



LUMINOUS™

570 Series LED LIGHT BAR

LED LIGHT BAR INSTALLATION MANUAL

Your purchase of a Wolo warning light is the perfect choice to complement your vehicle. Wolo's warning lights are manufactured with the finest materials. Before being packaged, each light is tested to meet our high standards and ensure a perfect working light. Our quality workmanship and components are Wolo's assurance that this product will provide years of dependable service.

Before installation of the light bar is attempted, it is important to read the installation manual completely. The lives of people are dependent on a proper installation of the light bar to the vehicle. The person installing this light bar must have advanced knowledge of the proper method for mounting and securing a light bar to a vehicle's roof or exterior, as well as knowledge of the vehicle's electrical system. Again, read this manual completely and note any messages marked "**IMPORTANT**", "**WARNING**" or "**NOTICE**". A safe installation will prevent serious injury or damage to the vehicle.

LUMINOUS comes completely wired and does not require any internal wiring by the installer. The light bar has two electrical cables exiting from the bottom of the light bar. The thinner cable has a factory installed waterproof plug that will ensure a successful installation and years of dependable service.

Installation of the LUMINOUS Light Bar requires drilling into the vehicle's roof and interior. The installer must carefully inspect both sides of the selected locations to ensure that there are no components, wires and/or any other vehicle part that could be damaged by drilling. **IMPORTANT:** Always de-burr any drilled holes, ensuring that there are no sharp edges. Install a rubber grommet into all metal holes that the wires are being routed through.

IMPORTANT: Always refer to the vehicle's shop manual for deployment location of the air bags. Never install the light bar's switch control panel, wires and or components in the deployment area of any air bag. Improper installation could reduce the effectiveness of the vehicle's air bag system and/or project an object that could cause serious personal injury, or death to driver and passenger. The user/installer assumes all responsibility to properly access a safe mounting location of the light bar's switch control panel, so to provide ultimate safety to the driver and passengers inside the vehicle.

The vehicle operator and/or maintenance department should inspect the light bar frequently to ensure all brackets and bolts are securely attached to the vehicle and that all mounting hardware is free of corrosion.

The light bar's switch control panel should be mounted in a location where the switches can be easily reached. Never attempt to power the light bar on/off while driving under hazardous conditions.

These installation instructions should always be kept and stored in a safe location so that they can be referred to when information, maintenance or reinstallation is required.

Failure to follow all safety precautions and installation procedures outlined in these instructions could result in property damage to the vehicle, serious injury or death.

MOUNTING THE LIGHT BAR

There are two methods to safely mount the light bar to the vehicle's roof. The light bar can be mounted directly to the vehicle's roof or a flat surface using the slide brackets, or using the provided stainless-steel straps that will secure the light bar to the vehicle's windows ledge.

MOUNT LIGHT BAR - DIRECT MOUNTING

1. The light bar has two adjustable slide mounting brackets that are designed to mount the light directly to a rack or a flat surface such as the vehicle's roof without using the stainless-steel straps. **IMPORTANT:** The installer should always use the stainless-steel mounting hardware provided when securing the light bar using the direct mounting method.
2. There are two mounting brackets on the bottom of the light bar, one on each end. Loosen the four nuts on one bracket and the bracket will freely slide, repeat procedure for the other bracket. **NOTE:** Do not tighten the brackets nuts until the light bar and slide brackets have been positioned on the mounting surface. See Fig. 1.
3. Place the light bar on the selected mounting location. A preferred mounting position on the roof is close to the B-pillar, which is the strongest part of the roof. **IMPORTANT:** Never drill into a support pillar. **IMPORTANT:** Make sure the light bar is facing the correct direction. **NOTE:** There is a label on the light's front lens indicating "FRONT".
4. Position the light bar in the mounting location. Tighten each of the slide brackets four nuts to firmly lock the bracket in position
5. The slide bracket has pre-drilled holes designed for easy direct mounting. Use the slide bracket as a template and mark the locations that need to be drilled. See Fig. 1.
6. Mark the hole location for access hole to route the cables into the interior of the vehicle. Mark the desired hole location; remove the light bar from the roof or mounting surface. The installer must lower the headliner before drilling any holes to carefully inspect selected location to ensure that there are no components, wires and or any other vehicle parts that could be damaged. **WARNING:** The roof has support members that spans from the driver's side to the passenger's side of the vehicle, **NEVER** drill into a support member! It will be necessary to relocate the cable's access hole either in front or behind support member.
7. Drill holes: Access hole 7/16"
Mounting holes 3/8"

