

WHELEN[®]

ENGINEERING COMPANY INC.

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Installation Guide: Liberty™ and Freedom™ LC Lightbars

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 he can operate the system without taking his 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.**
- **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®, 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!**

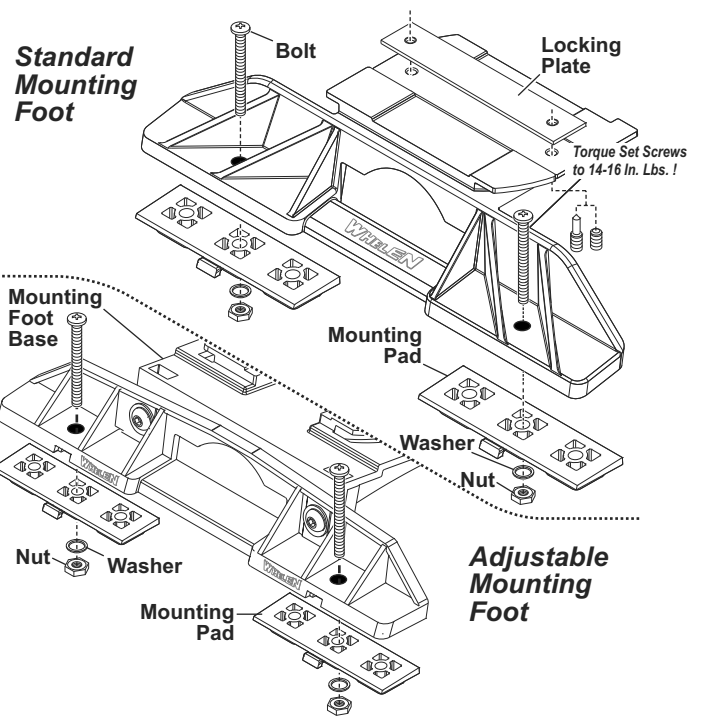
IMPORTANT! The lightbar should be a minimum of 16" from any radio antennas!

Permanent 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° counter-clockwise. 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 tighten all of the set screws (2 or 4 per side) to 14-16 In. Lbs. 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 weather-strip 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

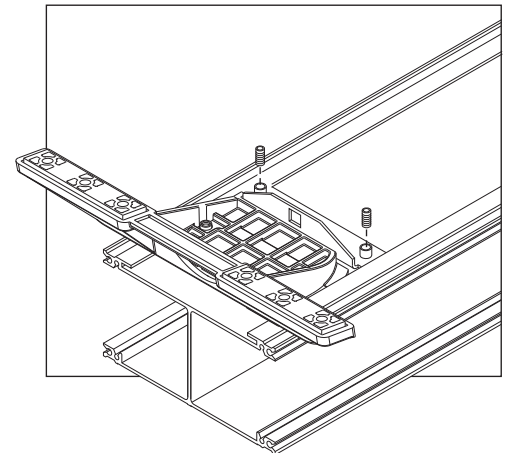
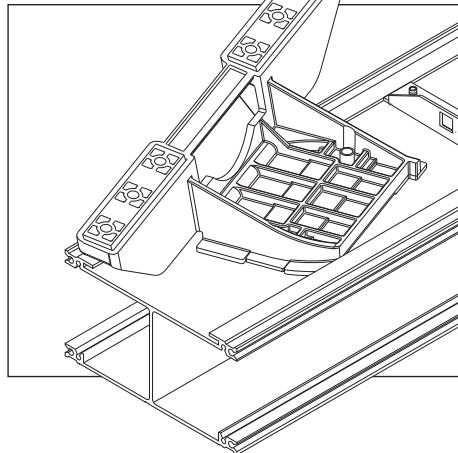
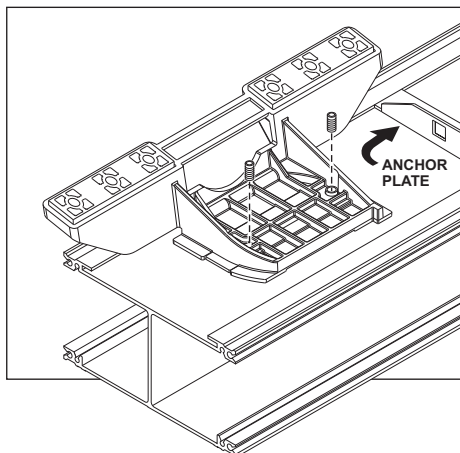
Strap Mounting:

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



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.

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 tighten all of the set screws (2 or 4 per side) to 14-16 In. Lbs. 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 weather-strip 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 lightbar to vehicle.

