

WHELEN[®]

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Installation Guide:
NFFA Lightbar
Models: 9308QLED, 9310QLED

Automotive: Lightbars

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.

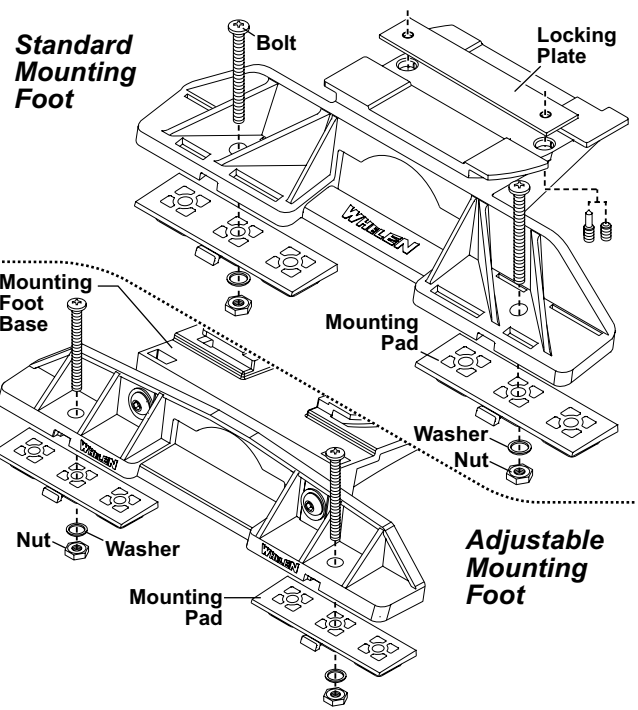
- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- If mounting this product requires drilling holes, the installer **MUST** be sure that no vehicle components or other vital parts could be damaged by the drilling 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

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

Permanent Mounting:

1. Locate the mounting foot and locking plate included with your lightbar. If not already present, install the locking plate onto the mounting foot. When properly positioned, this plate is centered from side to side on the mounting foot.
2. Flip the lightbar upside-down to expose the bottom of the extrusion and place the mounting foot onto the extrusion.
3. Rotate the mounting foot 90° in a counter-clockwise direction. Make sure that the edges of the mounting foot swing into position under the extrusion mounting lip.
4. Repeat this procedure for the remaining mounting foot and return the lightbar to its right side-up position.
5. Position the lightbar onto the vehicle roof in the desired mounting location. One often selected location is directly above the B-pillars. This area is the strongest part of the roof. Refer to your lightbar manual for cable exit location, to be sure that the lightbar is facing the proper direction.
6. Adjust the two mounting feet outwards so that they are as close to the edge of the roof as possible. Make sure that both mounting feet are in full contact with the roof. Be sure that there is no less than 1/2" clearance between the roof and the lightbar at their closest point. When the mounting feet are in their proper position, lightly tighten the locking plate allen head set screws.
7. Turn the lightbar upside down and firmly tighten all of the set screws from step 6 (2 or 4 per side).
8. On the adjustable foot, use the hole in the pad as a guide to drill the two holes into the mounting foot at the locations shown.



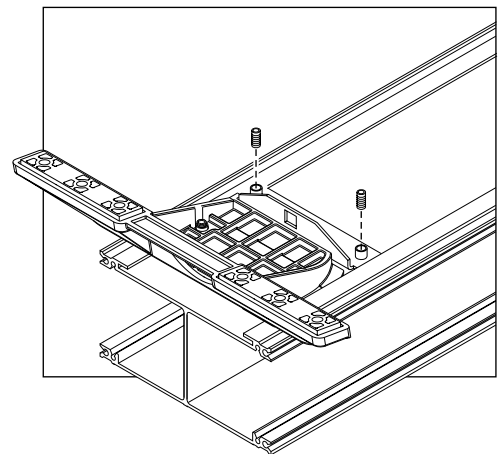
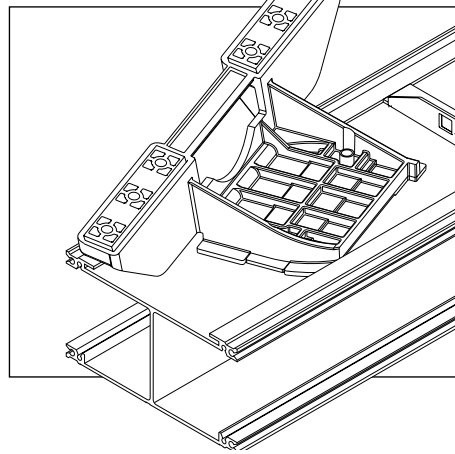
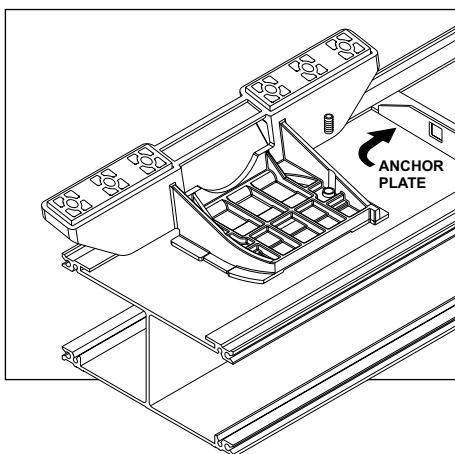
9. Place the lightbar in its final mounting position on the vehicle, mark the mounting hole locations off onto the mounting surface, remove the lightbar and drill the mounting holes.
10. Place the lightbar back onto the vehicle lined up with the mounting holes and secure the mounting feet to the vehicle with the supplied hardware

