

INSTALLATION INSTRUCTIONS

**2021 CAMARO
UNDER-GLOW LED LIGHT KIT**



RULE THE NITE™

BOOGEY LIGHTS®

Family Owned Motorsports Lighting Since 1989

800.847.1359

www.BoogeyLights.com

Thank you for purchasing genuine Boogey Lights® LED Lighting products! We know you're anxious to get started but we strongly recommend taking time to read through these instructions. You'll likely save yourself some grief and aggravation if you do. For additional installation support refer to www.BoogeyLights.com or give us a call at 800.847.1359 for assistance.

TOOLS & SUPPLIES YOU WILL LIKELY NEED

Variable speed drill (w/bits), variable speed screw gun (w/bits), wire cutters, wire strippers, crimping tool, electrical tape, silicone sealant, shop rags, extra zip ties, jack stands. A right angle screw gun / drill can be helpful.

BEFORE YOU START

Installing our light kits are relatively simple if you do some pre-planning. We suggest you carefully review the following before you begin:

1. It's simply not possible to provide detailed instructions for all installation scenarios. The information in this manual is intended to be used as a guide. You may need to vary your installation based on your unique situation. This is particularly the case with electrical wiring and LED placement.
2. Make sure you have ample area in which to work and that the area is protected from rain or cold temperatures. The 3M adhesive tape works best if applied when the air temperature is above 40 degrees (and of course is DRY).
3. This kit includes the aluminum flat stock necessary to mount the LED strips to the car such that the LED strips will last. It's important to use it. Do not attempt to mount the LED strips directly to the car.
4. Make sure you know where your electrical connections will terminate. For this Camaro kit, the LED controller should be located in the trunk near the battery.
5. If you are adding additional LED strips beyond the LEDs included with our kits pay attention to the number of LEDs you are lighting and the total amps you will be drawing. Our SUPER SERIES controllers are capable of powering up to 900 LEDs (10amp fuse).
6. Bench test your setup. We know this takes a few extra minutes but we STRONGLY suggest you bench test your lights AND your controller on a table before doing anything further. 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 from other wires, connectors and cables. You can use any 12vdc battery to do this (e.g. car battery, motorcycle battery, lawn tractor battery or 12vdc power supply). Bench testing takes an extra 10 or 15 minutes. You can also use a common 9vdc battery to test your lights if you don't have a 12vdc bench testing power source available (the lights won't be as bright). It's simple to do and can potentially save you hours of time and frustration down the road. Please take our advice. Bench test your LEDs AND controller before mounting.

BTW ... Did we mention we suggest bench testing your LEDs and controller before installing? You would be surprised at how many people don't take our advice on this step.

ABOUT THIS GUIDE

In putting together this installation guide we assume the installer has access to and has a basic understanding of using the tools needed to complete this installation. We also assume the following:

- The installer understands 12vdc electricity, making electrical connections, the importance of having a fuse in the circuit and polarity.
- How to access the car's battery, remove / connect battery connections, how to make electrical connections (e.g. crimping) and the importance of making sure all electrical connections are sealed properly (e.g. no water intrusion).
- How to run cabling such that the power leads/wiring are secured in a way as to not create a hazard when driving and/or placing them in locations which might damage them (e.g. next to the exhaust pipe, wrapped around the drive shaft, etc).
- A means by which to gain access underneath the car (e.g. floor jacks).

WHAT'S INCLUDED

In addition to the LED light strips, power leads and aluminum mounting systems, this kit includes some additional items you'll need. Here's a quick review of those items and why we include them. Some of the photos at the end of this guide reference these items too.

- Aluminum Flat Bar – 22.75" long. Front under-glow mounting surface. Screwed to the bottom.
- Aluminum Flat Bar – 78" long (2). Drivers and Passenger's side mounting surface.
- Aluminum Angle – 24" Long. Rear under-glow mounting surface.
- Rubber grommet. Used for rear trunk hole where the power lead will feed to the LED controller.
- Self-Tapping Mounting Screws. Used to screw the aluminum flat bars to the car's frame. Note: Be prepared to drill a hole in the aluminum flat bar first (1/4") with a bit large enough for the self-tapping screws to go through. You might even need to drill a pilot hole into the car's frame first.
- 20AWG Feeder Cable. This cable is primarily used to extend the connection from the LED controller in the trunk to the LED strips just underneath the trunk.
- 3M Adhesion Primer. Used to prep the surface before attaching the LED strips, the 3M reclosable tape or zip tie mounts. Always, always, always use this adhesion primer with 3M adhesive products if you want the bond to hold.
- 3M Quick Lock Reclosable Tape. This is a heavy duty "Velcro like" product. Used to secure the rear LED strip (with aluminum angle bar) to the back of the fuel tank.
- Split Loom / ¼". All power leads need to be protected from chaffing. Wrap them in this first.
- Battery Extension Cable. We include some 10awg cable because you'll need to extend the battery power inputs going to the LED Controller to the car's battery which is about 3 feet away.
- Battery Terminal Lugs. We include a couple of battery terminal lugs that attach to the battery extension cable (crimp on) to make it easy to connect the positive and negative power leads to the car's battery to the LED controller. It's a much better way to make this connection than to just simply wrap the bare cable around the battery post.

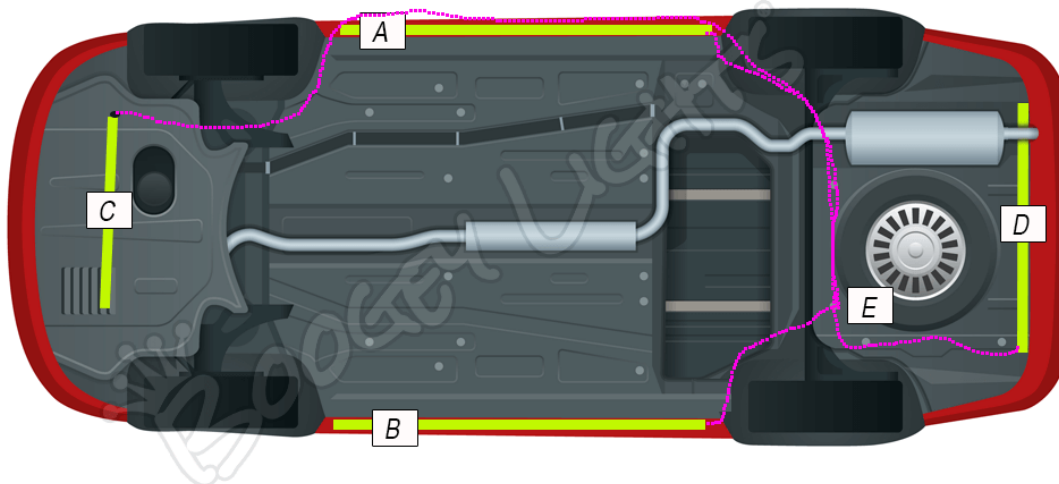
- Butyl Tape. We use butyl tape in a few places on this installation to help hold power lead wires to the car chassis as well as completely seal the hole we have to drill in the trunk.
- Zip Ties. We include some zip ties which you'll need to secure the LED power leads both to the aluminum flat bars and the car chassis.
- Zip Tie Mounts. These mounts are used to secure the LED power leads coming off the LED strips on the aluminum flat bars. See photos later on in this guide.
- Crimp On Wire Connectors. These are used to secure the wire connectors at the LED Controller. We recommend wrapping each connector after it's crimped with electrical tape.