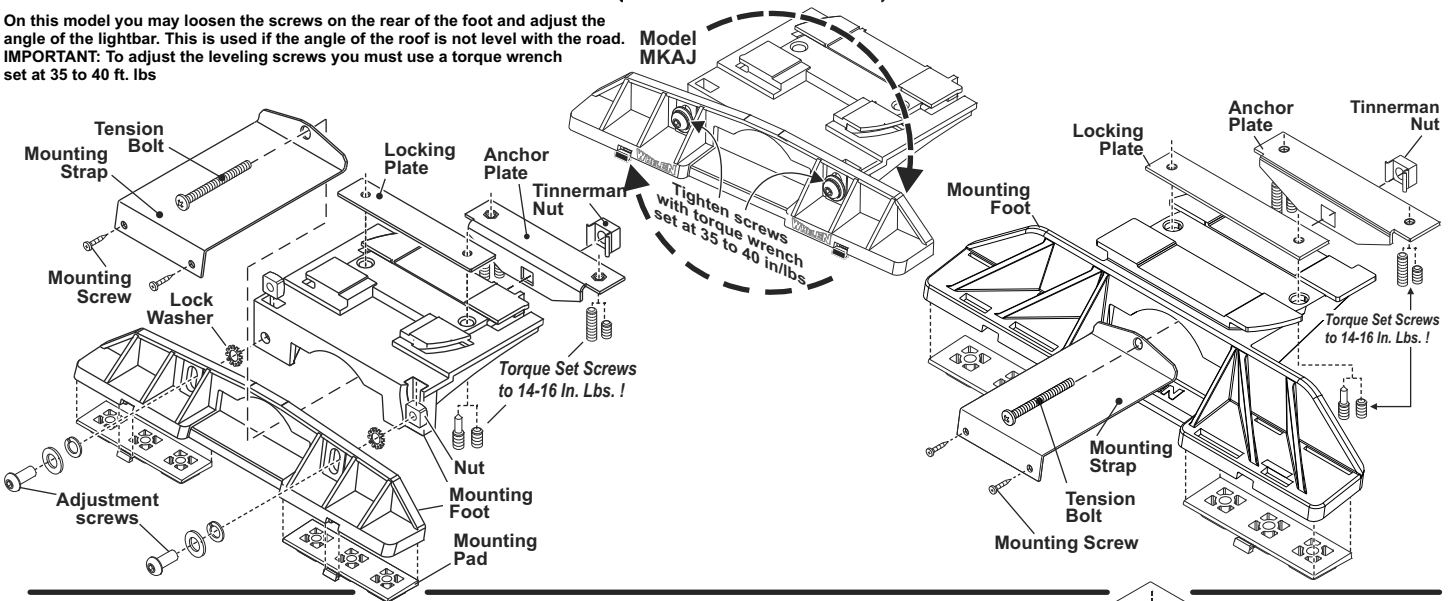


Adjustable Mounting Foot / Model MKAJ

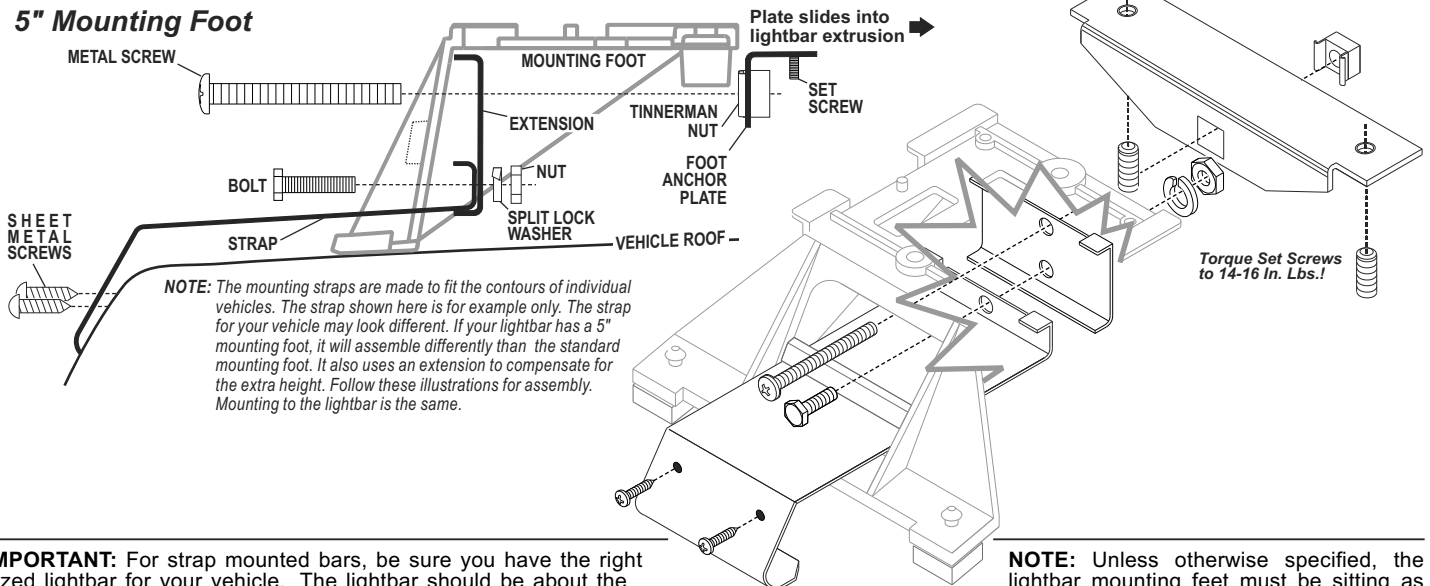
◀ For Reference Only ▶

Standard Mounting Foot / Model MKEZ

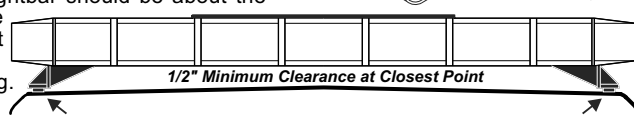
On this model you may loosen the screws on the rear of the foot and adjust the angle of the lightbar. This is used if the angle of the roof is not level with the road. **IMPORTANT:** To adjust the leveling screws you must use a torque wrench set at 35 to 40 ft. lbs



5" Mounting Foot



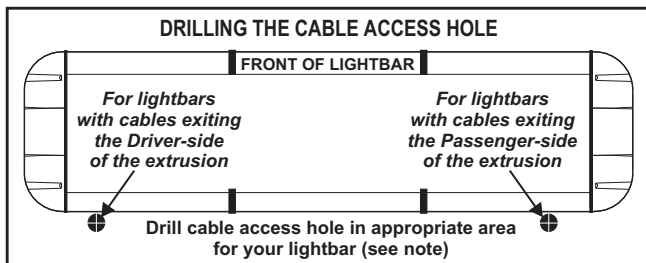
IMPORTANT: For strap mounted bars, be sure you have the right sized lightbar for your vehicle. The lightbar should be about the same width as the vehicle roof. If the lightbar is too large or small it will not mount properly to the vehicle and may shift or come loose during driving.



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

Routing your 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.



WARNING! 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.

2. Using a 1" hole saw, drill the cable access hole. Use a round file to smooth and de-burr the edges then insert a 1" grommet.
3. 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.
4. Route the cable(s) through the vehicle following manufacturers recommendations.

WARNING: Many vehicles are now equipped with side curtain and B-pillar air bags. Alternate routing may be required.

Connecting the Cables:

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!**

Power Cable:

1. Open the wiring shield lid and route the power cable into the wiring shield and towards the firewall. **Make sure you do not to pinch or crush any wires when running them through the wire shield.**
2. Follow the factory wiring harness through the firewall. It may be necessary to drill a hole in the firewall. If so, be absolutely sure that there are no components that could be damaged by drilling. After the hole has been drilled, insert a grommet to protect the cable.
3. Route the cable along the factory wiring harness to the battery.
4. Install a 30 amp fuse block (customer supplied) on the end of the RED wire in the power cable. Remove the fuse from the fuse block before connecting any wires to the battery.
5. Connect the fuse block to the POSITIVE (+) terminal on the battery. There can not be more than two feet of wire between the fuse block and the battery. The wire between the fuse block and the battery is "unprotected", do not allow this wire to touch any other wires.
6. Connect the BLACK wire to the factory chassis ground.

Cruise Lights & AUX (WHITE/ORANGE):

The WHITE/ORANGE wire operates in one of 3 different modes. Selecting a mode is controlled with the Scan-Lock™ wire. Using Scan-Lock™ (See Scan-Lock™), change between the 3 available modes as though you were changing flash patterns. The three modes are as follows:

MODE 1 (Default) - Cruise Lights in High Power and the AUX port is activated.

MODE 2 - Cruise Lights in Low Power and the AUX port is activated.

MODE 3 - Cruise Lights are not activated and the AUX port is activated.

Hi/Low Power (VIOLET):

The type of switch used is dependant on how the operator wishes the Hi/Low feature to function:

Latching Mode: By applying +12 VDC voltage to the VIOLET wire for less than 1 second, the lightbar is "latched" into low power operation. The unit must be turned off and then back on to restore normal, high power operation (a momentary switch is preferred).

Control Cable: Extend the control cable to your switch panel and make your connections using the information provided. The control cable connects to your control head or switch box and is fused there. Applying +12VDC to a control wire activates its function. Fuse as noted below.

Wire Color	Function	Fuse
GREEN	Front Corner LEDs	1 AMP
BLUE	Rear Corner LEDs	1 AMP
GRN/WHT	Front Outboard LEDs	1 AMP
BLU/WHT	Rear Outboard LEDs	1 AMP
GRN/BLK	Front Inboard LEDs	1 AMP
BLU/BLK	Rear Inboard LEDs	1 AMP
WHT/GRN	Right TA	1 AMP
WHT/BLU	Flashing Alley & T.D.'s	1 AMP
YELLOW	Pass.-Side Alley Lights	1 AMP
WHITE	Driver-Side Alley Lights	1 AMP
WHT/BLK	Take-Down Lights	1 AMP
WHT/ORG	Cruise Lights & AUX	1 AMP
WHT/YEL	Left TA	1 AMP

Special Order Lightbars:

Unicor Lightbar:

Wire Color	Function	Fuse
GREEN	All Front LEDs	1 AMP
BLUE	Rear LEDs / RED-BLUE	1 AMP
VIOLET	Flashing Ctr RED & Alleys	1 AMP
ORANGE	Take Downs	1 AMP
GREY	Rear AMBER	1 AMP
YELLOW	Passenger Alley	1 AMP
WHITE	Driver Alley	1 AMP
WHT/BLK	Steady Center RED	1 AMP

Philadelphia Lightbar:

BLU/BLK	End External Pods	1 AMP
WHT/RED	Front External Pods	1 AMP
WHT/BRN	Rear External Pods	1 AMP
YELLOW	Passenger Alleys	1 AMP
WHITE	Driver Side Alleys	1 AMP
GREEN	Front Corners	1 AMP
BLUE	Rear Corners	1 AMP
GRN/WHT	Front Outboards	1 AMP
BLU/WHT	Rear Outboards	1 AMP
GRN/BLK	Front Outboards	1 AMP
WHT/BLU	Flashing Alley & TDs	1 AMP

WHT/BRN	Rear Center LEDs	1 AMP
VIOLET	Hi/Low Power	0.5 AMPS
WHT-VIO	Scan-Lock™	0.5 AMPS
WHT/RED	Front Center LEDs	1 AMP
NONE	RFI shield drain / to ground	
Activating WHT/GRN + WHT/YEL = Split TA		

WHT/BLK	TakeDowns	1 AMP
WHT/ORG	Cruise Lts. & AUX	1 AMP
VIOLET	Hi-Low Power	0.5 AMP
WHT/VIO	Scan-Lock™	0.5 AMP
WHT/GRN	Right TA	1 AMP
WHT/YEL	Left TA	1 AMP
Activating WHT/GRN + WHT/YEL = Split TA		

Leader Lightbar:

GREEN	Front Corner LEDs	1 AMP
GRN/WHT	Front Outboards	1 AMP
GRN/BLK	Front Inboards	1 AMP
WHT/RED	Front Center LEDs	1 AMP

Level Mode: Applying +12 VDC voltage to the VIOLET wire for more than 1 second holds the lightbar in low power mode until voltage is removed (a toggle switch is preferred).

IMPORTANT NOTE: The corner modules in your lightbar do not switch to low power when this option is applied. They will always remain in normal high power.

