



## INSTALLATION GUIDE

### PETERBILT 379/389 UNDERGLOW LIGHT KIT

IMPORTANT! No two installation scenarios are the same. Accent lighting is highly subjective. Not everyone shares the same lighting or installation quality goals. Some folks are OK with twisting wires together, others want to solder and heat shrink them. Some folks are OK with running wires where they may be seen or unprotected to save money/time, others want a tidy, clean install so they wrap plastic split-loom around all exposed cables. Some folks are OK with mounting their LED strips to whatever surface they can find, others want to take the time necessary to build out appropriate mounting surfaces to provide the best lighting effect on their vehicle and maximize the longevity of their lighting system. The point is it's not possible to provide all the materials necessary for all installation scenarios on all types of vehicles to meet everyone's quality goals. Our light kits provide the essential components needed for a high-quality, functioning lighting system. Installation of our light kit to your specific vehicle will however likely require additional items to make it look, fit and work the way you want. This is particularly the case with electrical wiring, switching functionality and mounting surfaces for the LED strips. We have created a list of additional items you may need. Here's the link:

<https://www.boogeylights.com/other-items-you-might-need/>. While we offer them for sale you can also find these items locally. We urge you to review this information before starting your install.

### BENCH TEST YOUR LIGHTING COMPONENTS FIRST!

We know this takes a few extra minutes, but we STRONGLY suggest you bench test your lights AND your controller / switches on a table before doing anything further. Test all of them. 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. It also lets you know everything is working properly. 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 good 12vdc battery to do this (e.g. car battery, motorcycle battery, lawn tractor battery or 12vdc power supply capable of supporting a 5 amp load). If you're not sure how to do this, we have prepared a document explaining the process here: <https://docs.boogeylights.net/?wpdmdl=1305>. Bench testing takes an extra 10 or 15 minutes. It's simple to do and can potentially save you hours of time and frustration down the road.

Did we mention the importance of bench testing every LED strip and controller before installing?

## BEFORE YOU START

**THIS IS A GUIDE. NOT A HOW-TO.** It's simply not possible to provide detailed instructions for all installation scenarios. Far too many variables. The information in this manual 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 we assume the installer has the skills, knowledge and tools necessary to do the work using the information we provide as a guide. You may need to vary your installation and/or make adjustments based on your truck. This is particularly the case with electrical wire routing, electrical connections, electrical load sizing 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.

**YOU MUST HAVE AN UNDERSTANDING OF 12V POWER.** An essential skill with installation of any Boogey Lights LED products is knowing how to correctly wire the product to a 12vdc circuit. This includes understanding the importance of having a properly sized fuse at the power source, polarity, how to properly seal an electrical connection, using properly sized wire gauge for the load, measuring voltage and measuring the additional amperage draw you're adding. If you are uncertain or unfamiliar with any of these concepts, we urge you to ask someone who has the knowledge to assist you. Electricity is unforgiving.

**WORK AREA.** 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 and 3M adhesion promoter works best if applied when the air temperature is above 40 degrees (and of course is DRY).

**KNOW YOUR AMPERAGE DRAW.** Pay attention to the number of LEDs you are lighting and the total amps you will be drawing. We manufacture a number of LED Controllers of varying capacities. If you over-load the LED controller, it will either not work at all or the lights will dim in a short period of time. Amperage data for all our LED products are on each product page. You can also download it directly here: <https://docs.boogeylights.net/?wpdmdl=1137>

## Mounting & Placement Locations / Planning Your Install

All of the LEDs in this kit are built on our Heavy Duty LED strips. Each strip is encased in rubber with a 36" power lead. Each LED strip will have to have its power lead extended (using the included power lead cable + heat shrink tubing) based on where the LED strip is located on the truck. It's important that each of these connections be sealed. Our kit includes the 1/8" and 1/2" heat shrink tubing to do these connections. In total there are 16 different mounting locations in this kit and all of the power leads need to be carefully run.

The mounting areas are focused in the following areas:

Under the front bumper, across the rear and the following locations for each side of the truck:

- front of steps
- under-step
- on-top-of step
- under-fuel tank (requires 55" plastic flat bar – included)
- top of fuel tank
- under frame rear of cab
- under frame on top of axels

See photo with layout as indicated.