IMPORTANT: Protect the vehicle's interior headliner from damage that could be caused when drilling the access hole for the light bar's electrical cables. It's recommended to allow a minimum distance of 6" to 8" between the roof and headliner by lowering the headliner before drilling any holes.

IMPORTANT: Always de-burr the access hole that was drilled by using a round file to ensure there are no sharp edges. **NOTE:** Provided with the light bar is a rubber grommet. Insert the rubber grommet into the access hole, place the light bar on the roof of the vehicle. Route the thin electrical wire with the plug through the rubber grommet first, followed by the heavier gauge wire. See Fig. 3.

8. The cables will make an approximate 90° bend into the B-pillar. Depending on the vehicle, this can sometimes be difficult, but it is the recommended procedure for proper installation. Installation can vary for each make and model vehicle. It is up to the installation technician's decision whether to route the cables as recommend through the B-pillar, or use an alternative routing method. Route cables down to the bottom of the B-pillar, and pull the full length of both cables into the interior of the vehicle. See Fig. 4.
9. Secure the light bar to mounting surface with hardware provided. See Fig 2.
10. Place a coating of silicon or weather sealant around the head of each bolt that secures the light bar to the mounting surface. You will also need to seal the light bars wires and rubber grommet at the access hole. This will to ensure a waterproof installation.