Scan-Lock™ (WHITE/VIOLET):

TO CYCLE FORWARD THROUGH AVAILABLE PATTERNS: Activate ONLY the control wire of the function you wish to effect and apply +12 volts to the Scan-Lock™ wire (WHITE/VIOLET) for less than 1 second and release. This will change the pattern. For example, to change the Front Outboard LED pattern, apply +12VDC to the GREEN/WHITE wire and then *momentarily* apply +12VDC to the WHITE/VIOLET wire. Repeat until the desired pattern is displayed. Let this pattern run for 5 seconds to configure it as the pattern the Front Outboard LEDs will display when activated. **Important: Only ONE function may be active while changing patterns.** Repeat for next pattern.

TO CHOOSE A PATTERN: Allowing the desired pattern to run for more than 5 seconds makes it the default pattern.

TO RESET TO THE FACTORY DEFAULT PATTERN: Turn off *all lightbar functions*. Apply +12 volts to the Scan-lock™ wire and turn the appropriate function back on and it is now restored to its factory default pattern.

Available Flash Patterns:

Front Corner, Rear Corner, Outboard Inboard and Center

1. SignalAlert™ 75
2. CometFlash® 75
3. DoubleFlash 150
4. DoubleFlash 75
5. SingleFlash 375
6. SingleFlash 150
7. SingleFlash 75
8. ActionFlash™ 150
9. ModuFlash™
10. ActionScan™
5. SingleFlash 375
6. SingleFlash 150
7. SingleFlash 75
8. ActionFlash™ 150
9. ModuFlash™
10. Steady/SF75
11. Steady/Steady
12. ActionScan™

Take-Down / Alley

1. T-D & Alley - SingleFlash 240 ALT
2. T-D & Alley - DoubleFlash 120 ALT
3. T-D only - SingleFlash 240 SIM
4. T-D only - DoubleFlash 120 SIM

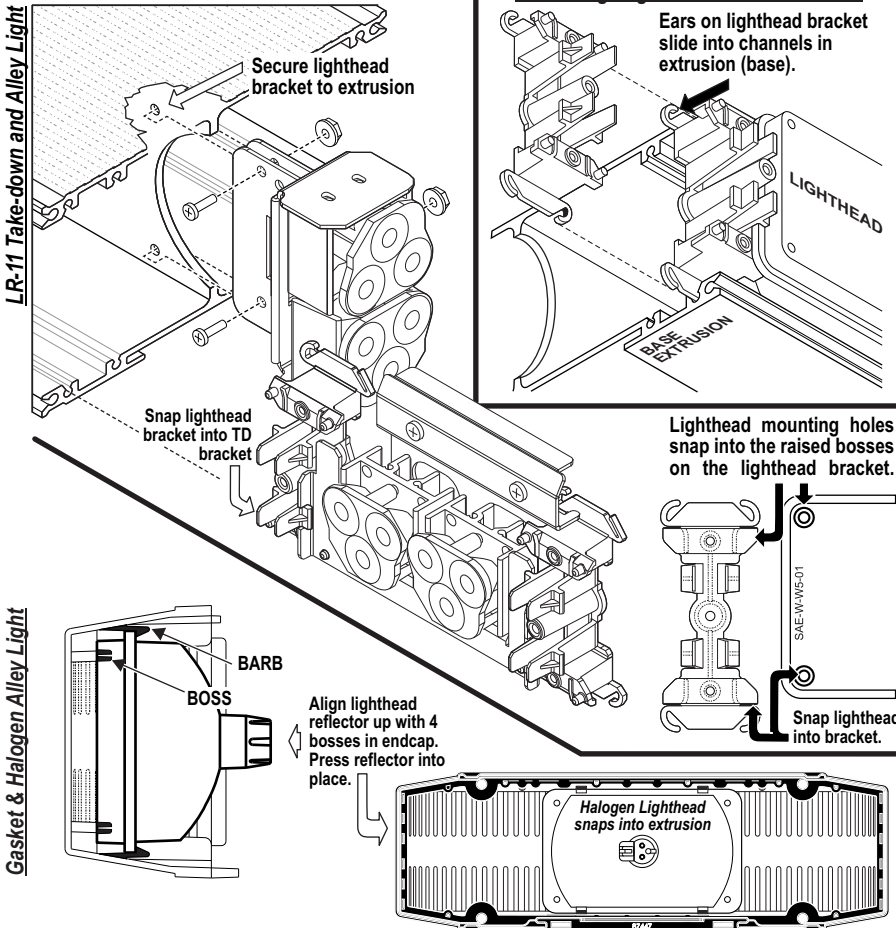
Traffic Advisor™ Sequence

1. Seq to Solid
2. Seq On - Seq Off
3. One Lamp Triple
4. Two Lamp Triple

Front Outboard, Inboard and Center

1. SignalAlert™ 75
2. CometFlash® 75
3. DoubleFlash 150
4. DoubleFlash 75

Servicing: Freedom™ Lightbar

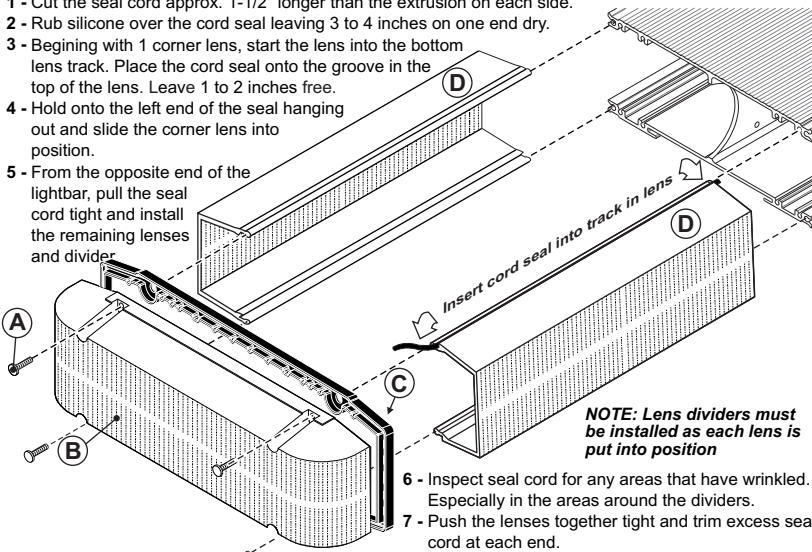


Remove the 4 screws (A) that hold the endcap (B) on and pull the endcap and gasket (C) off. Slide lenses (D) out of the lightbar, to gain access to the extrusion. When reinstalling the lenses and spacers, install the cord seal (NFPA / See below). When reinstalling the endcap, place the endcap gasket into its position on the endcap and line up all the tabs and holes. Spacers (not shown) mount the same as lenses.

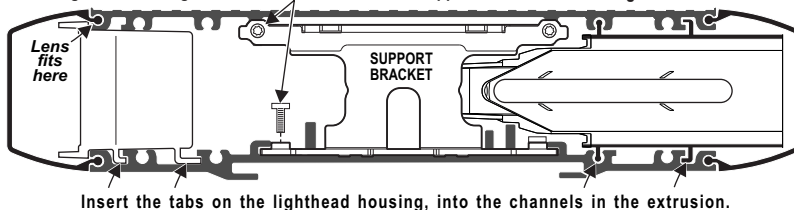
Seal Cord Installation / NFPA Only:

- 1 - Cut the seal cord approx. 1-1/2" longer than the extrusion on each side.
- 2 - Rub silicone over the cord seal leaving 3 to 4 inches on one end dry.
- 3 - Beginning with 1 corner lens, start the lens into the bottom lens track. Place the cord seal onto the groove in the top of the lens. Leave 1 to 2 inches free.
- 4 - Hold onto the left end of the seal hanging out and slide the corner lens into position.
- 5 - From the opposite end of the lightbar, pull the seal cord tight and install the remaining lenses and divider.