NOTE: Every installation varies a little so you may need to purchase additional items (or more of them such as zip ties) for your install.

LED PLACEMENT

This kit has four LED strips; one for each side, front and rear of the car. It's designed to provide a full perimeter under-glow lighting effect. The below diagram shows the approximate mounting locations for each strip.

NOTE: This is NOT an accurate drawing of the bottom of the Camaro. This is used for general placement illustration only.



LED Strips A & B: Mounted to Aluminum flat bar which is screwed to the car's frame on both sides.

LED Strip C: Mounted to Aluminum flat bar and screwed in the indent in the plastic cover.

LED Strip D: Mounted to the aluminum angle which is then affixed to the rear of the fuel tank using 3M recloseable tape.

E = Approximate location where power leads go into the trunk.

Pink lines indicate approx routing of power leads.

LED Strips A, B (78" ea) and C (22.75") are all first mounted to the supplied aluminum flat stock and then that flat stock is screwed to the bottom of the car. LED Strips D (24") is mounted to the 90 degree aluminum angle which is then attached to the back side of the fuel tank using 3M reclosable tape. At the end of the document we have some photos of each of these strips to show how they are mounted. The power lead feeding LED strip C (under the front bumper area) is run along the passenger's side of the car. We have a photo of this at the end of this document.

Routing the Power Leads

All of the power leads from the LED strips should come together under the trunk where we drill a hole for the cables to go through. It's important to make sure the power leads are encased in split loom to protect them from chaffing against other parts of the car. Also, when routing the power leads from the LED strips to the LED controller, make sure you're routing them in such a way as to protect them from moving components (e.g. drive shaft, wheels).

In our installation we ran a single power lead feeder-cable down from the LED controller in the truck to the location under the truck where all the power leads were then connected together in that location (zip tied to the chassis). If however you don't have a lot of working room under the car, you can also run those cables up into the truck and make the connection there. The problem with doing that of course is that you need to make a larger hole in the trunk to fit all the cables. We have included some photos of these connections at the end of this guide.

Securing the Power Lead

It's important to make sure you secure the end of each LED strip where the power lead attaches to the aluminum surface using a Zip Tie mount and Zip Tie. This stops the power lead from vibrating or damaging the connection between the power lead and the LED strip. We've included some photos of what we're referring to later on in this guide.

The LED Controller

The LED controller is mounted in the truck. The LED controller has a fuse which is essential to protecting the controller and your car. Do not cut the fuse out of the circuit.

CUTTING YOUR LEDS- If you need to cut your LED strip so as long as you cut in the proper location – which is every as shown in the below photo. Cutting incorrectly could damage and is not covered by the warranty. If you cut the strip, be sure included heat shrink tubing to seal the cut end. You can also found at your local hardware or RV store. A little dab will do do need to cut your LED strip, we strongly suggest doing so mount the strip to your RV/Camper/Trailer. **NOTE:** Your LED look a little different than this photo. Some of our LED strips solid oval solder pad with a dotted line going down the middle (e.g. the scissors isn't there). Just cut down the middle of those solder pads.



Cut Locations

you can do three LEDs to use the use silicone you. If you BEFORE you strip might have one

Follow these steps for mounting your LED strips:

- The area where you are mounting the LEDs has clean: free of all dirt, oil or anything that might the LED from sticking. You only get one opportunity to mount the LEDs so it's critical the be prepared properly.
- Use the supplied alcohol pads to clean the area you are going to mount the LED strip. Be sure to alcohol dry completely before proceeding to the step. (Note: Do not use acetone or similar cleaner).
- Next, use the 3M Adhesion Promoter supplied your kit to "paint" on the promoter where you going to mount the LED strip. **This is an important step. Do not bypass.** Allow the promoter to dry for 60-90 seconds.
- Peel off the red backing tape that protects the adhesive tape on your LED strip. Be careful not the tape touch anything. The 3M backing tape these LED strips are one-use only. They cannot reused.

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



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Do NOT bend the LED strip on a horizontal plane.



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- Carefully push the LED strip to the area you have prepared. You will want to apply only enough pressure to the strip to make sure it is firmly mounted. *You only get one opportunity to do this.* Once the LED strip touches a properly prepared surface that has been promoted, that LED strip will be very difficult to remove. Moreover, if you do remove the LED strip, the strip cannot be used again without adding another layer of 3M adhesive tape to the back. **DO NOT press too hard as too much pressure can damage the LEDs and connecting wires in the strip. Also, do not pull, stretch or twist the LED strip. Too much tension on the strip will also damage the LEDs such that some of the LEDs in the strip will not illuminate. The strip must be mounted flat against a single continuous mounting surface, in a straight line. Really important that the ENTIRE STRIP be stuck to the mounting surface and that you NOT attempt to span across multiple mounting surfaces.**
- Use ZIP TIE mounts and ZIP TIES to affix the left-over power lead cable running to the LED strip to the bottom of your car. You don't want to leave this power lead cable hanging. Doing so will place too much stress on the LED strip itself causing it to fall off or fail. Before affixing the Zip Tie Mounts be sure to prepare the area with alcohol and 3M Promoter just like you did with the LED strip. It's important these Zip Tie mounts hold. If you need more support, add more zip tie mounts.