IF LIGHT BAR HAS BEEN DIRECT MOUNTED SKIP TO MOUNTING & WIRING SWITCH CONTROLLER ON PAGE 4

Fig. 1

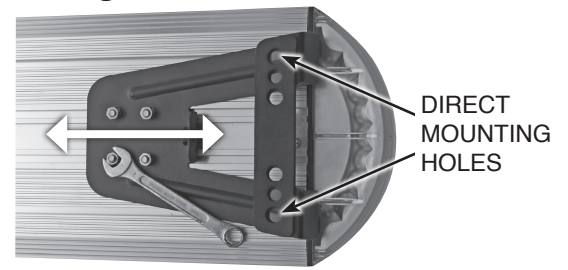


Fig. 2

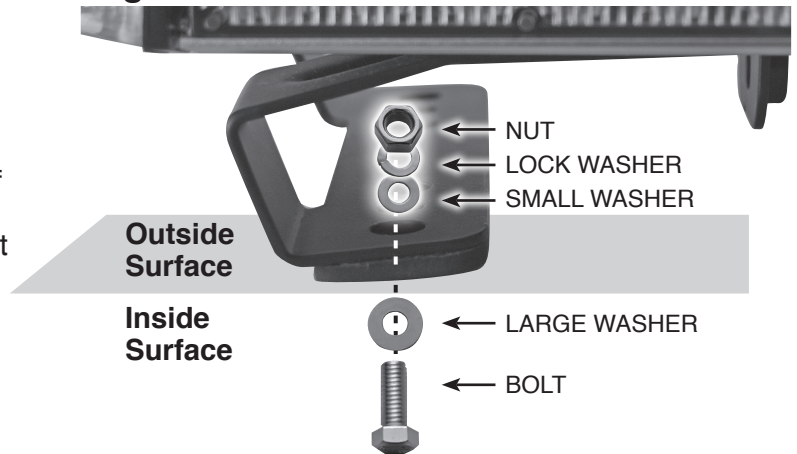


Fig. 3

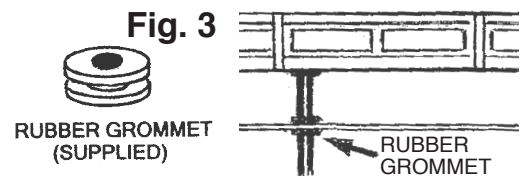
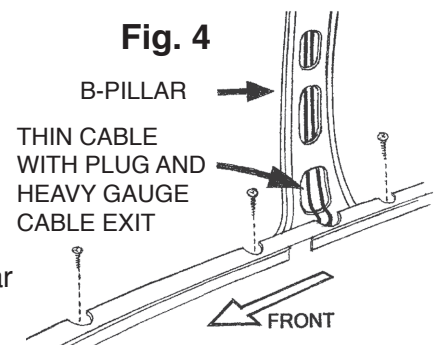


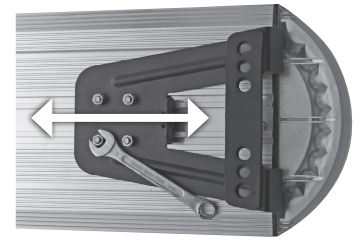
Fig. 4



MOUNT LIGHT BAR - STAINLESS-STEEL STRAPS

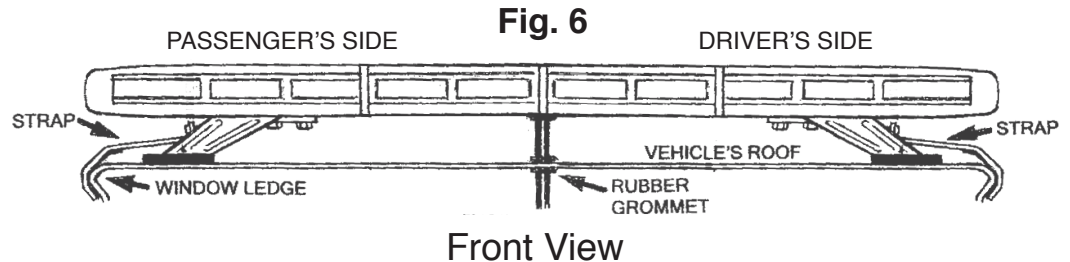
11. There are two mounting brackets on the bottom of the light bar, one on each end. Loosen the four nuts on one bracket and the bracket will freely slide, repeat procedure for the other bracket. Do not tighten the nuts until the brackets have been positioned with the stainless-steel straps. See Fig. 5.

Fig. 5



12. Place the light bar on the selected location of the vehicle's roof. A preferred mounting position on the roof is close to the B-pillar, which is the strongest part of the roof. **IMPORTANT:** Make sure the light bar is facing the correct direction. **NOTE:** There is a label on the lens indicating "FRONT".

13. Make sure the selected mounting location of the light bar will allow the stainless-steel straps to attach to the vehicle window ledge on both the driver's and passenger sides. See Fig. 6.



14. Drill a 1/2" hole into the roof, which will be the access point to route the cables into the interior of the vehicle. Mark the desired hole location; remove the light bar from the roof and drill the hole. The installer must lower the headliner to carefully inspect selected location to ensure that there are no components, wires and or any other vehicle parts that could be damaged before drilling. **WARNING:** The roof has support members that spans from the driver's side to the passenger's side of the vehicle. **NEVER** drill into a support member! It will be necessary to relocate the cables access hole either in front or behind support member.

15. **IMPORTANT:** Protect the vehicle's interior headliner from damage that could be caused when drilling the access hole for the light bar's electrical cables. It's recommended to allow a minimum distance of 6" to 8" between the roof and headliner by lowering the headliner before drilling the access hole.