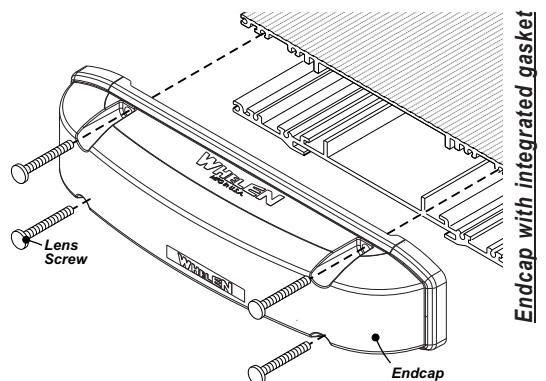
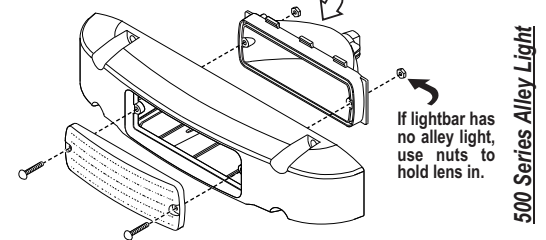
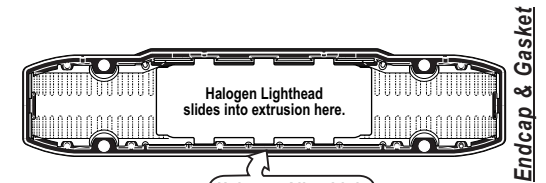
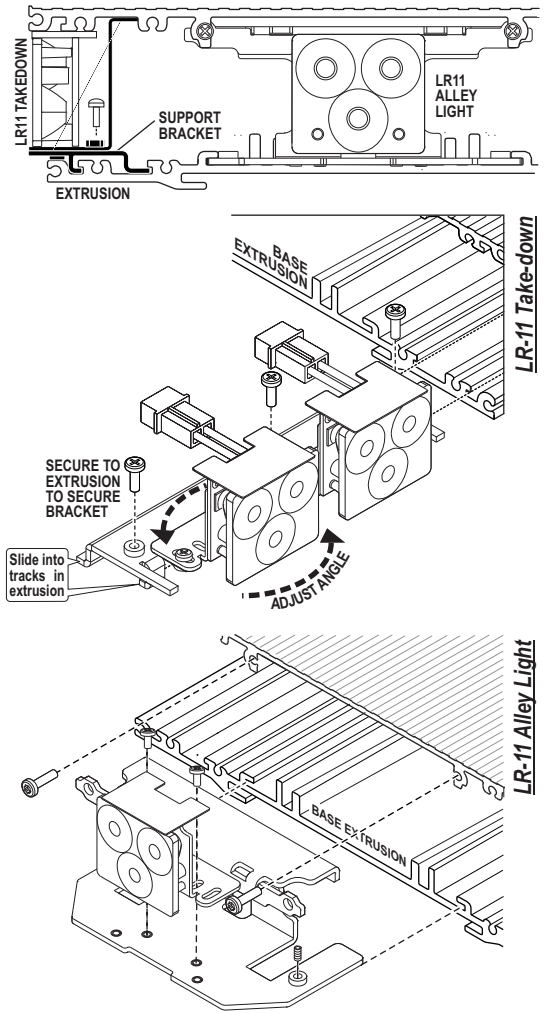
Endcap, Gasket, Lenses & Spacers Installation

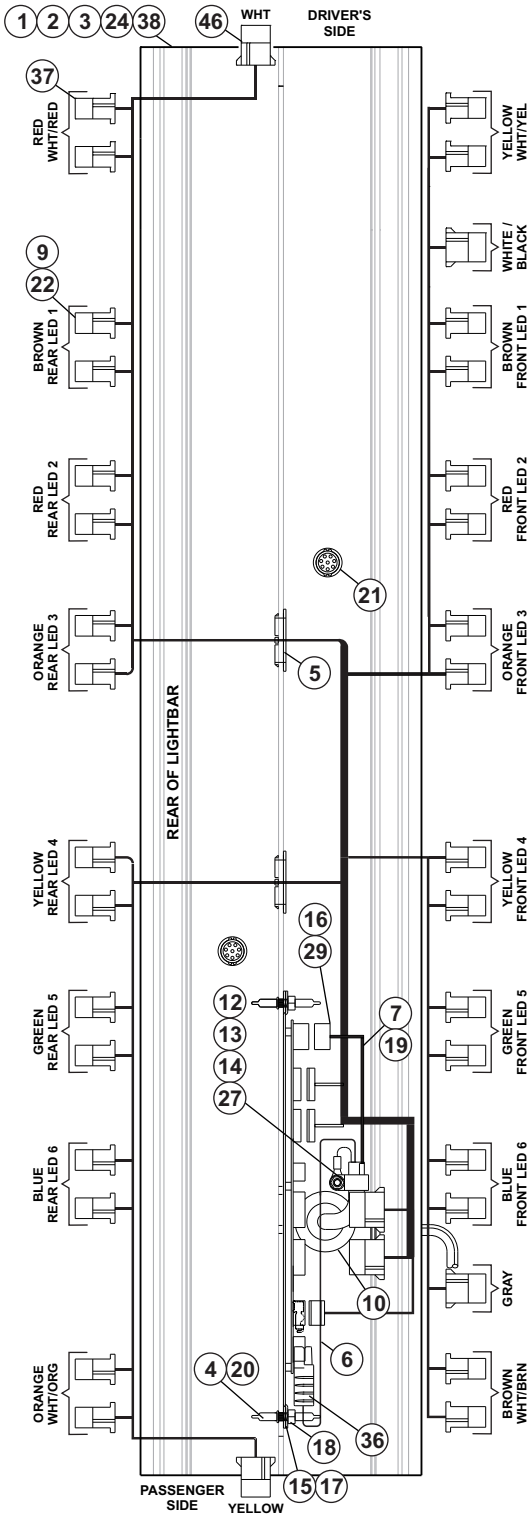


Installing Lens and Lighthouse Extrusion secures to Support Bracket. Installing Corner Linear-LED®