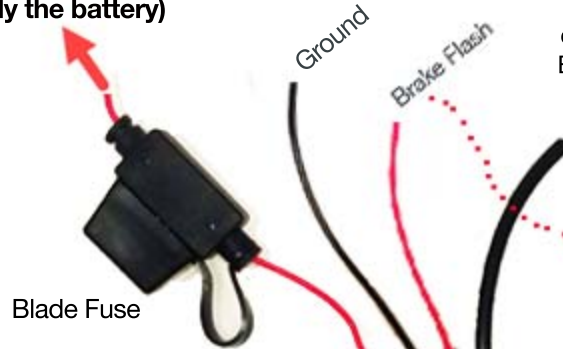
Multi-Color RGB Wireless LED Controller COMBO Bluetooth + RF KEYFOB Wiring Diagram

For Boogey Lights 'SUPER' (BLRC-009SBF) LED Controller Models



Red Fused Wire connects to 12vdc positive (usually the battery)

Black wire from controller connects to 12vdc Ground



Pushbutton On/Off Switch

If you're installing the controller on a small vehicle (e.g. motorcycle, golf cart) we recommend installing a pushbutton on/off switch. If installed, the switch would be wired between the battery and the LED controller before the fuse.

COMBO LED CONTROLLER: RF WIRELESS KEYFOBS + BLUETOOTH

RF REMOTE CONTROL



Remote Control KEY FOBS

BLUETOOTH ENABLED



Download the FREE Boogey Lights APP from APP store.

Download the APP operating manual from www.BoogeyLights.com



LED STRIP WIRES:

Red, Green, Blue & Black Wires

Connects w/ Red, Green, Blue and Black Wires coming from the LED Controller (in the wire loom). Each wire represents its respective LED light color. BLACK is the GROUND wire.



Brake Flash Integration (Red wire w/o Fuse)

All PLUS & SUPER Combo KeyFob LED controllers include Brake Flash integration. A feature typically used on motorcycles as a safety feature, when 12vdc power is applied to this circuit (e.g. the brake pedal is pressed), the LED controller will energize JUST the RED leds (or whatever LED color you have wired to the RED output wire from the wire loom bundle attached to the LED controller).

If you aren't using the brake flash feature, simply cap this red input wire; do not leave it exposed.

NOTE: In some cases the red BRAKE FLASH wire will be inside the black wire loom along with the LED power lead wires. If so, it will be labeled with a 'BF' tag.

800.847.1359



BLRC-009SBF

[BLMCCOMBOKFBF-SUPER 07-07-21]

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INSTALLATION PHOTOS

Here are some photos with comments on the installation we did in building this kit. We've commented on key parts of the installation along the way. We don't however cover every minute detail of the installation process.