Strap Mounting:

1. Locate the mounting foot, anchor plate and locking plate included with your lightbar. If not already present, install the locking plate onto the mounting foot. When properly positioned, this plate is centered from side-to-side on the mounting foot.
2. Flip the lightbar upside-down to expose the bottom of the extrusion and place the mounting foot onto the extrusion.
3. Rotate the mounting foot 90° in a counter-clockwise direction. Make sure that the edges of the mounting foot swing into position under the extrusion mounting lip. Install an anchor plate onto the extrusion in the same manner.
4. Repeat this procedure for the remaining mounting foot and anchor plate and return the lightbar to its right side-up position.
5. Position the lightbar onto the vehicle roof in the desired mounting location. One often selected location is directly above the B-pillars. This area is the strongest part of the roof. Refer to your lightbar manual for cable exit location, to be sure that the lightbar is facing the proper direction.
6. Adjust the two mounting feet outwards so that they are as close to the edge of the roof as possible. Both mounting feet must be in full contact with the roof. Be sure that there is no less than 1/2" clearance between

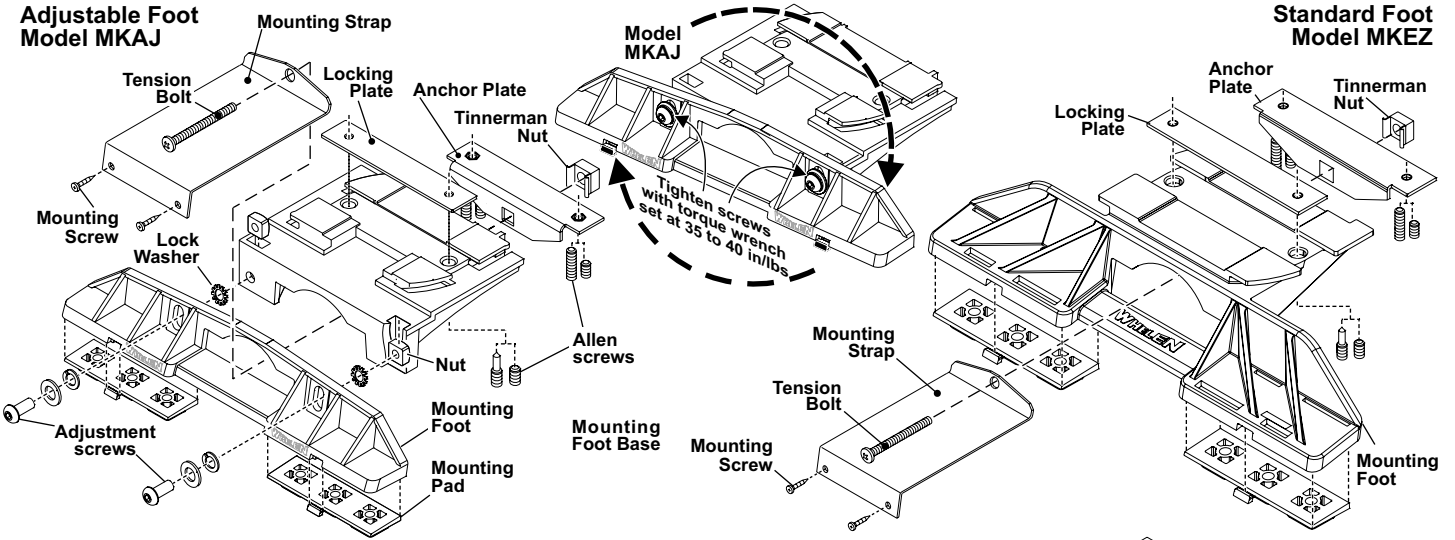
roof and lightbar at their closest point. When the mounting feet are in their proper position, lightly tighten the locking plate allen head set screws.