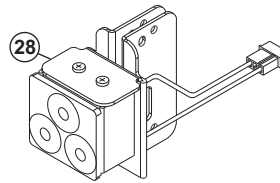


Servicing: Liberty Lightbar

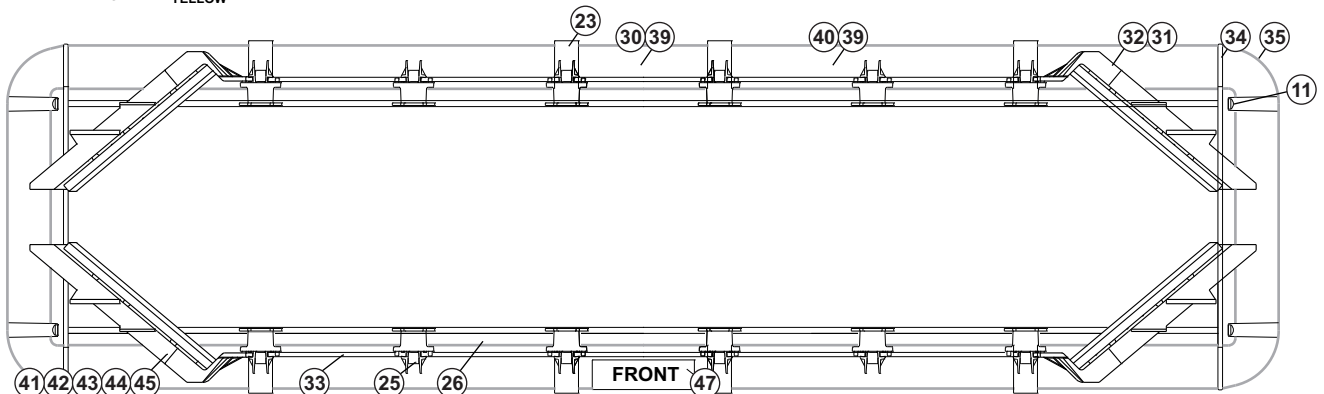




QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*	*		01-0684466-	Freedom™ Ext LC R/R/B/B 50"
		*	*		01-0684466-	Freedom™ Ext LC R/R/B/B 55"
	*				01-0684466-	Freedom™ Ext LC R/R/B/B 60"
*					01-0684466-	Freedom™ Ext LC R/R/B/B 44"
-	-	-	1	1	11-363141-000	BASE EXTRUSION (45.75")
-	-	1	-	2	11-363142-000	BASE EXTRUSION (51.125")
-	1	-	-	3	11-363143-000	BASE EXTRUSION (56.50")
2	2	2	2	4	22-0542701-00	MTG. STUD
2	2	2	2	5	21-242401-000	BUSHING, 1-5/8"
1	1	1	1	6	46-0742957-17	CABLE, 2/C 10GA 17'
1	1	1	1	7	46-0744336-17	CABLE, 17/C 22GA 17'
2	-	2	2	9	46-0763941-00	HARNESS, 6 LIGHT
1	1	1	1	10	21-11245004-1	GROMMET, 1.562"
8	8	8	8	11	14-104286-16JB	#10-24 x 1-1/4" TX. PHD. SCREW W/SHLDR
1	1	1	1	12	13-104111-063	NUT, #10-24 WHIZ
1	1	1	1	14	26-0115663-10	CABLE CLAMP, 5/8"
1	1	1	1	17	01-0269881-00	ASSEMBLY, I/O BOARD LC
2	2	2	2	18	13-130111-072	NUT, 1/4-20 ELASTIC STOP (316 SS)
4	4	4	4	20	22-0416982-00	PROTECTIVE COVER
2	2	2	2	21	21-7263998-00	VENT, 3/4"
-	2	-	-	22	46-0784223-00	6 LIGHT HARNESS 60"
8	8	6	6	23	02-0341448-30	LENS DIVIDER ASS'Y. (CLEAR)
1	1	1	1	24	10-0523067-02	LABEL, MODEL & SERIAL NO.
12	18	18	14	25	07-263103-000	MOUNTING BRACKET
10	16	12	12	26	09-1363158-00	FILLER PANEL, "400" SERIES
1	1	1	1	27	14-104216-160	#10-24 x 1 PPHMS
A/R	A/R	A/R	A/R	28	01-026C368-30	SUB ASY, SNGL LR11 ALLEY FREEDOM
2	-	-	-	30	68-1983816-30	LENS, 5.00" CLEAR
4	4	-	4	31	68-1983817-30	LENS, 6.562" CLEAR
-	-	4	-	32	68-1984104-30	LENS, 9.25" CLEAR
-	-	4	-	33	07-242815-000	BRACKET, SPACER
2	2	2	2	34	38-0487447-00	GASKET, ENDCAP
2	2	2	2	35	68-1183369-30	ENDCAP, CLEAR
1	1	1	1	36	39-0017188-08	HOUSING, 2 POLE
1	1	1	1	37	46-0763942-00	HARNESS, 4 LIGHT 72"
1	-	-	-	38	11-363390-000	BASE EXTRUSION (40.375")
4	2	-	-	39	68-1183491C02	LENS, 10.375" CLEAR
-	4	4	4	40	68-1984105-30	LENS, 15.75" CLEAR
2	2	2	2	42	01-026B805220	CORNER REFLECTOR LED BLUE
2	2	2	2	45	01-026B805550	CORNER REFLECTOR LED RED
A/R	A/R	A/R	A/R	46	46-0763967-00	HARNESS, ALLEY LIGHT
1	1	1	1	47	10-0322935-00	LABEL, "FRONT"

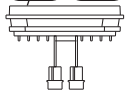


LR11 ALLEY

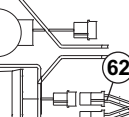


21-25

69-72 64-68

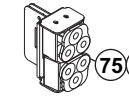
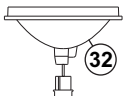
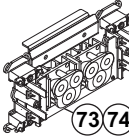


57



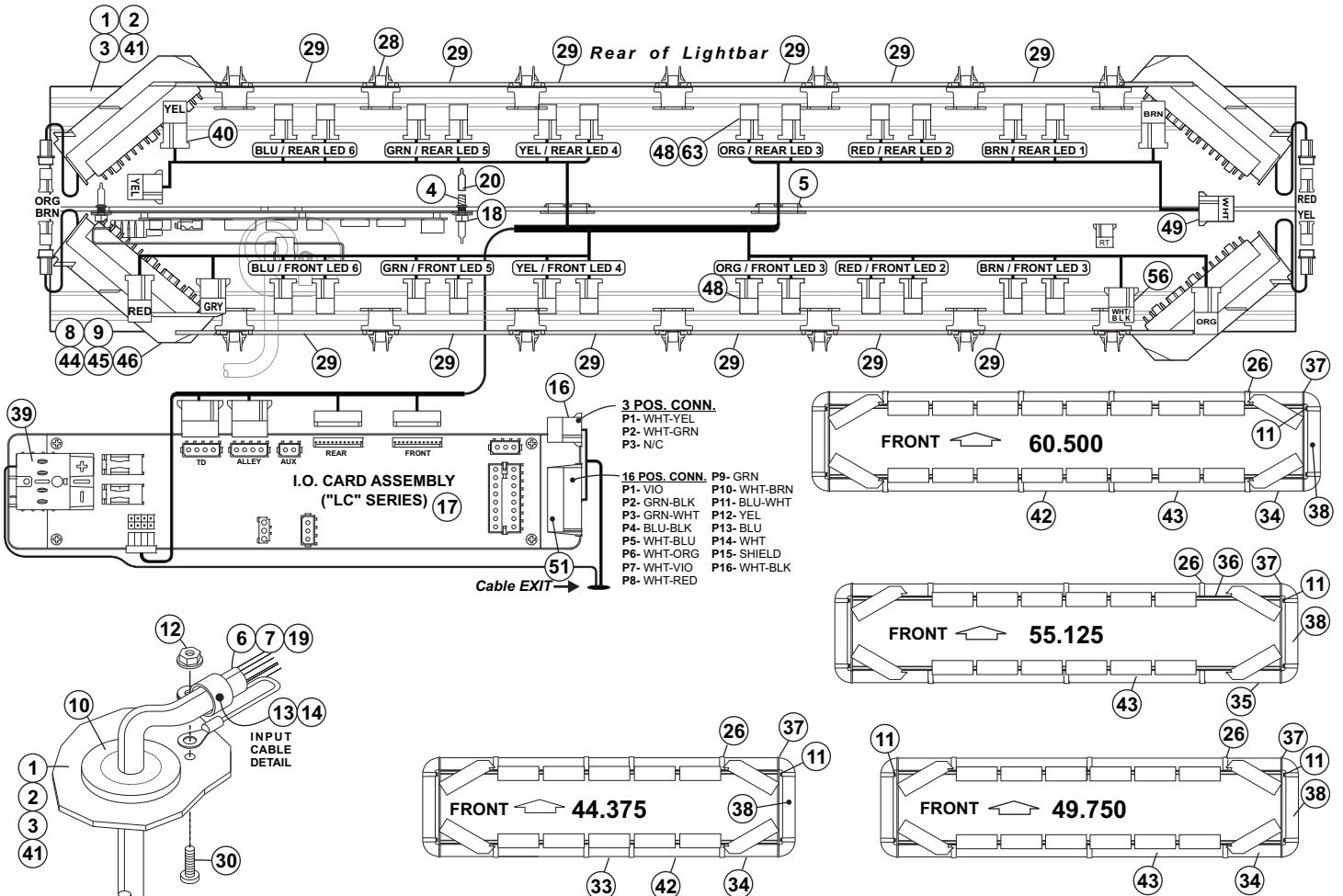
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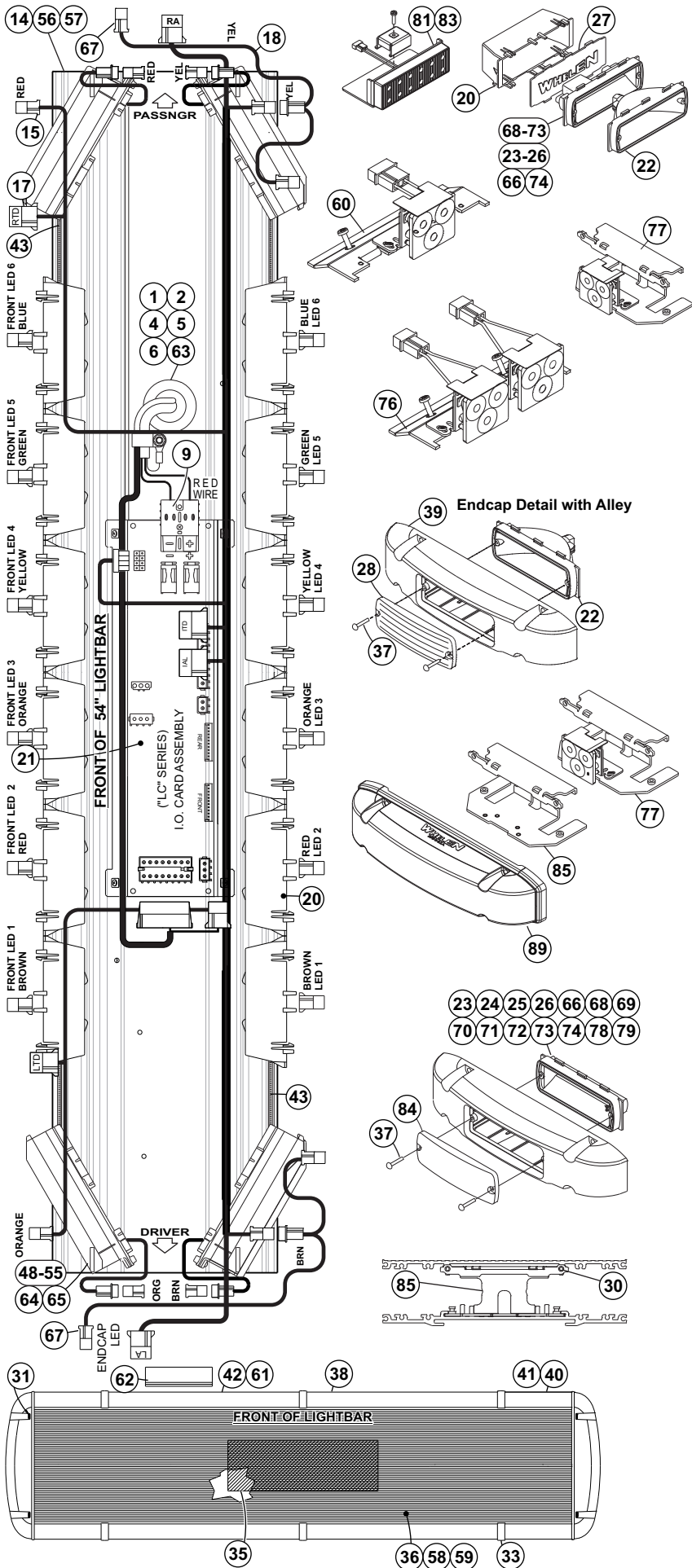
60 61