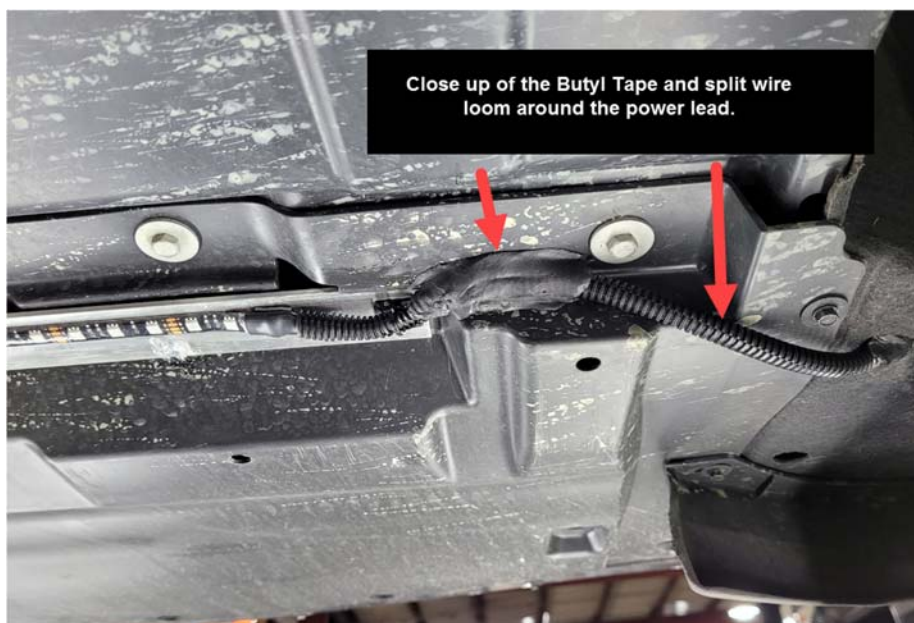
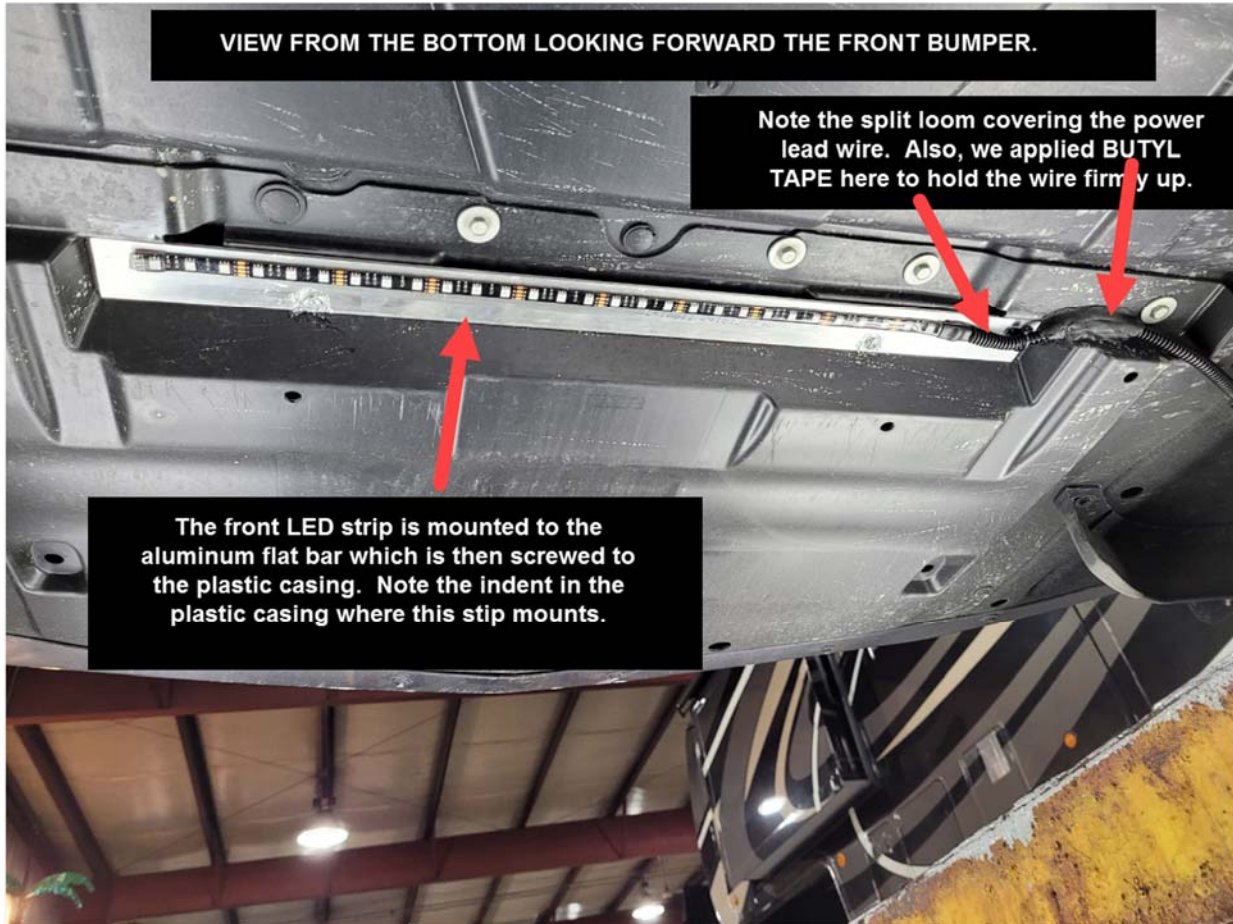