For power, you'll need access to the driver's side steps to access the batteries. Also, if you're installing an LED controller, the LED controller can be mounted in either the driver's side storage box or the passenger's. We elected to install it in the passenger's side since it was less cluttered. While either location will work, be aware if you mount the controller in the passenger's side, you'll need to extend the positive battery cable a little further than if you mounted the controller in the driver's side storage. The 12vdc + power going to the LED Controller should connect directly to the 12vdc+ terminal on your truck's battery bank. You can connect the ground wire on the LED controller to any bare metal part of the chassis. Regardless of which side bay you use, you will need to drill a hole in the floor of that box to connect power to the battery box, led wires and antenna. All of our Heavy Duty LED strips include a 3' power lead. Most of the strips will need to have additional power lead cable added which we include in the kit. Where possible, we recommend connecting all of LED strips in similar locations together and then running one feeder cable back to the LED controller. Doing so reduces the total number of power leads coming back to the LED controller. **Regardless, we strongly recommend planning out your install on paper first.** Be sure to wrap all power leads in split-loom which is also included and then secure them to the truck using zip ties.

## LED PLACEMENT

These are the LED placement locations we used for this kit. It's important to follow this placement pattern to ensure the LED strips are protected. Mounting them in any other way voids warranty. See photo with layout indicated.

Under Front Bumper: 1 - 75 LED heavy duty LED strip.

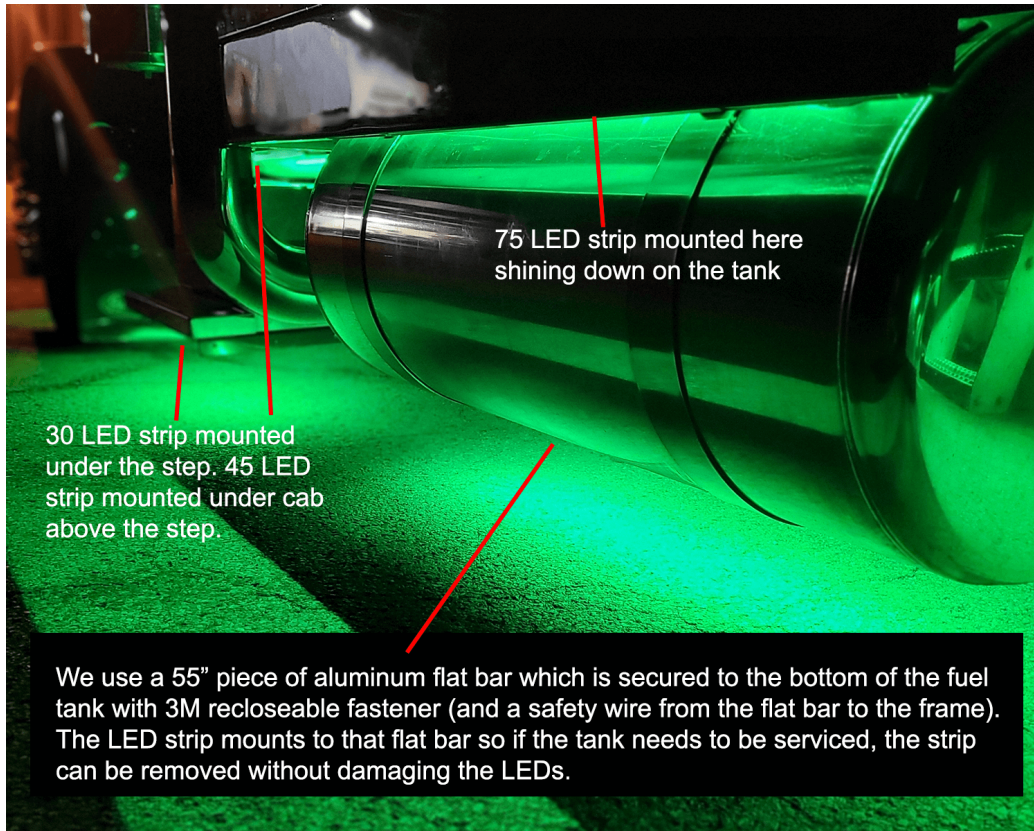
Under Rear Frame Cross Member: 1 - 45 LED heavy duty LED strip

For each side of the truck:

- front of steps: 1 - 15 LED heavy duty strip
- under-steps: 1 - 30 LED heavy duty strip
- on-top-of step: 1 - 45 LED heavy duty strip
- under-fuel tank: 1 - 75 LED heavy duty strip, mounted on 55" long plastic flat bar (provided in kit)
- top of fuel tank: 1 - 75 LED heavy duty strip mounted to bottom of sleeper shining down on fuel tank
- under frame rear of cab: 1 - 75 LED heavy duty strip mounted to bottom of frame rail.
- under frame on top of axels. 1 - 45 LED heavy duty strip mounted to bottom of top frame rail shining down.