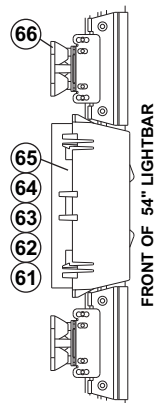
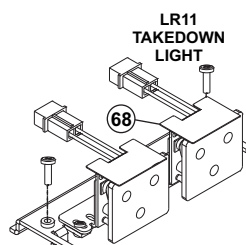
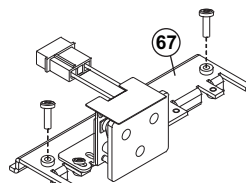
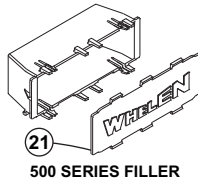
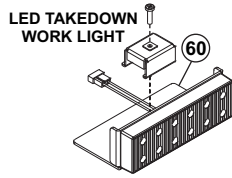
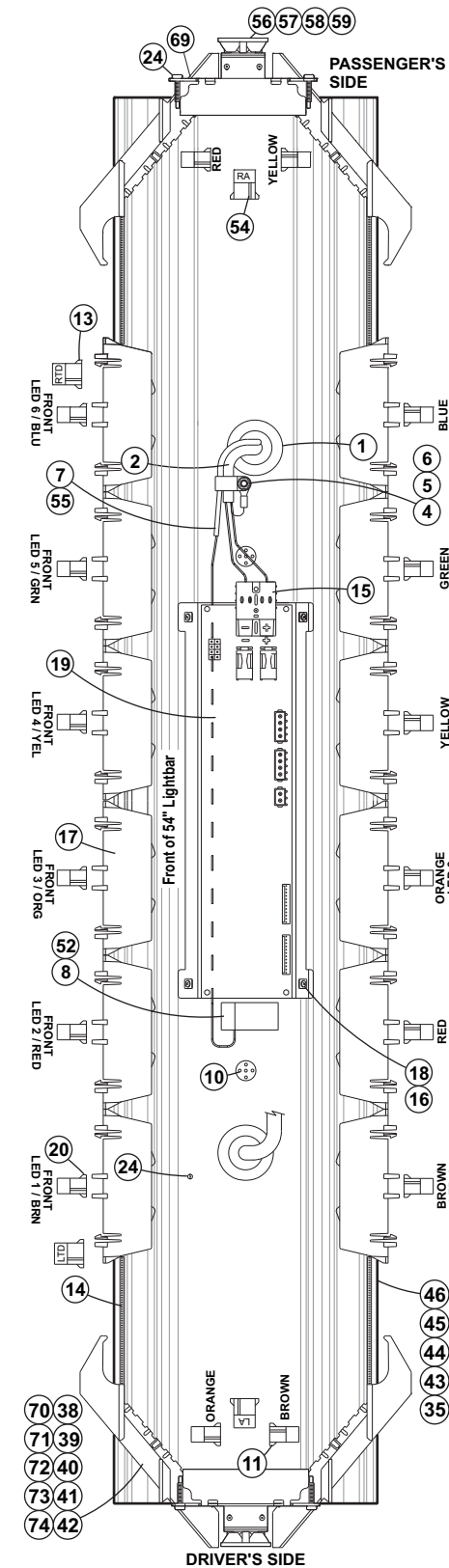
QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*			01-0684194-08	FREEDOM GEN 3 LC R/R/B/B 50"
		*			01-0684194-13	FREEDOM GEN 3 LC R/R/B/B 55"
		*			01-0684194-18	FREEDOM GEN 3 LC R/R/B/B 60"
		*			01-0684194-03	FREEDOM GEN 3 LC R/R/B/B 44"
-	-	-	1	1	11-363141-000	BASE EXTRUSION (45.75")
-	-	-	1	2	11-363142-000	BASE EXTRUSION (51.125")
-	1	-	-	3	11-363143-000	BASE EXTRUSION (56.50")
2	2	2	2	4	22-0542701-000	MTG. STUD
4	4	4	4	5	21-242401-000	BUSHING, 1-5/8"
1	1	1	1	6	46-0742957-17	CABLE, 2/C 10GA 17"
1	1	1	1	7	46-0744336-17	CABLE, 17/C 22GA 17"
2	2	2	2	8	01-026B807-50	CORNER REFLECTOR LED RED
2	2	2	2	9	01-026B807-20	CORNER REFLECTOR LED BLUE
1	1	1	1	10	21-11245004-1	GROMMET, 1.562"
8	8	8	8	11	14-104286-16JB	#10-24 x 1-1/4" TX. PHD. SCREW W/SHOULDER
1	1	1	1	12	13-104111-063	NUT, #10-24 WHIZ
1	1	1	1	14	26-0115663-10	CABLE CLAMP, 5/8"
1	1	1	1	17	01-0269881-000	ASSEMBLY, I/O BOARD LC
2	2	2	2	18	13-130111-072	NUT, 1/4-20 ELASTIC STOP (SS)
4	4	4	4	20	22-0416982-000	PROTECTIVE COVER
A/R	A/R	A/R	A/R	21	01-0286361244	LINEAR LED 400 GREEN GEN III AMP
A/R	A/R	A/R	A/R	22	01-0286361222	LINEAR LED 400 BLUE GEN III AMP
A/R	A/R	A/R	A/R	23	01-0286361255	LINEAR LED 400 RED GEN III AMP
A/R	A/R	A/R	A/R	24	01-0286361233	LINEAR LED 400 WHITE GEN III AMP
A/R	A/R	A/R	A/R	25	01-0286361211	LINEAR LED 400 AMBER GEN III AMP
8	8	6	6	26	02-0341448-30	LENS DIVIDER ASSY. (CLEAR)
1	1	1	1	27	10-0523067-02	LABEL, MODEL & SERIAL NO.
12	18	18	14	28	07-263103-000	MOUNTING BRACKET
10	16	12	12	29	09-1363158-000	FILLER PANEL, "400" SERIES
1	1	1	1	30	14-104216-160	#10-24 x 1 PPHMS
4	4	4	4	31	20-0042765-000	SPACER, CORNER STROBE
A/R	A/R	A/R	A/R	32	02-0363189-000	REFLECTOR ASSY. 400 HALOGEN
2	-	-	-	33	68-1983816-30	LENS, 5.00" CLEAR
4	4	-	4	34	68-1983817-30	LENS, 6.562" CLEAR
-	-	4	-	35	68-1984104-30	LENS, 9.25" CLEAR
-	-	4	-	36	07-242815-000	BRACKET, SPACER