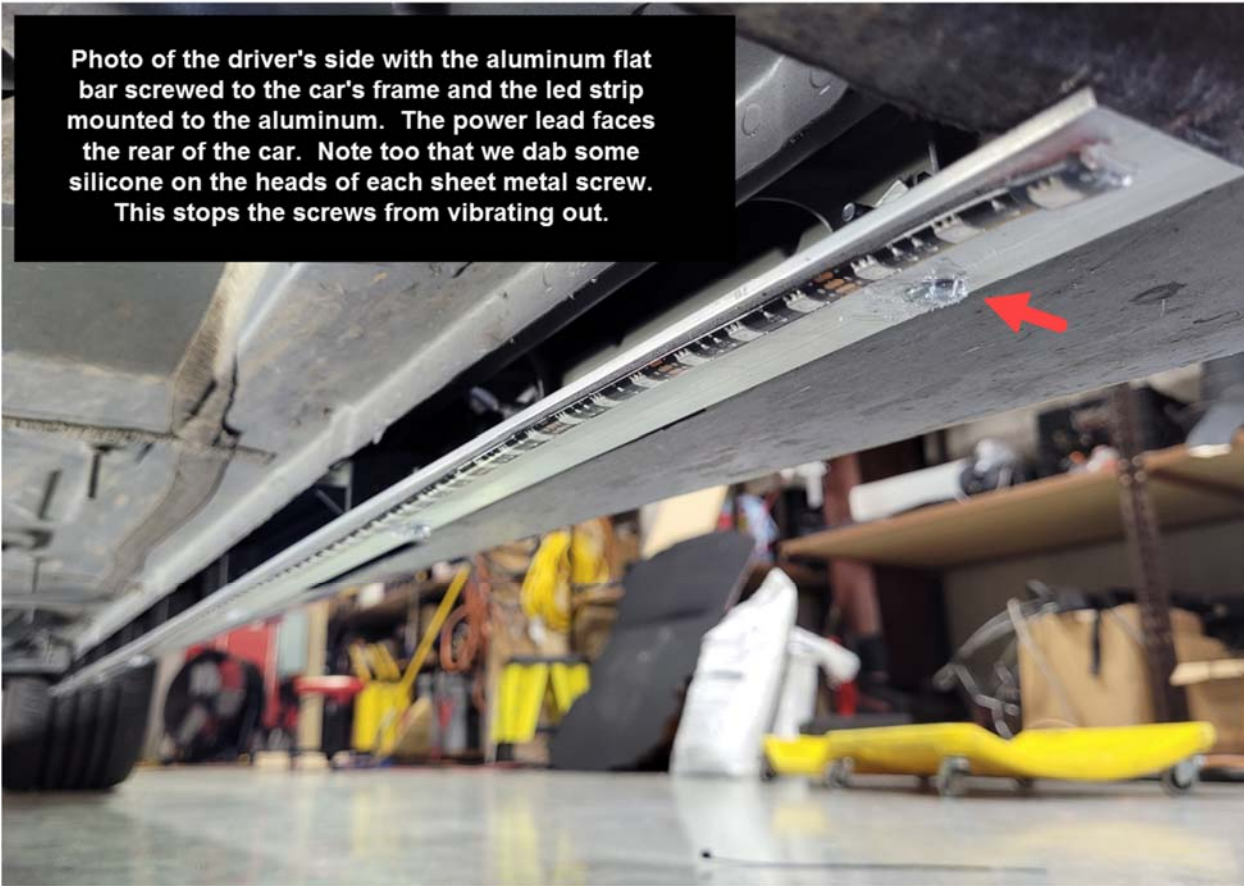
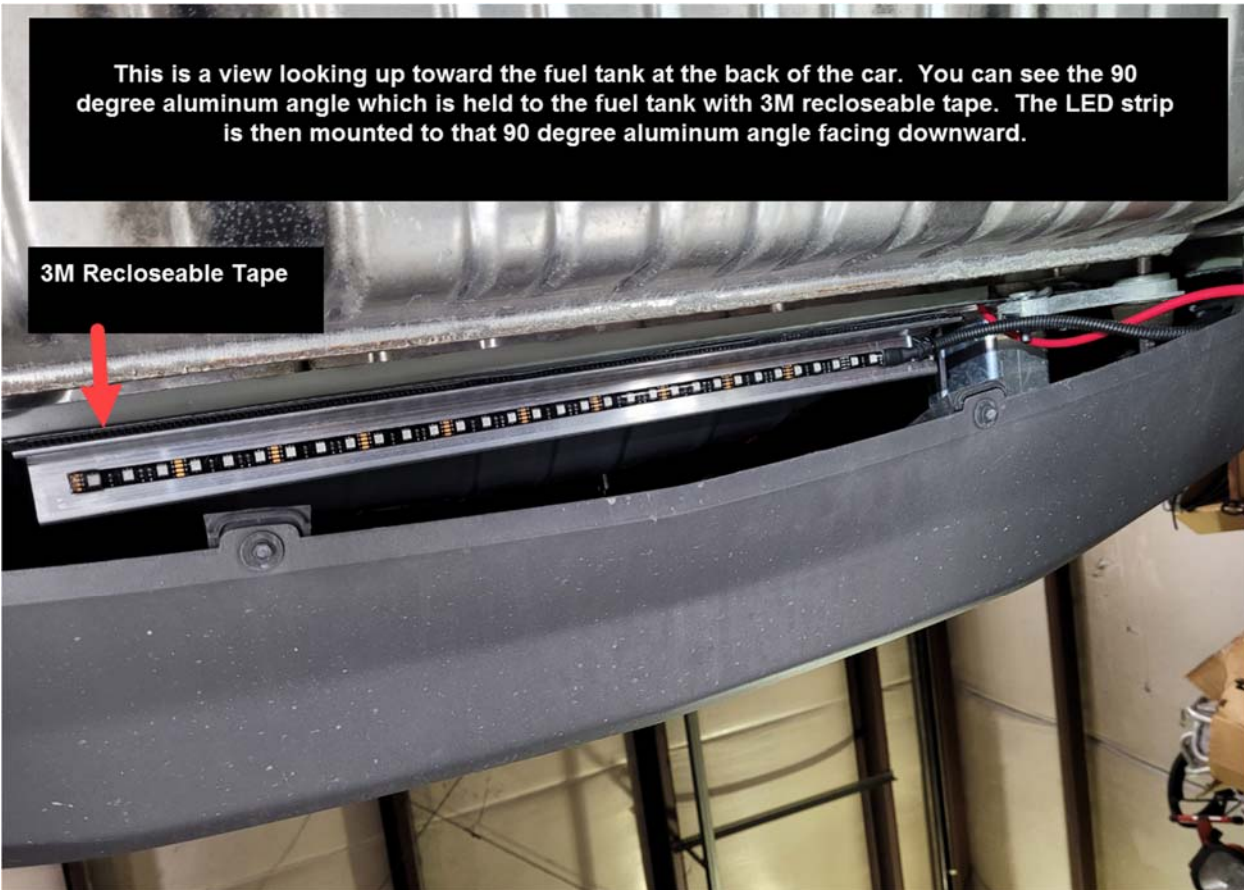


