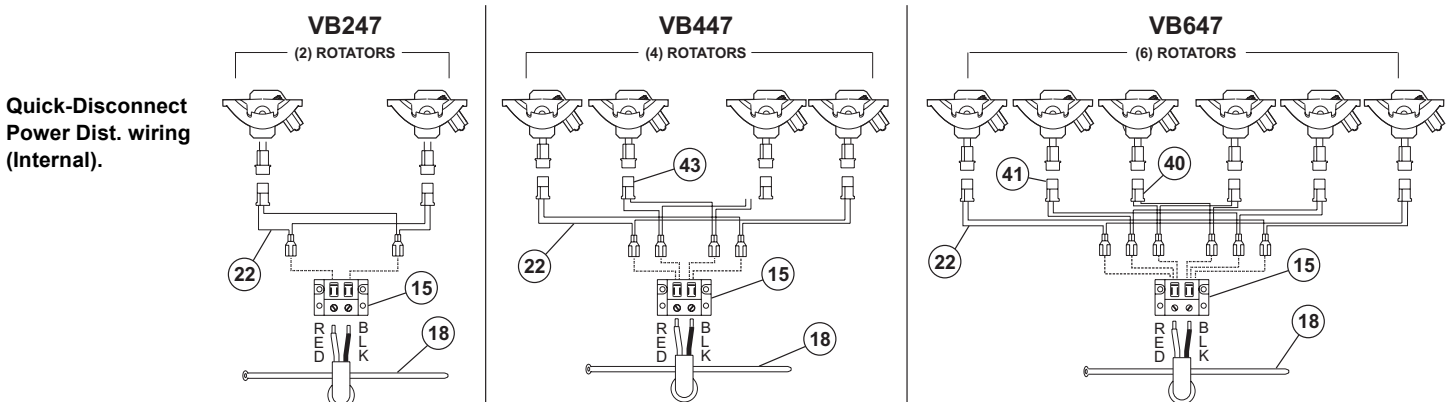
- All user supplied wires must be 10 gauge stranded conductor minimum.
- User supplied switch is to be 25 amp DC continuous (or greater).
- User supplied fuse: See specifications.
- Connect negative side of circuit before connecting positive side.
- Pre-wire switch and fuse before making any connections to power.



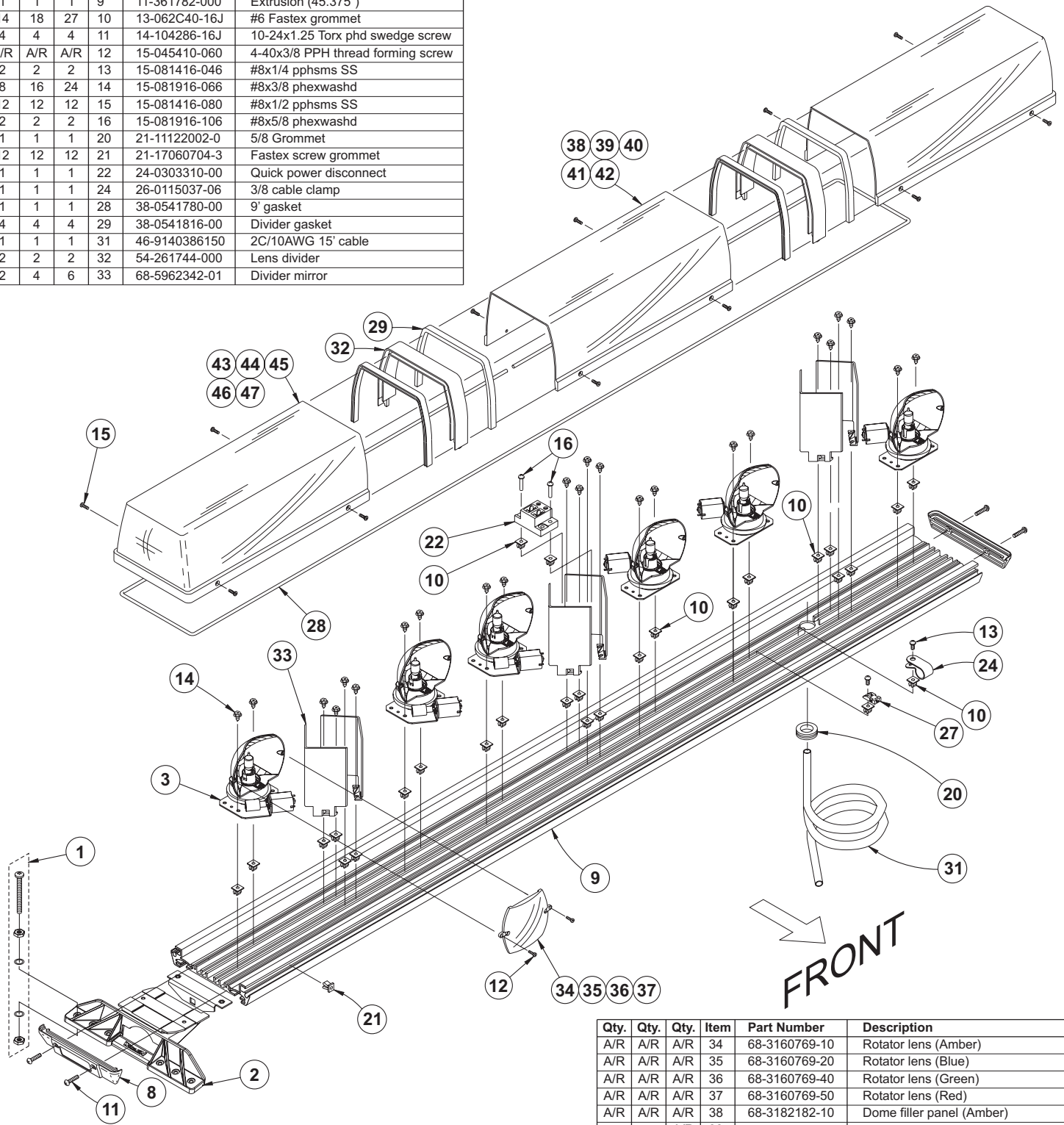
Specifications:

	VB247	VB447	VB647
Input Voltage	10-16 VDC	10-16 VDC	10-16 VDC
Input Current	6 Amps	12 Amps	18 Amps
Fuse Value	10 Amps	15 Amps	25 Amps
Lamp.....	50 Watt	50 Watt	50 Watt
Rotation Speed	150 RPM	150 RPM	150 RPM
Operating Temp.	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C
Humidity Range	0% to 100%	0% to 100%	0% to 100%
Weight	14 lbs.	15 lbs.	16 lbs.

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



Qty.	Qty.	Qty.	Item	Part Number	Description
*				01-0682215-()	Model VB247 Lightbar
	*			01-0682216-()	Model VB447 Lightbar
		*		01-0682217-()	Model VB647 Lightbar
1	1	1	1	01-0441547-00	Perm mount kit
2	2	2	2	02-0341742-01	Mounting foot w/pads & hardware
2	4	6	3	02-0363276-02	Rotating reflector 150-12-50H
2	2	2	8	11-282151-000	Extrusion cover
1	1	1	9	11-361782-000	Extrusion (45.375")
14	18	27	10	13-062C40-16J	#6 Fastex grommet
4	4	4	11	14-104286-16J	10-24x1.25 Torx phd swedge screw
A/R	A/R	A/R	12	15-045410-060	4-40x3/8 PPH thread forming screw
2	2	2	13	15-081416-046	#8x1/4 pphsms SS
8	16	24	14	15-081916-066	#8x3/8 phexwashd
12	12	12	15	15-081416-080	#8x1/2 pphsms SS
2	2	2	16	15-081916-106	#8x5/8 phexwashd
1	1	1	20	21-11122002-0	5/8 Grommet
12	12	12	21	21-17060704-3	Fastex screw grommet
1	1	1	22	24-0303310-00	Quick power disconnect
1	1	1	24	26-0115037-06	3/8 cable clamp
1	1	1	28	38-0541780-00	9' gasket
4	4	4	29	38-0541816-00	Divider gasket
1	1	1	31	46-9140386150	2C/10AWG 15' cable
2	2	2	32	54-261744-000	Lens divider
2	4	6	33	68-5962342-01	Divider mirror



Qty.	Qty.	Qty.	Item	Part Number	Description
A/R	A/R	A/R	34	68-3160769-10	Rotator lens (Amber)
A/R	A/R	A/R	35	68-3160769-20	Rotator lens (Blue)
A/R	A/R	A/R	36	68-3160769-40	Rotator lens (Green)
A/R	A/R	A/R	37	68-3160769-50	Rotator lens (Red)
A/R	A/R	A/R	38	68-3182182-10	Dome filler panel (Amber)
A/R	A/R	A/R	39	68-3182182-20	Dome filler panel (Blue)
A/R	A/R	A/R	40	68-3182182-30	Dome filler panel (Clear)
A/R	A/R	A/R	41	68-3182182-40	Dome filler panel (Green)
A/R	A/R	A/R	42	68-3182182-50	Dome filler panel (Red)
A/R	A/R	A/R	43	68-3182183-10	End dome (Amber)
A/R	A/R	A/R	44	68-3182183-20	End dome (Blue)
A/R	A/R	A/R	45	68-3182183-30	End dome (Clear)
A/R	A/R	A/R	46	68-3182183-40	End dome (Green)
A/R	A/R	A/R	47	68-3182183-50	End dome (Red)