2	2	2	2	37	38-0487447-00	GASKET, ENDCAP
2	2	2	2	38	68-1183369-30	ENDCAP, CLEAR
1	1	1	1	39	39-0017188-08	HOUSING, 2 POLE
1	1	1	1	40	46-0763942-00	HARNESS, 4 LIGHT 72"
1	-	-	-	41	11-363390-000	BASE EXTRUSION (40.375")
4	2	-	-	42	68-1183491C02	LENS, 10.375" CLEAR
-	4	4	4	43	68-1984105-30	LENS, 15.75" CLEAR
A/R	-	A/R	A/R	48	46-0763941-00	HARNESS, 6 LIGHT
A/R	A/R	A/R	A/R	49	46-0763967-00	HARNESS, ALLEY LIGHT
A/R	A/R	A/R	A/R	50	46-0743719-00	HARNESS, "Y" LR11
2	2	2	2	52	21-7263998-00	VENT, 3/4"
A/R	A/R	A/R	A/R	53	46-0743106-00	HARNESS, TRAFFIC ADVISOR
A/R	A/R	A/R	A/R	54	46-0741346-17	CABLE, 9/C 17"
A/R	A/R	A/R	A/R	55	39-0412014-14	HOUSING, 12 POS CMNL
A/R	A/R	A/R	A/R	56	46-0763967-01	HARNESS, TAKE DOWN
A/R	A/R	A/R	A/R	57	02-0364229-00	SUB ASSY, MR11/TIR3 ALLEY
A/R	A/R	A/R	A/R	58	02-036B4942A2	ATIR3 LED STEADY/AMB/VERT/AMP
A/R	A/R	A/R	A/R	59	02-036B4942B2	TIR3 LED STEADY/BLU/VERT/AMP
A/R	A/R	A/R	A/R	60	02-036B4942C2	TIR3 LED STEADY/WHT/VERT/AMP
A/R	A/R	A/R	A/R	61	02-036B4942R2	TIR3 LED STEADY/RED/VERT/AMP
A/R	A/R	A/R	A/R	62	46-0722108-00	HARNESS "Y"
-	A/R	-	-	63	46-0784223-00	6 LIGHT HARNESS 60"
A/R	A/R	A/R	A/R	64	01-0286361210	LED 400 SPLIT 6/6 GEN III AMB/NONE/AMP
A/R	A/R	A/R	A/R	65	01-0286361212	LED 400 SPLIT 6/6 GEN III AMB/BLU/AMP
A/R	A/R	A/R	A/R	66	01-0286361213	LED 400 SPLIT 6/6 GEN III AMB/WHT/AMP
A/R	A/R	A/R	A/R	67	01-0286361215	LED 400 SPLIT 6/6 GEN III AMB/RED/AMP
A/R	A/R	A/R	A/R	68	01-02863612A0	LED 400 SPLIT 3/3 GEN III AMB/NONE/AMP
A/R	A/R	A/R	A/R	69	01-02863612AB	LED 400 SPLIT 3/3 GEN III AMB/BLU/AMP
A/R	A/R	A/R	A/R	70	01-02863612AR	LED 400 SPLIT 3/3 GEN III AMB/RED/AMP
A/R	A/R	A/R	A/R	71	01-028636122A	LED 400 SPLIT 6/3 GEN III BLU/AMB/AMP
A/R	A/R	A/R	A/R	72	01-028636125A	LED 400 SPLIT 6/3 GEN III RED/AMB/AMP
A/R	A/R	A/R	A/R	73	01-026A936-00	SUB ASSY, DUAL LR11 TAKEDOWN
A/R	A/R	A/R	A/R	74	01-026A936-01	SUB ASSY, DUAL LR11 TAKEDOWN 100lm
A/R	A/R	A/R	A/R	75	01-026B047-30	SUB ASSY, DUAL LR11 ALLEY
A/R	A/R	A/R	A/R	76	01-026B047-31	SUB ASSY, DUAL LR11 ALLEY 100lm
A/R	A/R	A/R	A/R	77	38-0417738-00	O RING, CORD STOCK .093 DIA





QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*			01-0684191-09	Liberty™ Gen 3 LC B/B/B/B 43"
	*			01-0684191-13	Liberty™ Gen 3 LC R/R/B/B 48"
*				01-0684191-16	Liberty™ Gen 3 LC R/R/B/B 54"
1	1	1	1	21-11245004-1	GROMMET, 1.562"
1	1	1	2	46-0742957-17	INPUT CABLE ASSY., (2C-10GA.) 17"
1	1	1	4	13-104111-063	#10-24 WIZ NUT
1	1	1	5	26-0115663-10	CABLE CLAMP, 5/8"
1	1	1	6	14-0023347-00	SCREW, 10-24 x 1.25" TX PHD.
1	1	1	9	39-0017188-08	HOUSING, 2 POLE
2	2	2	12	21-7263998-00	PLUG, VENT (3/4")
-	1	-	14	11-363312-044	EXTRUSION, BASE 44" W/HOLES
1	1	1	15	46-0743151-00	HARNESS, CORNER L.E.D. (LIBERTY)
A/R	A/R	A/R	16	46-0963330-00	HARNESS, INBOARD L.E.D. (LIBERTY)
A/R	A/R	A/R	17	46-0783576-04	HARNESS, TAKE DOWN (LIBERTY)
A/R	A/R	A/R	18	46-0783576-03	HARNESS, ALLEY LIGHTS (LIBERTY)
12	12	10	20	11-4835664-000	HOUSING, LIGHTHEAD (SNAP-IN)
1	1	1	21	01-0269879-00	ASSY., I.O. CARD "LC"
A/R	A/R	A/R	22	02-0383577-03	SUB-ASSY., 500 HALOGEN W/3POS.
A/R	A/R	A/R	23	01-026B827610	SUB-ASSY., 500 LED, AMBER, W/2POS.
A/R	A/R	A/R	24	01-026B827620	SUB-ASSY., 500 LED, BLUE W/2POS.
A/R	A/R	A/R	25	01-026B827630	SUB-ASSY., 500 LED, CLEAR, W/2POS.
A/R	A/R	A/R	26	01-026B827650	SUB-ASSY., 500 LED, RED, W/2POS.
12	12	10	27	09-1363542-00	PANEL, FILLER (500 SERIES)
A/R	A/R	A/R	28	68-1963237-30	LENS, 500 SERIES, OPTIC (CLEAR)
4	4	4	29	20-0042765-00	SPACER, CORNER RETENTION
4	4	4	30	14-104216-06J	#10-24 X 3/8 PPH SCREW
8	8	8	31	14-104286-16JB	#10-24 X 1-1/4" TX. PHD. W/SHOULDER
A/R	A/R	A/R	32	38-0283572-00	GASKET, ENDCAP
6	6	8	33	02-0342791-30	ASSY., LENS DIVIDER (CLEAR)
1	1	1	35	38-0142783-00	INSULATOR, FOAM PAD
-	1	-	36	11-26B607-044	EXTRUSION, TOP 44"
A/R	A/R	A/R	37	15-065410-100	#6 X 5/8" PPH PLASTI-LOC SS
1	1	1	38	10-0322935-00	LABEL, "FRONT" LIGHTBAR ASSY.
A/R	A/R	A/R	39	68-1183566-3S	LENS, ENDCAP (CLEAR) W/SEAL
-	4	4	40	68-1983819-30	LENS, 5.687" LG. (CLEAR)
4	-	-	41	68-1963333C08	LENS, 8.375" LG. (CLEAR)
4	4	-	42	68-1983567-30	LENS, 15.800" LG. (CLEAR)
4	-	-	43	07-243170-000	BRACKET, SPACER CORNER
1	1	1	44	10-0522960-00	LABEL, MODEL & SERIAL NO.
2	2	4	49	01-026B625220	CORNER 12 LED BLUE (LIBERTY)
2	2	-	51	01-026B625250	CORNER 12 LED RED (LIBERTY)
-	-	1	56	11-363312-038	EXTRUSION, BASE 38.61" W/HOLES
1	-	-	57	11-363312-049	EXTRUSION, BASE 49.39" W/HOLES
-	-	1	58	11-26B607-038	EXTRUSION, TOP 38.61"
1	-	-	59	11-26B607-049	EXTRUSION, TOP 49.39"
A/R	A/R	A/R	60	01-026A749-05	SUB ASSY, LR11 T-D SINGL. FULL LBRTY
-	-	4	61	68-1963333C03	LENS, 10.500" LG. (CLEAR)
-	-	2	62	68-1983818-30	LENS, 5.062" LG. (CLEAR)
1	1	1	63	46-0744336-17	CABLE, 17/C 22GA (17)
A/R	A/R	A/R	66	01-026B827640	SUB-ASSY., 500 LED, GREEN, W/2POS.
A/R	A/R	A/R	67	46-0722108-00	HARNESS, "Y"
A/R	A/R	A/R	68	01-026B827410	SUB-ASSY., 500 4 LED, AMB, W/2POS.
A/R	A/R	A/R	69	01-026B827420	SUB-ASSY., 500 4 LED, BLUE W/2POS.
A/R	A/R	A/R	70	01-026B827430	SUB-ASSY., 500 4 LED, WHITE, W/2POS.
A/R	A/R	A/R	71	01-026B827440	SUB-ASSY., 500 4 LED, GREEN, W/2POS.
A/R	A/R	A/R	72	01-026B827450	SUB-ASSY., 500 4 LED, RED, W/2POS.
A/R	A/R	A/R	73	01-026B8276K0	SUB-ASSY., 500 AMBER-RED W/2POS.
A/R	A/R	A/R	74	01-026B8276M0	SUB-ASSY., 500 AMBER-BLUE W/2POS.
A/R	A/R	A/R	75	01-026A748-02	SUB ASSY, LR11 TD HALF LIBERTY
A/R	A/R	A/R	76	01-026A749-06	SUB ASSY, LR11 T-D DUAL FULL LIBERTY
A/R	A/R	A/R	77	01-026B855-30	SUB ASSY, LR11 ALLEY LT WHITE 20 DEG
A/R	A/R	A/R	78	01-026B8276J0	SUB-ASSY., 500 RED-BLUE W/2POS.
A/R	A/R	A/R	79	01-026B8276A0	SUB-ASSY., 500 AMB-AMB W/2POS.
A/R	A/R	A/R	80	01-0264868-00	SUB-ASSY., 500 LED ALLEY LIGHT
A/R	A/R	A/R	81	01-026A493-00	SUB-ASSY, TIR LED TD, NOPTIC
A/R	A/R	A/R	82	26-0215001-06	TY-WRAP, 6" BLACK
A/R	A/R	A/R	83	01-026A493-01	SUB-ASSY, TIR LED TAKEDOWN, OPTIC
A/R	A/R	A/R	84	68-3963228-30	LENS, 500 SERIES, NON OPTIC (CLEAR)
2	2	2	85	02-036B855-00	SUB ASSY, END SUPPORT BRACKET
A/R	A/R	A/R	86	01-026B8272J0	SUB ASSY, 500 6/6 BLU/RED INTRLVD
A/R	A/R	A/R	87	01-026B8271K0	SUB ASSY, 500 6/6 AMB/RED INTRLVD
A/R	A/R	A/R	88	01-026B8271M0	SUB ASSY, 500 6/6 AMB/BLU INTRLVD
2	2	2	89	02-036E683-30	SUB ASSY, OVERMOLD ENDCAP CLEAR



QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*	*		01-0684458-	Liberty Lightbar™ 60" LC
		*			01-0684458-	Liberty Lightbar™ 54" LC
	*				01-0684458-	Liberty Lightbar™ 48" LC
*					01-0684458-	Liberty Lightbar™ 43" LC
1	1	1	1	1	21-11245004-1	GROMMET, 1.562"
1	1	1	1	2	46-0742957-17	INPUT CABLE, (2C-10GA), 17'
4	-	-	2	3	68-1963333C03	LENS, 10.500 LG (CLEAR)
1	1	1	1	4	13-104111-063	#10-24 WIZ NUT
1	1	1	1	5	26-0115663-10	CABLE CLAMP, 5/8"
1	1	1	1	6	14-0023347-00	SCREW, 10-24 x 1.25" TX PHD
2	2	2	2	10	21-7263998-00	PLUG, VENT (3/4")
1	1	1	1	11	46-0743151-00	HARNES, CORNER LED
4	4	-	4	12	68-1983819-30	LENS, 5.687" LG. (CLEAR)
A/R	A/R	A/R	A/R	13	46-0783576-04	HARNES, TAKE DOWN/WORK LIGHTS
-	-	4	-	14	07-243170-000	SPACER, CORNER
1	1	1	1	15	39-0017188-08	HOUSING, 2 POLE
10	12	12	16	17	11-483564-000	HOUSING, LIGHTHEAD (SNAP-IN)
1	1	1	1	19	01-0269879-00	ASS'Y, I/O CARD "LC"
2	2	2	2	20	46-0963330-00	HARNES, INBOARD LED
10	12	12	16	21	09-1363542-00	PANEL, FILLER (500 SERIES)
4	4	4	4	24	14-104216-06J	#10-24 X 3/8 PPH SCREW
8	8	8	8	25	14-104286-16J	#10-24 X 1-1/4" TX. PHD. W/SHOULDER
8	6	6	8	27	02-0342791-30	ASS'Y., LENS DIVIDER (CLEAR)
1	1	1	1	29	38-0142783-00	INSULATOR, FOAM PAD
1	1	1	1	30	10-0322935-00	LABEL, "FRONT" LIGHTBAR ASS'Y.
2	2	2	2	31	02-036E683-30	SUB ASSY, OVERMOLD ENDCAP CLEAR
2	-	-	2	32	68-1983818-30	LENS, 5.062" LG (CLEAR)
-	-	4	-	33	68-1963333C08	LENS, 8.375" LG. (CLEAR)
-	4	4	4	34	68-1983567-30	LENS, 15.800" LG. (CLEAR)
1	1	1	1	35	10-0522960-00	LABEL, MODEL & SERIAL NO.
A/R	A/R	A/R	A/R	38	01-026B693210	EXTENDED, CORNER 12 L.E.D. AMBER
A/R	A/R	A/R	A/R	39	01-026B693220	EXTENDED, CORNER 12 L.E.D. BLUE
A/R	A/R	A/R	A/R	40	01-026B693230	EXTENDED, CORNER 12 L.E.D. WHITE
A/R	A/R	A/R	A/R	41	01-026B693250	EXTENDED, CORNER 12 L.E.D. RED
A/R	A/R	A/R	A/R	42	01-026B693240	EXTENDED, CORNER 12 L.E.D. GREEN
-	-	-	1	43	11-363312-054	BASE, EXTRUDED (54.78")
-	-	1	-	44	11-363312-049	BASE, EXTRUDED (49.39")
-	1	-	-	45	11-363312-044	BASE, EXTRUDED (44.00")
1	-	-	-	46	11-363312-038	BASE, EXTRUDED (38.61")
-	-	-	1	47	11-26B607-054	TOP, EXTRUDED (54.78")
-	-	1	-	48	11-26B607-049	TOP, EXTRUDED (49.39")
-	1	-	-	49	11-26B607-044	TOP, EXTRUDED (44.00")
1	-	-	-	50	11-26B607-038	TOP, EXTRUDED (38.61")
A/R	A/R	A/R	A/R	53	46-0743719-00	HARNES, "Y"
A/R	A/R	A/R	A/R	54	46-0783576-03	HARNES, ALLEY LIGHT
1	1	1	1	55	46-0744336-17	CABLE, 17/C 22GA (17')
A/R	A/R	A/R	A/R	56	01-026B855-30	SUB-ASSY, ADJ. LR-11 ALLEY LIGHT
A/R	A/R	A/R	A/R	57	01-026B855-10	SUB-ASSY, ADJ. LR-11 ALLEY LT AMBER
A/R	A/R	A/R	A/R	58	01-026B855-20	SUB-ASSY, ADJ. LR-11 ALLEY LT BLUE
A/R	A/R	A/R	A/R	59	01-026B855-50	SUB-ASSY, ADJ. LR-11 ALLEY LT RED
A/R	A/R	A/R	A/R	60	02-036A493-00	SUB-ASSY, TIR TAKE-DOWN NON OPTIC
A/R	A/R	A/R	A/R	61	01-026B827610	SUB-ASSY, 500 LIN6 AMBER
A/R	A/R	A/R	A/R	62	01-026B827620	SUB-ASSY, 500 LIN6 BLUE
A/R	A/R	A/R	A/R	63	01-026B827630	SUB-ASSY, 500 LIN6 WHITE
A/R	A/R	A/R	A/R	64	01-026B827650	SUB-ASSY, 500 LIN6 RED
A/R	A/R	A/R	A/R	65	01-026B8276J0	SUB-ASSY, 500 LIN6 RED/BLU
A/R	A/R	A/R	A/R	66	01-026A748-02	SUB-ASSY, LR-11 TAKEDOWN LT HALF
A/R	A/R	A/R	A/R	67	01-026A749-05	SUB-ASSY, LR11 TAKEDOWN FULL SINGLE
A/R	A/R	A/R	A/R	68	01-026A749-06	SUB-ASSY, LR11 TAKEDOWN FULL DUAL
2	2	2	2	69	02-036B855-00	SUB ASSY, END SUPPORT BRACKET
A/R	A/R	A/R	A/R	70	01-026B693810	EXTENDED, CORNER 18 L.E.D. AMBER
A/R	A/R	A/R	A/R	71	01-026B693820	EXTENDED, CORNER 18 L.E.D. BLUE
A/R	A/R	A/R	A/R	72	01-026B693830	EXTENDED, CORNER 18 L.E.D. WHITE
A/R	A/R	A/R	A/R	73	01-026B693840	EXTENDED, CORNER 18 L.E.D. GREEN
A/R	A/R	A/R	A/R	74	01-026B693850	EXTENDED, CORNER 18 L.E.D. RED