7. Return the lightbar to an upside-down position. Slide each anchor plate outwards until it is fully engaged with its corresponding mounting foot. With the mounting feet and anchor plates in their proper positions firmly tighten all of the set screws (2 or 4 per side). Flip the lightbar right side-up and return it to its mounting position.
8. Open both drivers side doors. In the area directly below the mounting foot, pull the weatherstrip away from the vehicle so the area where the mounting strap will be secured is exposed. Repeat for the other side.
9. Insert the mounting strap through the mounting foot. Be sure that the strap fits flush against the area where it will be secured onto the vehicle. Insert the tension bolt through the mounting strap and anchor plate, into the tinnerman nut. Tighten slightly with a long-shafted, Phillips screwdriver. Repeat procedure for passenger side.
10. If your mounting strap has mounting holes in the end of the strap, use these holes as a template to drill appropriately sized pilot holes through the strap and into the vehicle. Repeat for passenger side of the vehicle.
11. Firmly tighten the tension bolts to secure the lightbar to the vehicle.

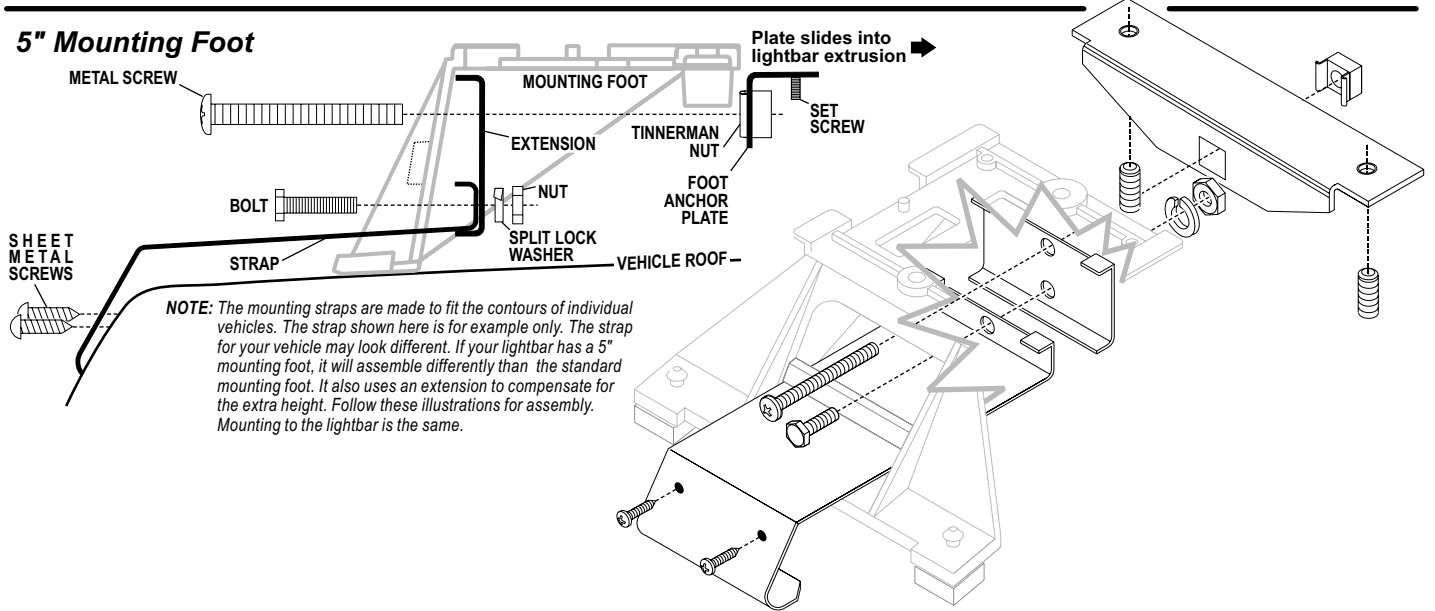


NOTE: Model MKAJ is an adjustable mounting foot. On this model you may loosen the screws on the rear of the foot and adjust the angle of the lightbar. This feature can be used if the angle of the roof is not level with

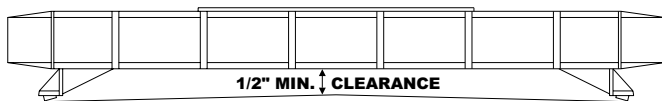
the road. IMPORTANT: To adjust the leveling screws you must use a torque wrench set at 35 to 40in./lbs.