### Plastic Flat Bar/ Under Fuel Tanks

We include 3M Re-Closeable fasteners for use in securing the Plastic Flat Bar to the bottom of each fuel tank (2). This fastening system is a heavy duty 'velcro' like substance but unlike 'velcro', you don't need two different pieces to make it work. This 3M product will securely fasten to itself. It's not cheap but it works! We include enough of it in the kit to run three sections on each fuel tank. One on each strap (typically 4" – 8" wide) and one in the center on the tank itself. As with anything 3M, the mounting surface MUST be thoroughly cleaned – free of dirt, grim or grease. We use rubbing alcohol mostly but if the surface is especially greasy, you can use a degreaser solvent PROVIDED you follow that up with rubbing alcohol to remove any petroleum residue left over from the degreaser. This is super important. If you don't remove that residue, the 3M tape will not hold. Once you have both the fuel tank surface and the flat bar surfaces clean, you can apply the 3M Adhesion Primer to both surfaces. We suggest mounting both pieces of the 3M fastener to the plastic flat bar first and then pressing that assembly to the bottom of the fuel tank. When positioning it on the tank, we suggest angling it in just a little toward the center of the truck. Do not mount it precisely on the bottom; better to have the LED strip angled in a little. This way the LED strip (and flat bar) won't be the lowest point on the fuel tank.

Even though the 3M Re-Closeable fastener is super strong, we suggest using a safety wire on both ends of the flat bar just in case something on the road were to knock it loose. To do this simply drill a hole on each end of the flat bar. Once you have the flat bar mounted to the bottom of the fuel tank (using the 3M product), run a piece of wire (we include 12awg wire for this purpose) through each hole of the flat bar and then secure the other end to the structure of the truck somewhere above it.

Follow these steps for mounting your LED strips:

- The area where you are mounting the LEDs has to be clean: free of all dirt, oil or anything that might affect the LED from sticking. You only get one opportunity to mount the LEDs so it's critical the area be prepared properly.
- Use rubbing alcohol to clean the area where you are going to mount the LED strip. Be sure to let the alcohol dry completely before proceeding to the next step. (Note: Do not use acetone or similar cleaner).

If the area is especially greasy, you'll need to clean it with a degreaser or similar solvent. If you do, be sure to use rubbing alcohol on the surface next to completely remove any left-over residue from the degreaser.

- Next, use the 3M Adhesion Promoter supplied with your kit to "paint" on the promoter where you are 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 3M adhesive tape on your LED strip. Be careful not to let the tape touch anything. The 3M backing tape on these LED strips are one-use only. They cannot be reused.

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.