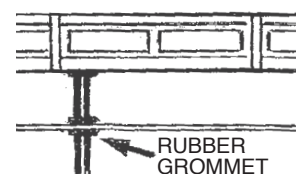
16. **IMPORTANT:** Always de-burr the access hole that was drilled by using a round file to ensure there are no sharp edges. **NOTE:** Provided with the light bar is a rubber grommet. Insert the rubber grommet into the access hole, place the light bar on the roof of the vehicle. Route the thin wire cable with the plug through the rubber grommet first, followed by the heavier gauge wire cable. See Fig. 7 & 8.

Fig. 7



17. The cables will make an approximate 90° bend into the B-pillar. Depending on the vehicle, this can sometimes be difficult, but it is the recommended procedure for a proper installation. Installation can vary for each make and model vehicle, and it is up to the installation technician's discretion whether to route the power cable as recommend through the B-pillar or use an alternative routing method. Route cables down to the bottom of the B-pillar and pull the full length of both cables into the interior of the vehicle. See Fig. 9.

Fig. 8

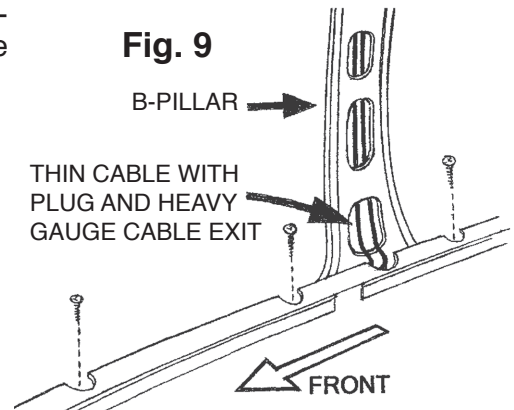


18. Position the light bar into mounting position onto the roof. The two adjustable slide brackets located on the bottom of the light bar are positioned outward toward the edge of the roof. The installer will need to adjust the location of the two brackets with the stainless-steel straps. See Fig. 10.

19. Open the vehicle's door and determine the location that the stainless-steel strap will clamp onto the windows ledge. You may need to move the rubber weather strip away from the vehicle. Only remove enough weather-strip so that the area where the stainless-steel strap will be secured to the vehicle is exposed. **NOTE:** The installer will have to bend and shape each strap to contour of the window ledge. Repeat the procedure for other side of vehicle.

20. Remove the protective film covering the stainless-steel straps. Place one of the stainless-steel straps into position on the window ledge so the installer can determine which holes in the stainless-steel strap is best positioned to attach the "L" bracket using the bolts, washers

Fig. 9



and nuts provided. Insert the tension adjustment bolt through the strap's "L" bracket and thread bolt into the light bar's bracket, hand tighten.

IMPORTANT: The "L" bracket can be repositioned for proper installation by simply removing the bolt securing it to the stainless-steel strap. Reposition and secure the "L" bracket in preferred location using the bolt, lock washer and nut. Repeat the procedure for other side of vehicle. **WARNING:**

The two-(2) stainless-steel straps, included with the light bar are universal and should always be securely installed to the window's ledge, using the hardware provided. Some vehicles may require a custom designed strap to properly secure the light bar to the vehicle's window ledge. Always make sure that both straps have a full hold on the vehicles window ledge. See Fig. 10.

21. Secure the two slide mounting brackets by firmly tighten the four nuts that were loosened in step 1. See Fig. 5.

22. Tighten the two-(2) tension adjustment bolts evenly. While tightening the bolts, make sure the light bar remains in the desired mounting position on the roof. Torque bolts to 10 to 12 ft.- lbs. Failure to properly tighten the tension adjustment bolts and straps could result in damage to the vehicle and injury or death to the driver or others. **IMPORTANT:** Always inspect to make sure that both straps have a full hold on the vehicles window ledge and the tension bolts are torqued correctly. See Fig. 10.

23. The hooked end of the stainless-steel strap that is engaged to the vehicle's window ledge has two holes, which will secure the bracket to the vehicle with the sheet metal screws provided. Use each of the holes in the bracket as a guide and drill the required holes to size 11/64" into the window ledge. Secure the stainless-steel strap to the window ledge with the sheet metal screws. **IMPORTANT:** The installer may have to lower headliner and inspect the selected location to ensure that there are no components, wires and or any other vehicle part that could be damaged by drilling. See Fig. 11.