Photo of the driver's side with the aluminum flat bar screwed to the car's frame and the led strip mounted to the aluminum. The power lead faces the rear of the car. Note too that we dab some silicone on the heads of each sheet metal screw. This stops the screws from vibrating out.

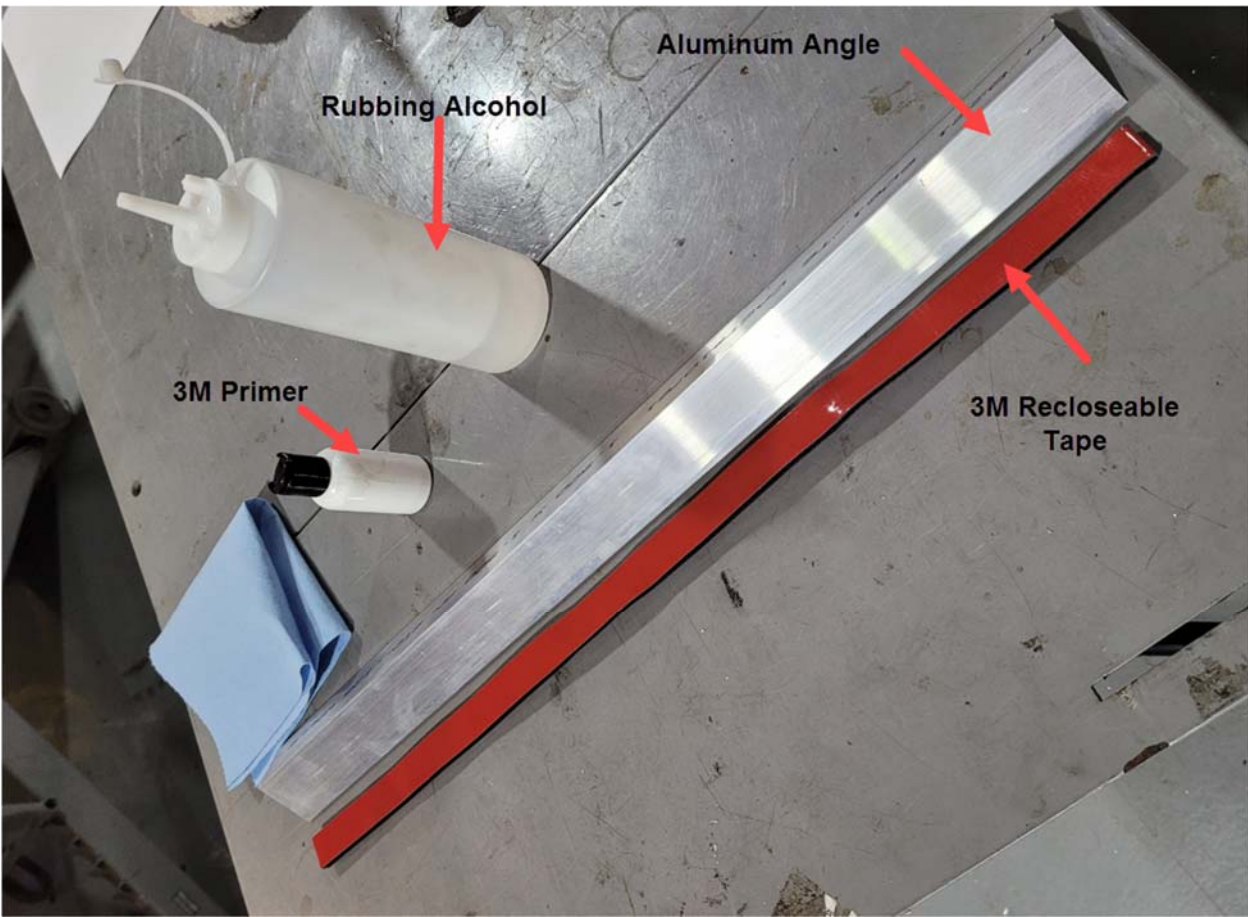
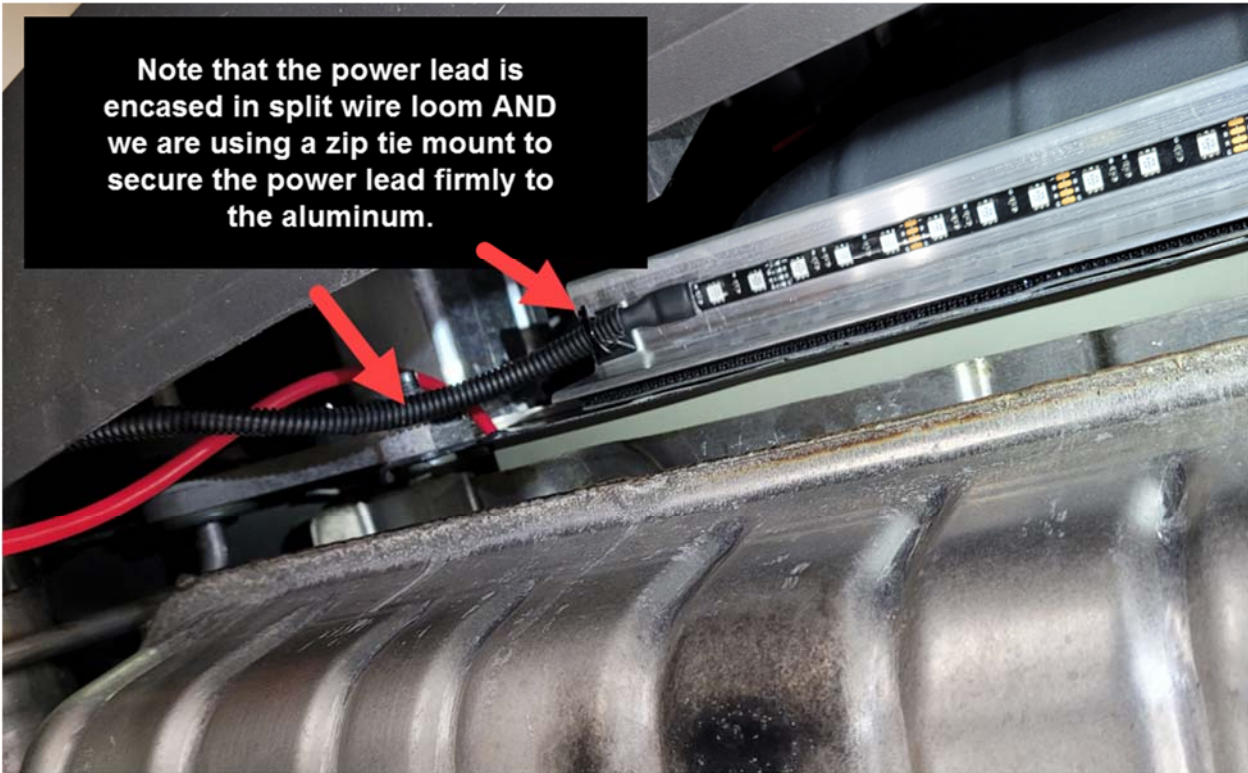