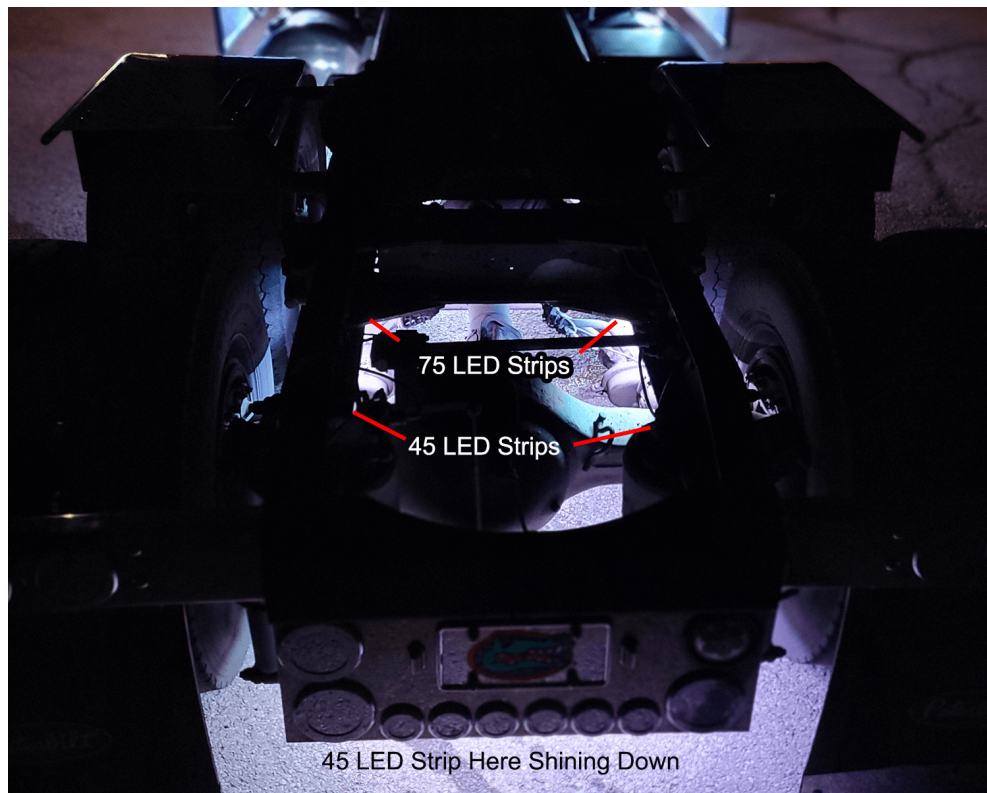
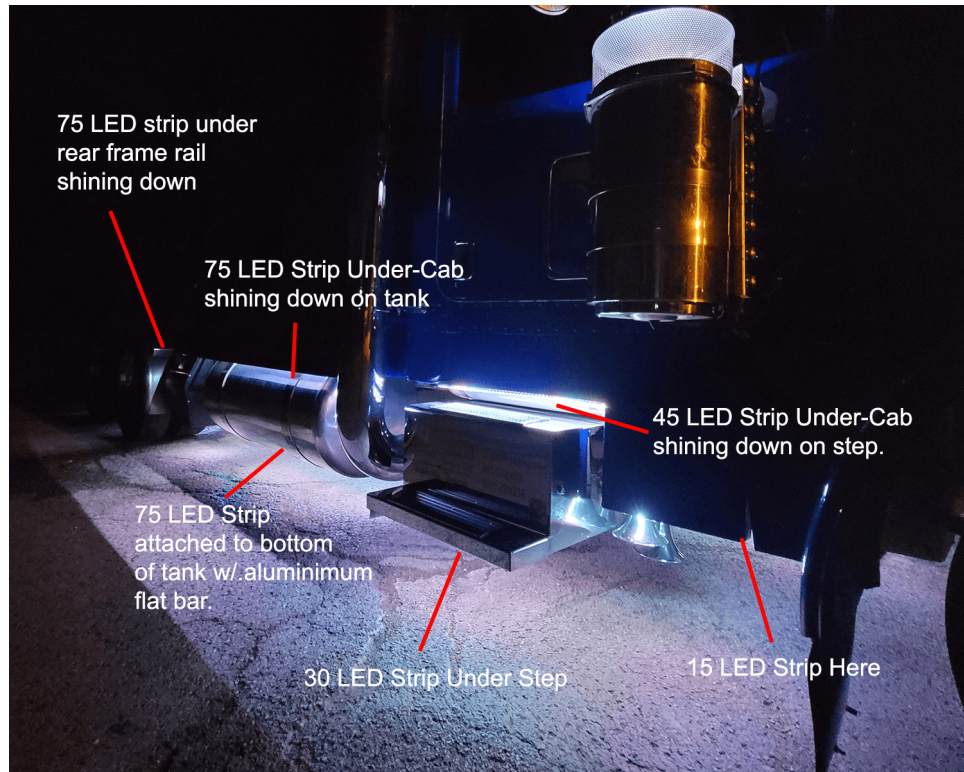
Do NOT bend the LED strip in a radius of less than 2 inches.



Do NOT bend the LED strip on a horizontal plane.