24. Place the weather-stripping back into position on both sides of the vehicle.

MOUNTING & WIRING SWITCH CONTROL PANEL

The light bar's switch control panel needs to be mounted in a location that can easily be reached. **WARNING:** If the vehicle is equipped with air bags, the installer MUST consult the vehicle's shop or build manual to ensure that light's switch controller and wires will not affect deployment of air bags. This switch controller must be installed in a location recommended by vehicle manufacturer. If necessary, consult manufacturer for their recommendation. Failure to adhere to this warning could result in damage to the air bag and or reduce the effectiveness of the air bag, which could result in bodily injury, or death to you or others.

25. **NOTE:** there are two methods to mount the switch controller, either by using the double face tape provided or the metal mounting bracket, which is secured to the mounting surface with screws. **IMPORTANT:** The installer must inspect the selected location to ensure that there are no components, wires and or any other vehicle part that could be damaged by drilling.

26. **TAPE METHOD:** Position the switch controller's wire into the slots on the back panel. Make sure the vehicle's mounting surface is clean and free of dust, dirt, oil, wax etc. Using the double face tape provided, secure the control panel to the selected mounting location. See Fig. 12.

27. **SCREW AND BRACKET METHOD:** Position the switch controller's cable into the slots on the back panel so that the cable is flush with the back panel. Secure the metal mounting bracket to the back of the switch controller with the four (4) screws provided. Use the mounting bracket as a template, mark the two screw hole locations and drill to size 11/16" and secure bracket with two (2) screws provided. See Fig. 13.

28. **IMPORTANT:** Connect the switch controller's waterproof plug to the light bars mating plug which was routed into the vehicle through the access hole. The plugs can only be connected in one position. Tighten the shoulder nut fully to ensure a good waterproof connection. See Fig. 14.