5" Mounting Foot



NOTE: The mounting straps are made to fit the contours of individual vehicles. The strap shown here is for example only. The strap for your vehicle may look different. If your lightbar has a 5" mounting foot, it will assemble differently than the standard mounting foot. It also uses an extension to compensate for the extra height. Follow these illustrations for assembly. Mounting to the lightbar is the same.



IMPORTANT: For strap mounted bars, be sure you have the right sized lightbar for your vehicle. The lightbar should be approximately the same width as the vehicle roof. If too large or small it will not mount properly to the vehicle and may come loose during driving.

NOTE: Unless otherwise specified, the lightbar mounting feet must be sitting as close to the edge of the roof as possible. They must also be in full contact with the roof and not be hanging off the edge.

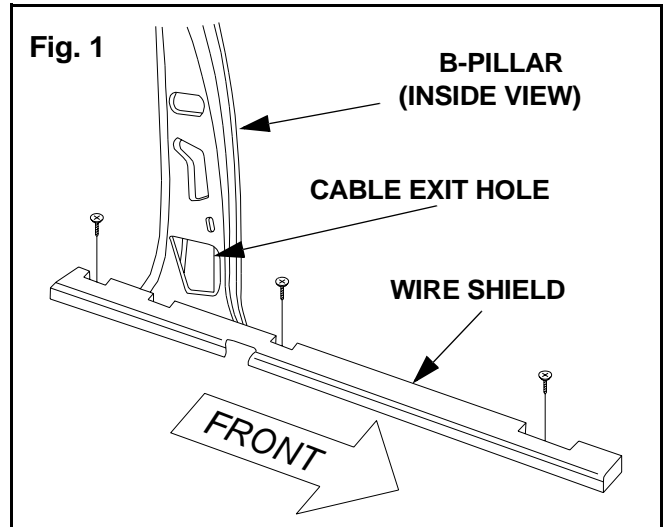
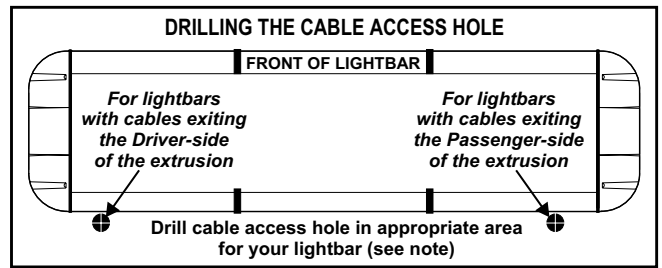
Routing your Edge Lightbar Cable(s)

1. To protect the headliner from damage caused by drilling the cable access hole through the vehicle roof, allow a 5" to 7" distance between roof and headliner by lowering the headliner before drilling.
2. Using a 1" hole saw, drill the 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.

