

WRECKER BODY LED LIGHTS

It's simply not possible to provide detailed instructions for all installation scenarios. Far too many variables and truck variations. **The information in this document is intended to be used as a guide.** It is not a detailed step-by-step how-to installation manual. We do not spell out every single step along the way. We cover the essential steps related to installing this kit. Beyond that however we must assume the installer has the skills, knowledge and tools necessary to do the work using the information we provide. You may need to vary your installation based on your truck. This is particularly the case with electrical wire routing and switching. If you're unsure about how to do the installation – particularly the electrical components – we urge you to seek assistance from someone who has those skills.

RGBx / Multi-Color : If you purchased the RGB multi-color version of our kit a Heavy Duty Bluetooth / RF Combo wireless controller is included with your kit. We include a wiring diagram with the controller. Please make sure you read the instructions included with the controller. All RGBx multi-color LED strip power leads must be routed back to the controller.

All **Boogey Lights**[®] LED strips are **COMMON CATHODE LEDS**. They share a common ground and if you're using a controller, they will only work with our positively switched controllers. Most LED strips on the market today are COMMON ANODE because the controller technology used to power them is less expensive to manufacture. However, they're not nearly as bright and are an overall inferior design when compared with COMMON CATHODE LEDs.

Typical Placement

Typical placement of the LED strips are along the sides of the wrecker or service truck in the existing side body channel commonly found on most wreckers today. This is particularly true for our LOW PROFILE LED strips. In many cases, our LOW PROFILE LED strips can be used as a direct replacement for factory installed lights using the existing wiring, access holes and even switches (assuming you're using single color LED strips). If your truck doesn't have that channel to protect the LED strip, it's important to mount the LOW PROFILE LED strip on aluminum channel with a diffuser cover to protect the LED strip. If you purchased our HEAVY DUTY LED strips, you want to make sure the LED strip will fit into that side body channel without damaging the strip. Do not force the strip into the channel. You'll notice too that our Heavy Duty LED strips include a screw mounting location at the end of each strip to help secure the strip to the truck.

> BOOGEY LIGHTS® bl-wrecker-body-021224

LED Strip Type / Where and How You Mount Matters

Where are how you mount these LED strips impacts the warranty we provide. We manufacture two styles of LED strips for wrecker body lighting. One is our LOW PROFILE (LP) LED Strip. The other is our HEAVY DUTY (HD) LED Strip. The default is our LOW PROFILE LED Strip. Which style you choose depends on where on the truck you're mounting it. If for example your truck has a built in indentation or channel (typical of most Miller truck bodies for example) where the LED strip is protected, you can use our LOW PROFILE strip. If however your truck doesn't have that indentation to protect the LED strip you either need to mount the LED strip inside an aluminum channel with cover OR, use our HEAVY DUTY LED version instead. This is especially important if you're operating in extreme cold temperature markets where roads are treated with salt/chemicals. Our Heavy Duty (HD) LED strips will hold up much better. They're more expensive and take longer to install but they're much more durable than our LOW PROFILE LED Strips. If durability isn't a factor and/or budget is an issue, then our LOW PROFILE LED strips are the easiest to install. Just be aware that we do not warranty our LOW PROFILE product if not mounted according to our directions.

Do Not Install Low Profile LEDs Under Tension

When installing Boogey Lights Low Profile Wrecker Body led strips it's important to simply unroll the LED strips and push them to the wrecker body surface AS YOU GO versus pulling on the LED strip and pushing the strip to the surface when it is tight. This is a super important concept to understand if you want your lights to last. The natural tendency is to pull tightly on the LED strip to keep it straight and level when mounting horizontally BUT doing so means the solder joints in the LED strip will be installed under maximum tension from day one. Mounting the strips this way doesn't allow any room for the solder joint to move, contract or expand as needed over time. LED strips installed this way will fail prematurely at that solder joint every time. Not a matter of if but when. Strips that fail due to improper installation are not covered under warranty