Fig. 10

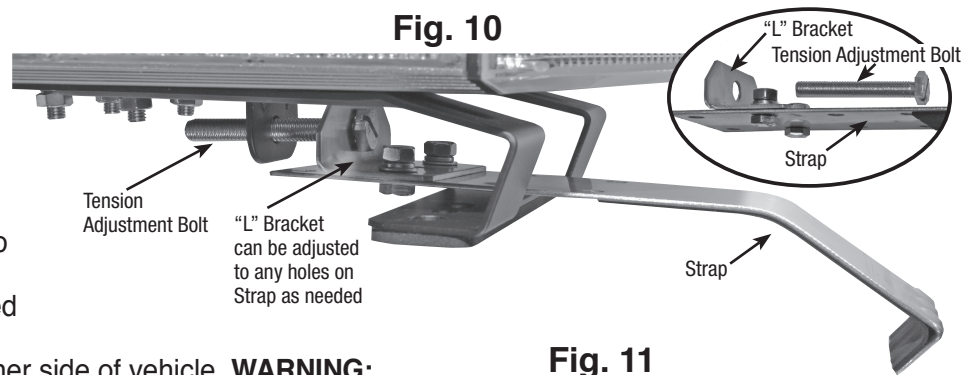


Fig. 11

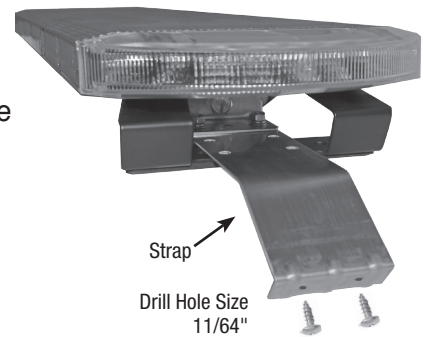


Fig. 12

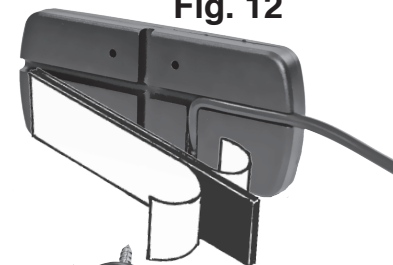


Fig. 13



Fig. 14

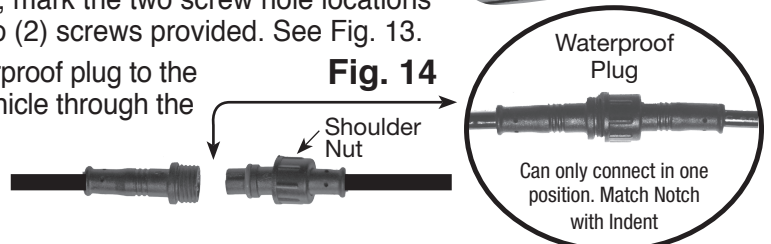
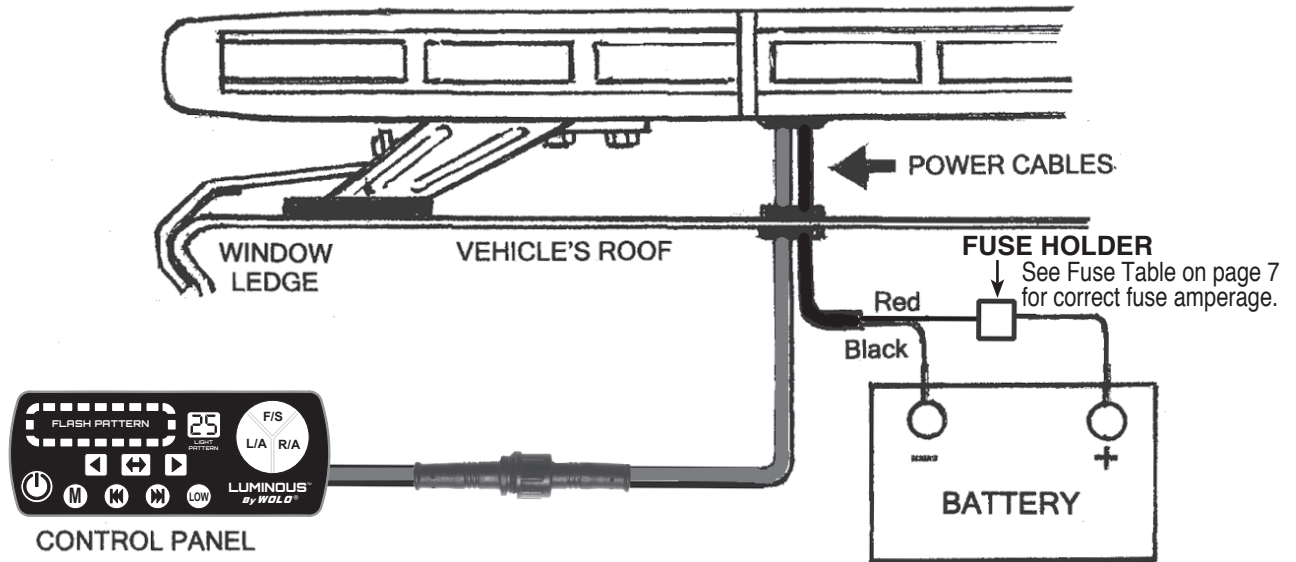