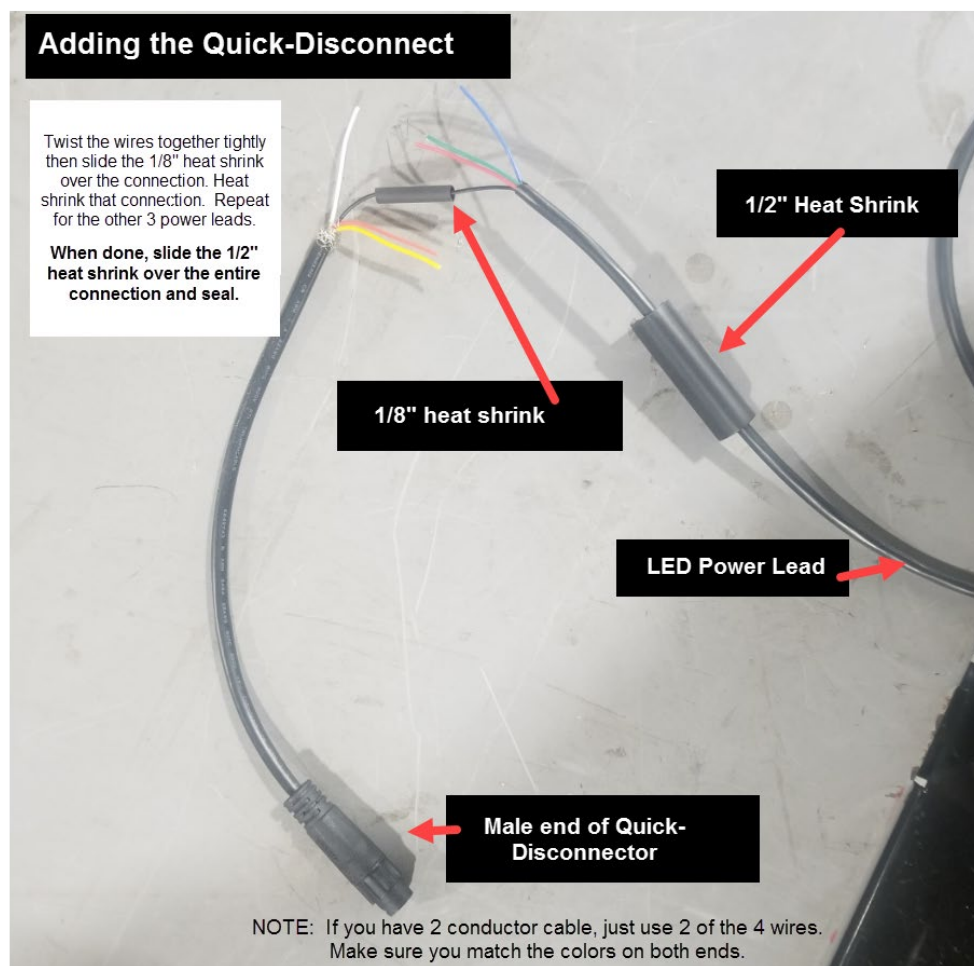






Here's a photo showing how to use the 1/8" and 1/2" heat shrink to connect and seal the feeder cable connections to the power leads of each Heavy Duty LED strip. Tightly twist the copper wires together. Important that none of the copper wire strands poke through the heat shrink. Make sure they're all laying down (and not pointing outward). Then, slide the 1/8" heat shrink over the connection and heat shrink that connection. Repeat for the other 3 (or 1 if single color LEDs). When those connections have been made, slide the 1/2" heat shrink on top of the bundle and heat shrink. For the 1/8" heat shrink you only need about an inch (1") or 1.25" of heat shrink to seal each connection. Use 2 or 2.5 inches of the 1/2" heat shrink to cover the bundle.

NOTE: There are no quick-disconnect connectors in this kit. The below diagram is provided for illustration purposes.





## Additional Resources

- Product Page: <https://www.boogeylights.com/peterbilt-379-389-under-glow-led-light-kit/>
- How to Videos: <https://www.boogeylights.com/how-to-videos/>
- Building a mounting surface: <https://www.boogeylights.com/video-creating-a-smooth-mounting-surface/>
- Using Aluminum Channels - <https://docs.boogeylights.net/?wpdmdl=1351>
- General installation: <https://www.boogeylights.com/video-how-to-install-a-boogey-lights-multi-color-under-glow-led-light-kit/>
- Troubleshooting: <https://www.boogeylights.com/trouble-shooting-guide/>
- Installation Resources: <https://www.boogeylights.com/installation-resources/>
- GEN2 LED Controller Wiring Diagrams + Operating Info: <https://docs.boogeylights.net/?wpdmdl=1163>
- GEN2 RF Wireless Remote Operating Info: <https://docs.boogeylights.net/?wpdmdl=1164>
- GEN2 Bluetooth APP Operating Info: <https://docs.boogeylights.net/?wpdmdl=1169>
- GEN2 Bluetooth APP Quick-Start: <https://docs.boogeylights.net/?wpdmdl=1167>
- Amperage Data: <https://docs.boogeylights.net/?wpdmdl=1137>

## Support

- Phone: 800.847.1359 (M-F, 9-6 Eastern)
- Text: 859.955.8155
- Open a Support Ticket: <https://www.boogeylights.com/email-us/>
- Online: 24/7 resources at <https://www.boogeylights.com/installation-resources/>
- How to Make a Warranty Claim: <https://www.boogeylights.com/make-a-warranty-claim/>

## Warranty

The Boogey Lights® warranty requires an original sales receipt from Boogey Lights or an authorized dealer. It covers product replacement only, not labor or other costs. Register your purchase at: <https://www.boogeylights.com/warranty-registration/>. Full details: <https://www.boogeylights.com/warranty/>.