Attaching Your Light Strips

Bench Testing:

We strongly recommend bench testing your lights BEFORE you mount them to your truck. While we test every light strip and controller before shipping, bench testing your lights will eliminate the possibility of any problems with the lights or controller before mounting. Also, the process of bench testing gives you an opportunity to understand the wiring system without interference of other wires, connectors and cables already on your truck. Additionally, if you're using one of our multi-color RGB controllers, bench testing helps you better understand the wiring configuration and operation. Bench testing takes an extra 15 or so minutes. It's simple to do and can potentially save you hours of time and frustration later.

Mounting Steps:

1) Clean the mounting surface with alcohol towels first. Every tow truck lighting kit includes a 3M adhesion promoter. Use the supplied 3M adhesion promoter (aka 'primer') to prepare the surface where you'll be attaching the strips. The 3M adhesion promoter is used to enhance the adhesion strength of the 3M tape on the back of the light strips and makes a permanent bond. **YOU CANNOT SKIP**

BOOGEY LIGHTS® bl-wrecker-body-021224 THIS STEP. Always apply 3M Promoter to any surface Boogey Lights[®] LED strips will be mounted.

For situations where you are affixing Boogey Lights[®] to a surface where heavy oils or grease are present, a "degreaser" solvent such as acetone may need to be used first. If you use acetone (or any other degreasing solvent) you must still apply the 3M Promoter. Acetone is not a replacement for promoter. In addition, if you use acetone to clean a heavy oiled or greased surface, you will still need to follow up with an alcohol cleaning to help ensure any residue or film from the acetone is removed. This is because acetone (and most other degreasing solvents) will thin the promoter as well as break down the adhesive in the tape greatly reducing the tape's stickiness. Any surface first cleaned with acetone must also be cleaned with alcohol and then thoroughly dried before painting on promoter.

For best results, attach your lights within one hour or less after the promoter has been applied.

2) We suggest you position the LED strip before removing the tape backing. When ready, remove a small amount of tape backing from one end of the strip while holding it in position. Continue to peel it off and press as you go to ensure the tape doesn't stick prematurely to the wrong place. The promoter used will cause immediate and permanent adhesion on contact with the 3M tape so be sure to **TAKE YOUR TIME**. You must get it right the first time for a guaranteed trouble-free installation.

3) If you're using our single-color LED strips, make sure you are not over-loading the circuit they are attached to. As with all lighting solutions, each LED strip should be properly fused. If for any reason there is a dead short in the strip, you want the power to that strip to be cut off to avoid over-heating and potentially burning.

Bending: While these LED Strips are designed to take a beating, it's important you do not bend the strips in a radius of less than 2". Also, do not bend the LED strip on a horizontal plane. Doing so will damage the circuit traces on the PCB board causing the LED strip to fail and voiding the warranty.

Do NOT bend the LED strip in a radius of less than 2 inches.



Do NOT bend the LED strip on a horizontal plane.



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WARRANTY

Warranty info can be found on our website at <u>https://www.boogeylights.com/warranty/</u>. The warranty is a product only warranty. It covers the lights (or remote control) themselves. It does not cover reimbursement for labor or other charges involved in replacing the product.

PLEASE NOTE: If you want warranty coverage on our LED Strips, you must follow these instructions before installing:

- 1. Bench test each LED strip using a 12vdc power supply. Confirm each LED diode in the strip is lighting as expected.
- 2. Visually inspect the LED strip to make sure it's not damaged.

Do not install a LED strip if it's not lighting properly and/or appears damaged/defective in any way. Instead, contact Boogey Lights by opening a support ticket at <u>https://www.boogeylights.com/contact-us/</u>. We will respond promptly.

Assuming you've performed the above two steps and the strips are working as expected, be sure to follow the mounting instructions included with your order.

Failure to follow these instructions will void the warranty.