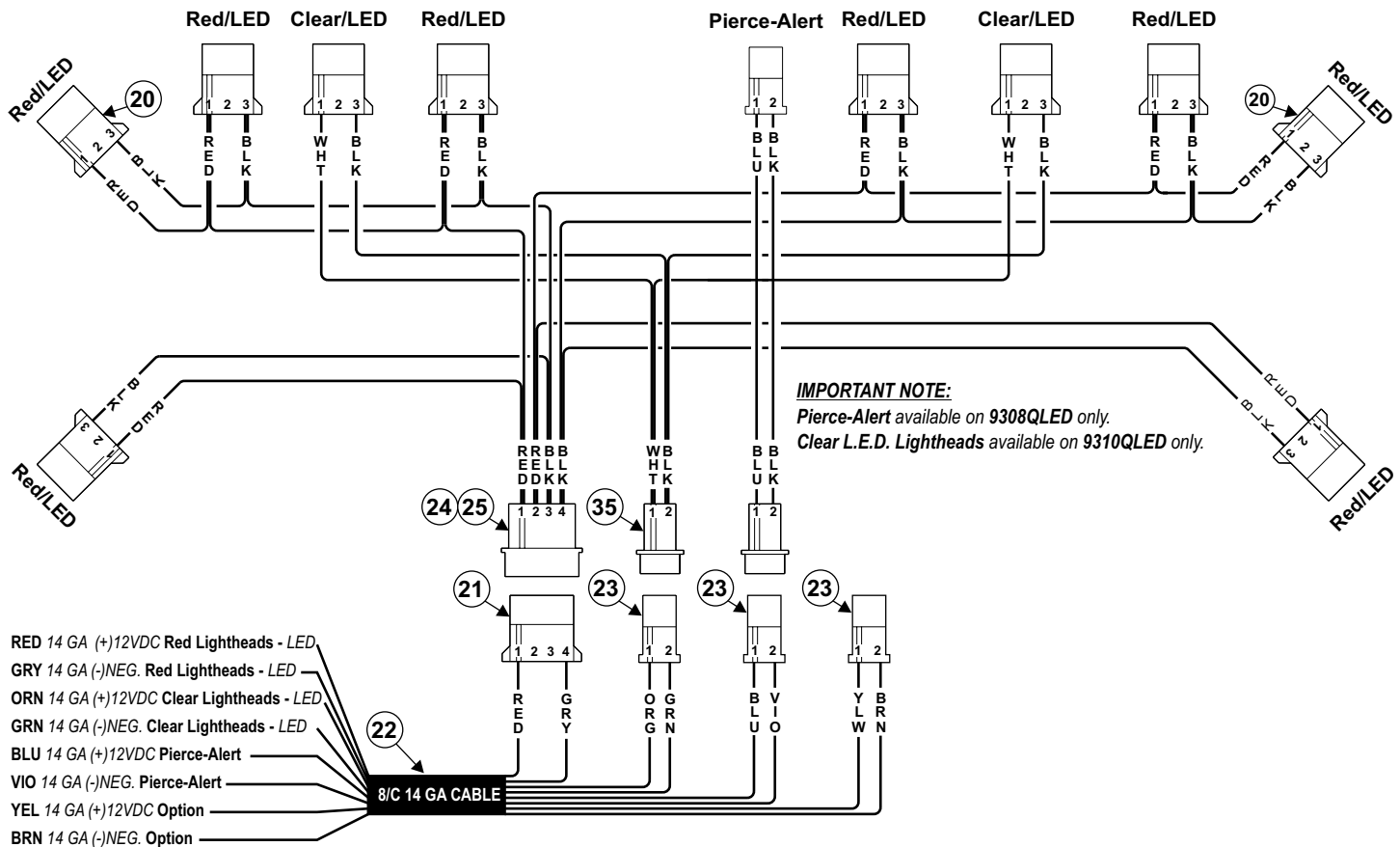
3. Use a round file to smooth and de-burr the edges of the hole.
4. Insert a 1" grommet (user supplied) into the cable access hole.
5. Insert the cable(s) through the cable access hole into the vehicle. Use RTV silicone to weatherproof the access hole after the cable(s) are pulled completely into the the vehicle.
6. 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 switch wiring information.

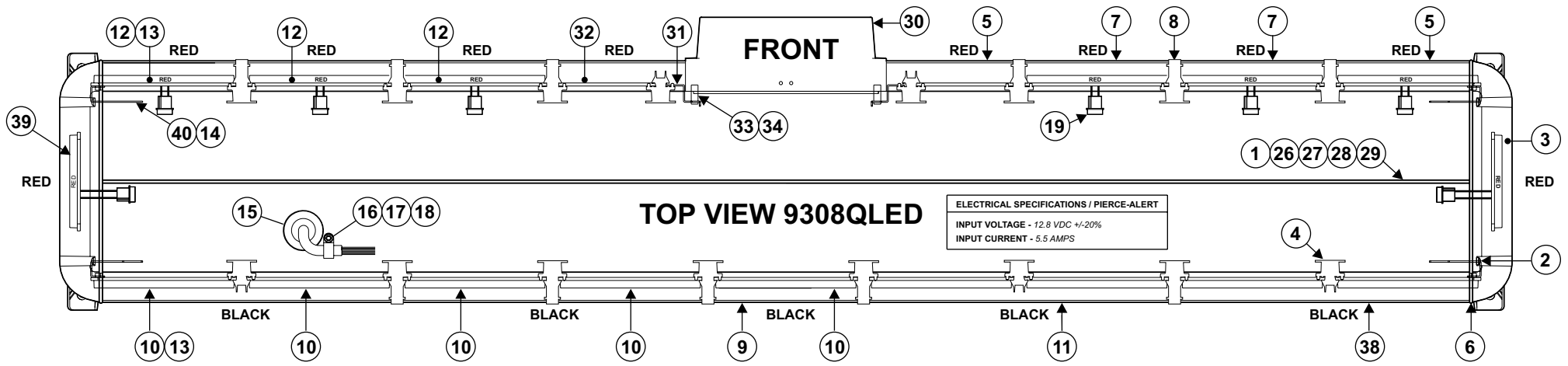
NOTE: The outer surfaces of this product may be cleaned with mild soap and water. Use of any other chemicals may void product warranty. Do not use a pressure washer.