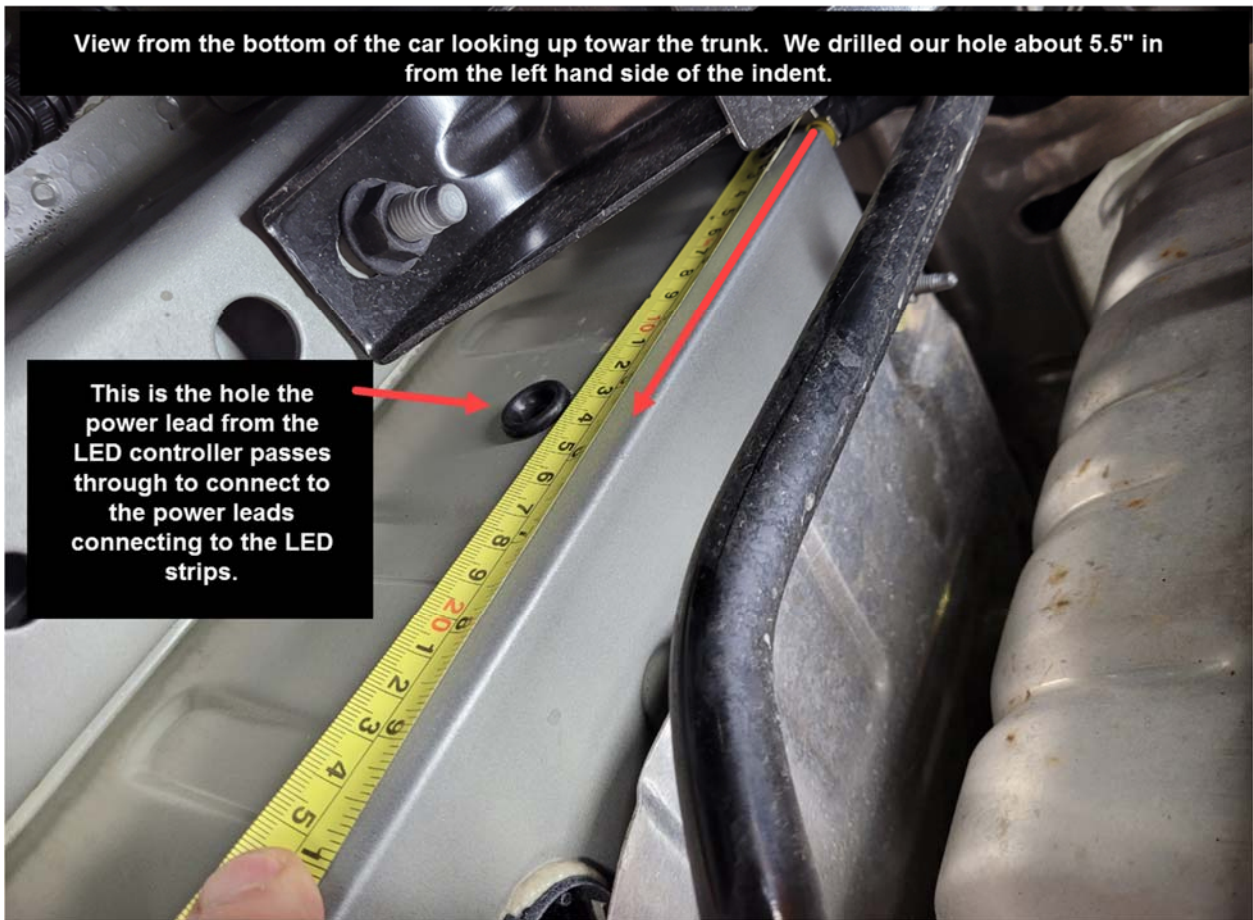
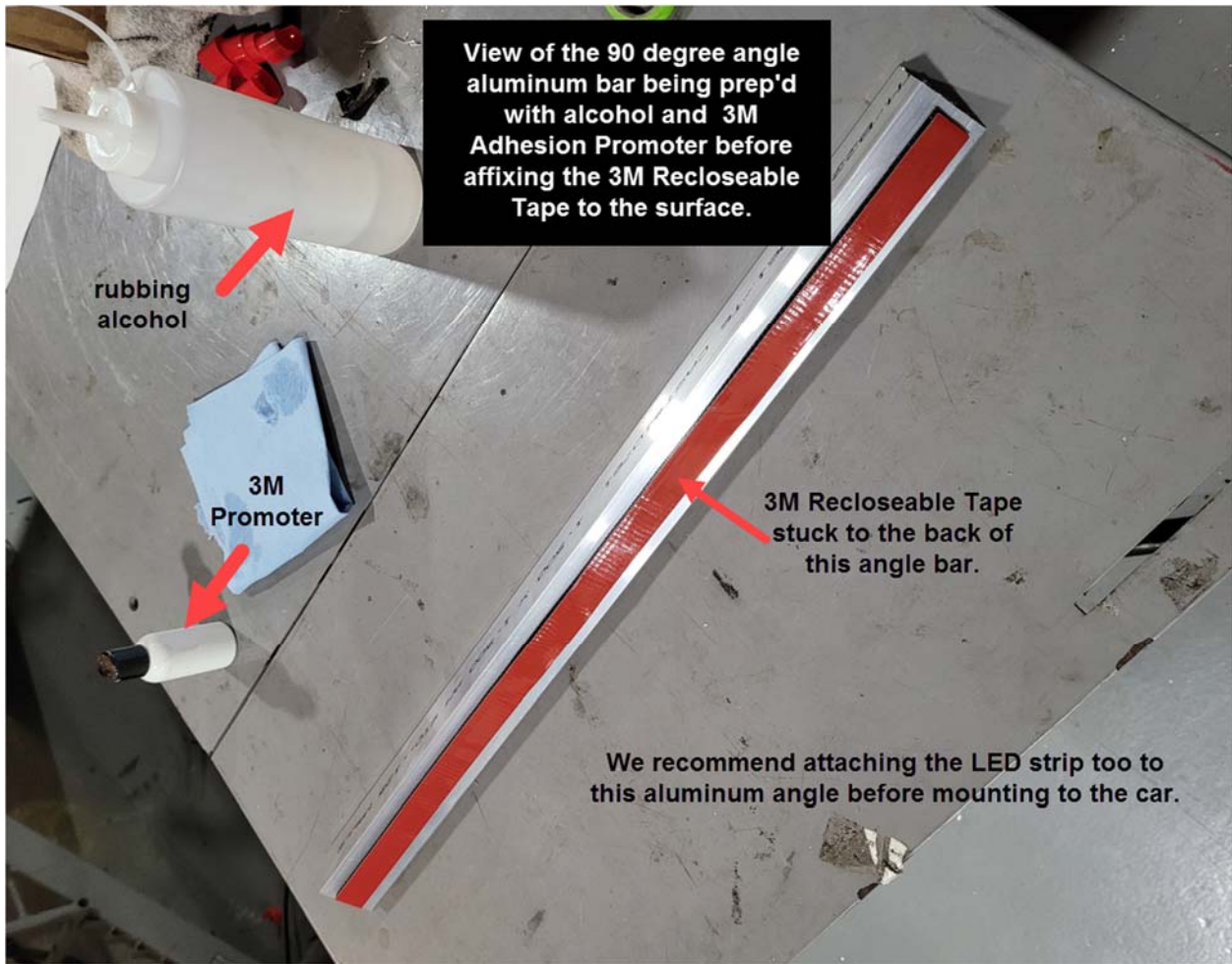
This is a view looking up toward the fuel tank at the back of the car. You can see the 90 degree aluminum angle which is held to the fuel tank with 3M recloseable tape. The LED strip is then mounted to that 90 degree aluminum angle facing downward.