Fig. 15



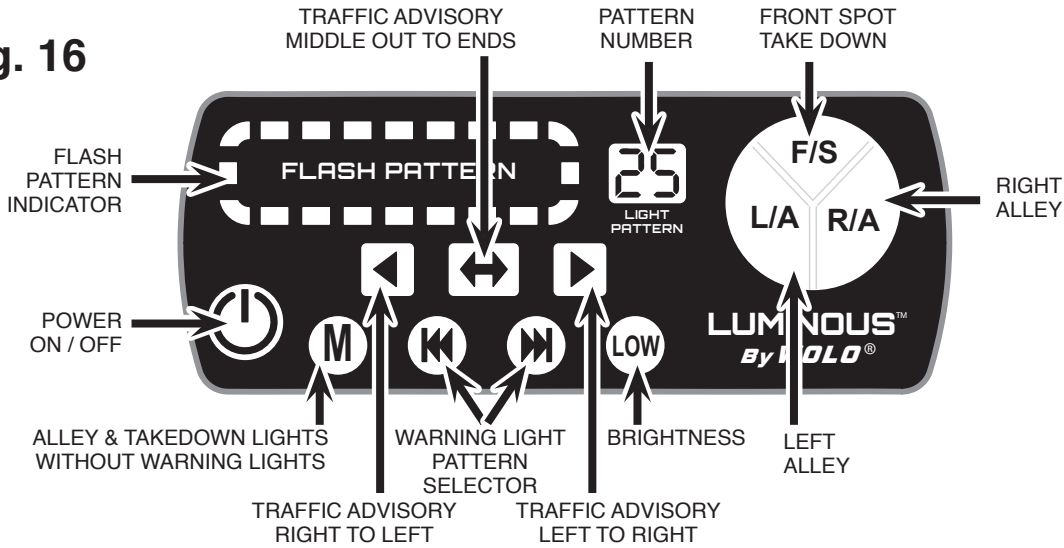
WIRING POWER CABLE

The Power Cable has two wires (red and black)

See Fig. 15.

29. **WARNING:** Failure to wire the light bar correctly could result in permanent damage to the light bar, the vehicle's electrical system and/or cause a fire. If any electronic component parts, fuse or wire is replaced, they must meet or exceed Wolo's specifications. Any deviation to the electrical specifications is at the installers/user's risk. **IMPORTANT:** Disconnect the vehicles battery before beginning any wiring. **IMPORTANT:** The warning lights RED wire must be connected directly to the inline fuse (included) at a power source such as; the fuse block, the vehicle's battery, or any 12 to 24 volt DC power source which is rated by vehicle's manufacturer capable of handling the amperage (see FUSE TABLE page 7). The inline fuse should never be more than ten (10) inches from the power source. If either the red or black power wires need to be lengthened use 18 gauge or heavier wire. The light bar is a low current device, to operate this product at peak performance make sure all connections are clean of paint, rust and corrosion and firmly secured.
30. **RED & BLACK WIRES:** Route the wires to the vehicles fuse block, accessory source or battery. If the power wires pass through any drilled holes or firewall, always use a rubber grommet to protect the wire cables.
31. **BLACK WIRE:** Connect to ground by securing wire under any metal body bolt or the negative (-) battery post. Make sure that the METAL surface around the bolt that secures the wire is clean of rust, oxidation and paint to make a good electrical connection.
32. **RED WIRE:** Connect to positive (+) 12 to 24 volts DC such as the fuse block, accessory power source in the dashboard area or the positive (+) battery post. Always use the inline fuse holder provided with the correct fuse, see Fuse Table on page 7 for correct fuse amperage. **NOTE:** The fuse holder will come with the correct fuse for a 12-volt installation. The fuse to be used for 24-volt installation can be found in the same hardware box as the fuse holder. Always use ATO or ATC type fuse.
33. To prevent shorts, make sure all wire connections are properly insulated and secured.
34. Make sure all wires are securely fastened to vehicle using plastic wire ties or electrical tape (not provided). **WARNING:** Carefully inspect the interior driver's area to make sure the light bar wires or the vehicle's electrical system wires are not interfering with the operation of vehicle's controls; accelerator, brake, clutch pedals etc.
35. Reconnect the vehicle's battery. Installation is complete.

Fig. 16



OPERATING LIGHT BAR See Fig. 16.