WIRING DIAGRAM

Front Of Lightbar





QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
*	*		01-0683714-01	MODEL 9308QLED
*	*		01-0683714-03	MODEL 9310QLED
1	1	1	11-363451-000	ULTRA 68.00" BASE EXTRUSION
8	8	2	14-104286-16JB	#10-24 X 1-1/4" TORX with SHOULDER
2	2	3	68-1183369-50	ENDCAP / RED
16	16	4	07-263103-000	LIGHTHEAD MOUNTING BRACKET
2	2	5	68-1183491R06	ULTRA 6.750" RED LENS
2	2	6	38-0283381-00	ULTRA ENDCAP GASKET
4	4	7	68-1183491R07	ULTRA 7.375" RED LENS
12	10	8	02-0341448-00	LENS DIVIDER
2	1	9	68-1183491907	7.375" BLACK LENS
10	9	10	11-462865-000	HOUSING / 700 LED
4	4	11	68-1183491905	15.062" BLACK LENS
6	6	12	01-0283442-R0	700 WIDE ANGLE RED LED ASSEMBLY
8	8	13	15-065419-160	#6 X 1 PPH PLASTI SCREW
8	8	14	13-062C40-16J	#6 FASTEX SCREW GROMMET
1	1	15	21-11245004-1	1.562" MOUNTING DIAMETER GROMMET
1	1	16	13-104111-063	#10-24 WHIZ NUT
1	1	17	14-104286-16JA	#10-24 X 1.25" TX PH SCREW
1	1	18	26-0115037-06	CABLE CLAMP 3/8"
10	8	19	39-0403013-04	3 POSITION PIN HOUSING
2	2	20	46-0763455-00	LED HARNESS / RED / NFPA LIGHTBAR

QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
*	*		01-0683714-01	MODEL 9308QLED
*	*		01-0683714-03	MODEL 9310QLED
2	2	21	39-0404023-04	4 POSITION SOCKET HOUSING
1	1	22	46-0742237-20	CABLE - 8/C 14 GA W/SOCKETS 20'
3	3	23	39-0402023-04	2 POSITION SOCKET HOUSING
1	1	24	39-0404313-04	4 POSITION PIN HOUSING
2	2	25	25-0820060-05	COMMONING TAB 2 POSITION
4	4	26	21-242401-000	PLASTIC 1-5/8" HOLE BUSHING
4	4	29	21-77002404-0	VENT .750 DIA. HOLE
-	1	30	01-0462199CCC	PIERCE ALERT KIT
-	2	31	07-263432-000	PIERCE-ALERT BRACKET / NFPA
-	2	32	09-1363158-00	400 SERIES PANEL
-	REF	33	20-48121040A9	#10-24 STANDOFF M/F
-	REF	34	16-1021220-45	#10 INTERNAL TOOTH LOCKWASHER
1	-	35	46-0763456-00	LED HARNESS / WHITE / NFPA LIGHTBAR
2	-	36	01-0283442-W0	700 WIDE ANGLE CLEAR LED ASSEMBLY
2	-	37	68-1183491C07	ULTRA 7.375" CLEAR LENS
2	2	38	68-1183491908	14.500" BLACK LENS
2	2	39	01-0283458-55	400 RED LED ASSEMBLY
4	4	40	07-263431-000	MOUNTING BRACKET 700 LED / NFPA
-	-	41	07-242844-000	700 LED SNAP BRACKET / NFPA "V"
-	-	42	68-1183491R08	ULTRA 14.500" RED LENS

QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
*	*		01-0683714-01	MODEL 9308QLED
*	*		01-0683714-03	MODEL 9310QLED
-	-	43	01-0263452-50	700 RED TRIMMED LED ASSEMBLY
-	-	44	07-263427-000	700 LED CORNER BRACKET / NFPA "V"
-	-	45	14-130436-120	1/4-20 X 3/4 HEX HEAD MS SS
-	-	46	13-130111-072	1/4-20 ELASTIC STOP NUT