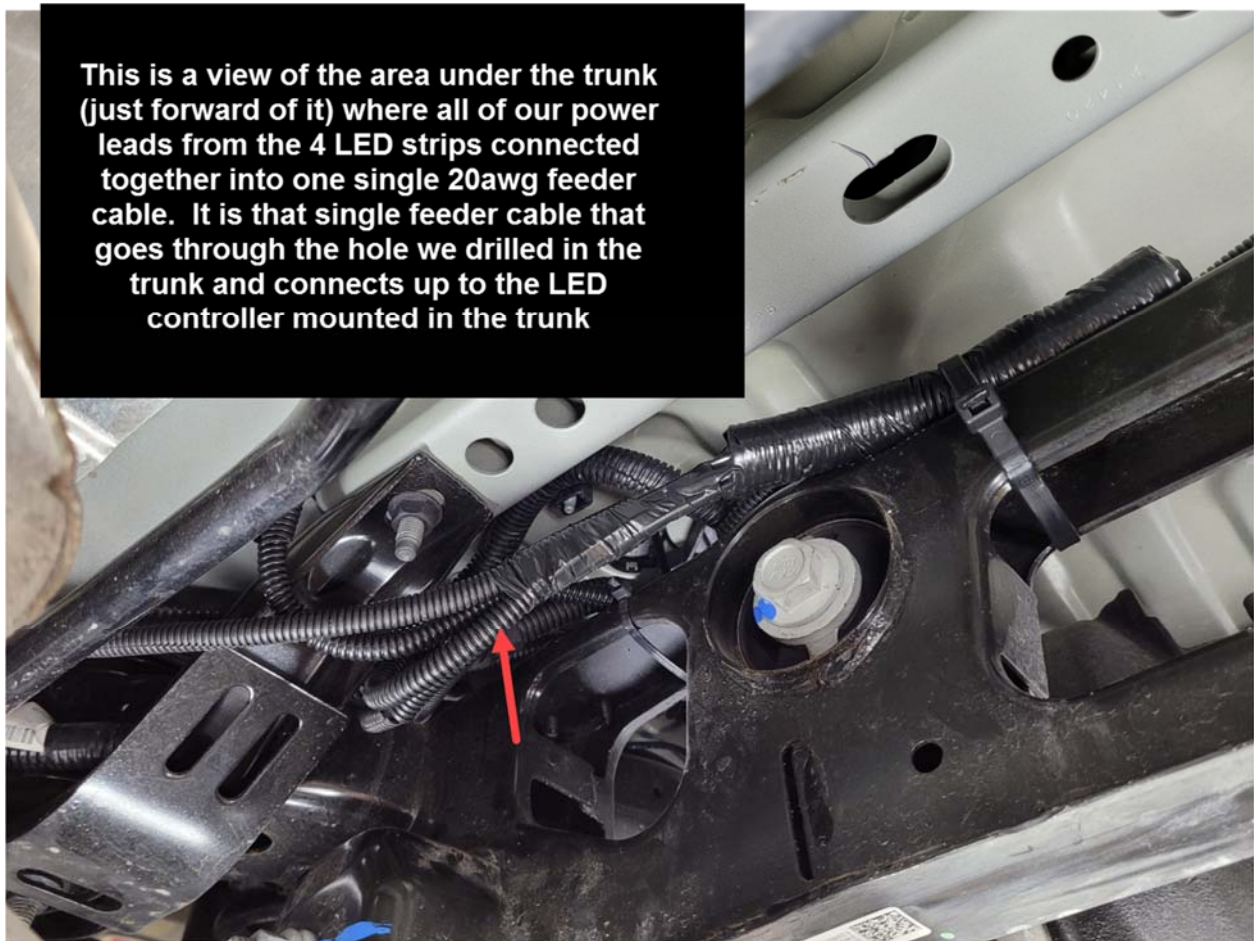
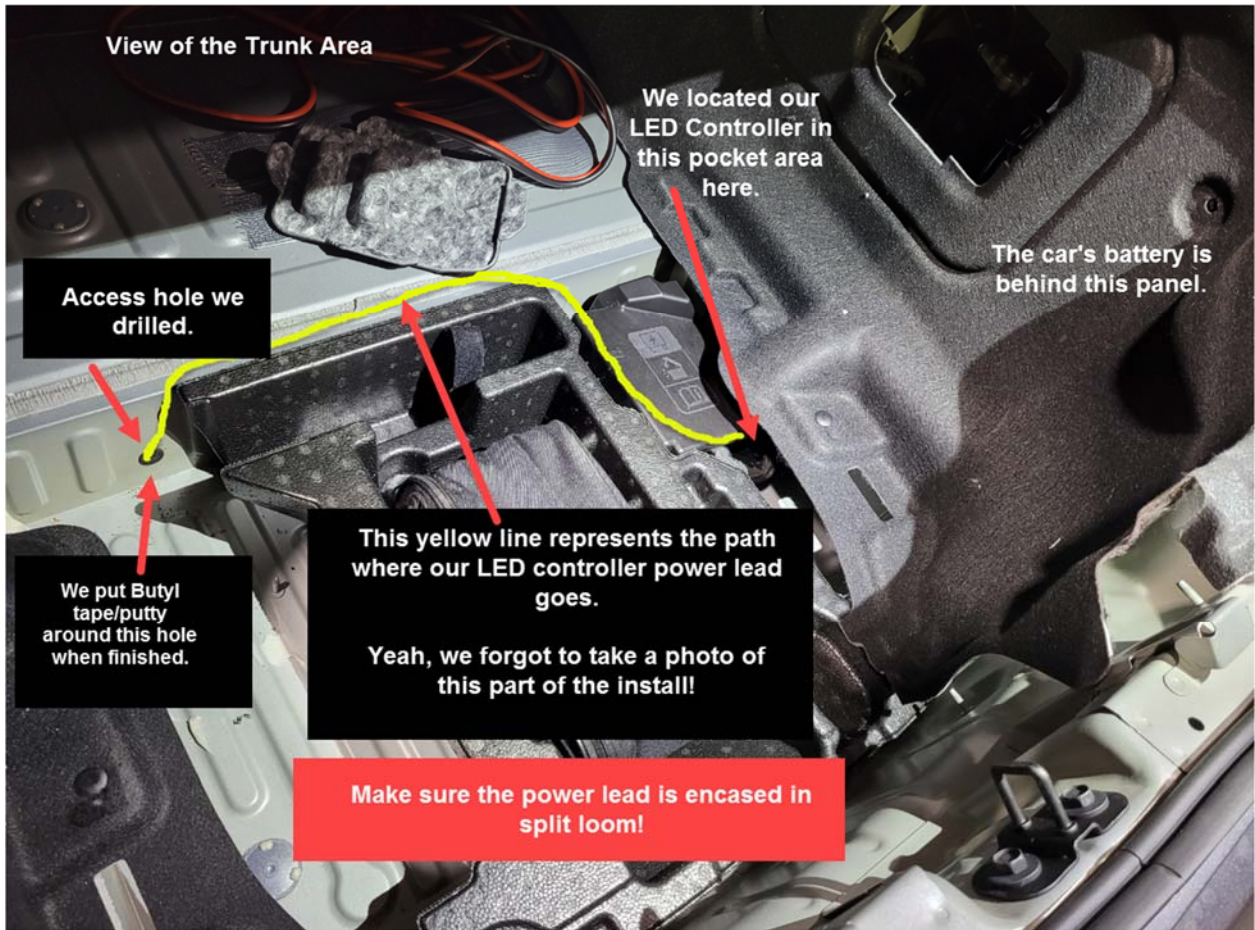
3M Recloseable Tape



Note that the power lead is encased in split wire loom AND we are using a zip tie mount to secure the power lead firmly to the aluminum.







This is a view of the passenger's side of the car (from underneath).

Notice how we ran the power lead from the front of the car (under the front bumper) back to the rear using this channel.