36. The switch controller has an on/off switch located at the bottom left corner, press and release the button switch to turn the light bar ON/OFF. When the light bar is powered on the switch controller's digital pattern indicator will display the pattern number in use. The flash pattern indicator may illuminate depending on what mode the switch controller is set to.



Traffic Advisory: There are three-(3) selectable traffic advisory light patterns to choose from. The pattern in use will display on the switch controller's flash pattern indicator and digital indicator.



37. To power on traffic advisory: press and release the selected traffic indicated on the push button switch. To turn off traffic advisory, press and release same button used to turn on.

Rear facing lights will flash from right corner to the left corner, the front facing warning lights all LED clusters will flash on/off at the same time.



Rear facing lights will flash from the center to left and right corners. The front facing warning light, all LED clusters will flash on/off at the same time.



Rear facing lights will flash from left corner to the right corner. The front facing warning light, all LED clusters will flash on/off at the same time.



Warning light: There are twenty-nine-(29) selectable warning light patterns to choose from. The pattern in use will display on the switch controller's flash pattern indicator and will display digitally showing a pattern number.



IMPORTANT: When switching the light bar from traffic advisory to warning lights, you need to turn off the traffic advisory program by simply pressing and release the switch button for the traffic advisory pattern in use, you will see the digital indicator change.

IMPORTANT: When the warning light is powered on the end LEDs (circular lens) have three light pattern options to choose from.

38A Press L/A or R/A buttons once and the end LED lights (circular lens), will flash in sequence with the light pattern in use.



38B Press L/A or R/A buttons twice and the end LED lights (circular lens), will change color to clear and will function as an alley light illuminating steady on.

38C Press L/A or R/A buttons three times and the end LED lights (circular lens), will turn off.

38D 26B Press F/S button once and the two front center LED clusters will change color to clear and will function as a powerful takedown light by illuminating steady on.

Using Alley and Takedown Lights without Warning lights

Press the M button once and the alley or takedown lights can be used without any warning lights being illuminated.



FLASH PATTERNS

1	Single flash	11	One-One Single - slow	21	CCW constant flash
2	Double flash	12	One-One Single - flash	22	Center-Out
3	Triple flash	13	One-One eight flash - slow	23	Left arrowstick
4	Quad flash	14	One-One eight flash - fast	24	Right arrowstick
5	Eight flash	15	In out -slow	25	Middle to side arrowstick
6	Single half to half	16	In out -fast	26	Night ride
7	Double half to half	17	Combo (1,6,11,14,16)	27	Left half single flash
8	Triple half to half	18	CW Rotation	28	Right half single flash
9	Quad half to half	19	CCW Rotation	29	Steady on
10	Eight half to half	20	CW constant flash		

CW = Clockwise CCW = Counter Clockwise

FUSE TABLE

Use ATO or ATC Type fuse

LENGTH OF LIGHT BAR	12-VOLT FUSE AMPERAGE	24-VOLT FUSE AMPERAGE
31 Inch	10-Amp	7.5-Amp
48 Inch	15-Amp	10-Amp
57 Inch	15-Amp	15-Amp

SPECIFICATIONS

Certification:

SAE J845Class 1: W3-1 19

California code of Regulation Title 13

ECE R10

UNECE R65

Operating voltage: 12-24 VDC

Construction: Heavy-duty extruded aluminum top and bottom

LED output: 3-Watts

LED type: 3030

Takedown dual color type: 5030

LED life span: 100,000 hours of use

29 Selectable light patterns

Length of power cable: 11.5 feet

Length of controller cable: 11.5 feet

Switch controller wire length: 5 feet

31 inch / 78 LEDs

48 inch / 126 LEDs

57 inch / 150 LEDs

CLEANING

A scratched, dull or dirty lens can cause a reduction in brightness of the warning light. Never use a caustic or petroleum-based cleaner on any surface of the warning light. For best cleaning results, always use household glass cleaner or mild soap with a soft lint free rag. If the lens has scratches, or is dull, it is recommended those components be replaced to ensure maximum brightness of the warning light.