

INSTALLATION GUIDE

VOLVO VNL
Air-Vent
LED LIGHT KIT
Gen 2 and Gen 3 Trucks



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.

BEFORE YOU START

It's simply not possible to provide detailed instructions for all installation scenarios. Far too many variables and truck variations. **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 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.

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).

Bench test your setup. We know this takes a few extra minutes but we **STRONGLY** suggest you bench test your lights (and LED controller if purchased) 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.

RGB/MULTI-COLOR KIT Installations

Installation of this led light kit takes 2 to 3 hours depending on whether or not you're adding this light kit to an existing installation such as the UNDER-GLOW kit or installing this kit as a stand-alone. Wiring diagram is included at the end of the guide.

SINGLE COLOR KIT Installations

Installation of our single color kit typically takes 1 to 2 hours. With single color installations we always recommend using a dedicated on/off switch OR if you want to tie them into an existing circuit (e.g. marker lights), we suggest adding a relay to the circuit.

Mounting & Placement Locations / Planning Your Install

All the LED strips in this kit are built on our low profile hi-intensity surface mounted LED strips. The air vent lights have a total of 6 mounting locations (3 on each side) on the inside of the air vent which is accessed by removing the air vent covers. For power, if you are adding this light kit to an existing kit (e.g. Under-Glow kit), you'll connect the power leads from these led strips to your existing under-glow installation. If this is a stand alone light kit, 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 prefer to use the driver's side as it is closest to the battery bank. 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 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.

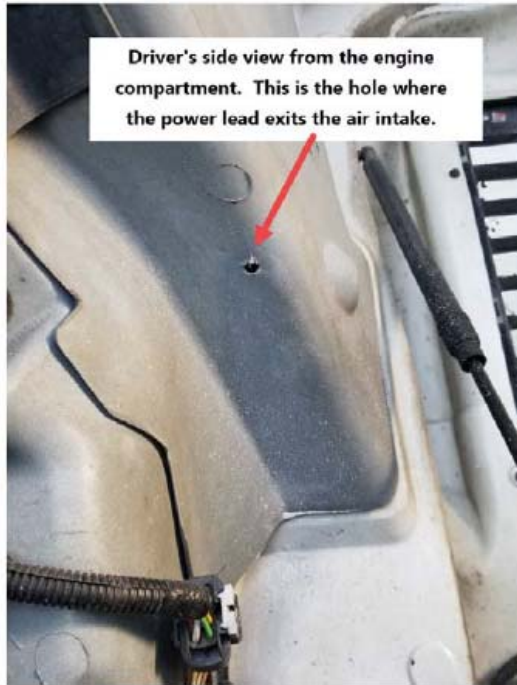
We recommend planning out your install on paper first. Be sure to wrap all power leads in split-loom which is also included and then secure them to the truck using zip ties.

INSTALLATION

- You'll need to remove the air intake vent covers on each side of the hood. They are affixed to the hood with three small screws and adhesive tape which can be difficult to remove. Care must be taken so you don't break the plastic vent cover with using too much force. When reassembling you'll want to either have some double sided tape available to mount the vents back in place or use a silicon sealant.
- Once you have the hood vent covers removed, you'll need to drill a 3/8" hole near the bottom of the hood vent area such that the power lead will be able to be routed back to the power source. The hole should be drilled near the bottom of the vent. See photo below.
- Each Hood Vent light is comprised of three surface mounted LED strips. One is 16" long and the other two are 12" each. Each of these LED strips comes with a 3' power lead. We also include some feeder cable with this kit. See photo below of suggested placement for each of these LED strips.
- The power leads coming from each LED strip should come together. This is where you connect the feeder cable that will exit the hood plenum and connect to power (or LED controller). The idea is to create that connection inside the hood air plenum such that only one single power lead exits the hood. Use the supplied crimp on connectors to secure your power lead connectors.
- For GEN 2 trucks, the longer LED strip is designed to mount above the air intake vent opening. The shorter strips on the side and below the air intake vent opening (see photo). The power lead cable exits the hood through the hole you drilled. For GEN 3 trucks, the longer strip runs across the top of the opening and the other two mount below (see photo).
- Before mounting the led strips, the surface inside the vent where the strips will be mounted must first be cleaned with alcohol and then prepped with the include 3M® adhesion primer. This is an important step.
- When you are ready to affix the LED strip to the inside surface of the vent intake, simply remove the red protective covering on the back of each LED strip and press firmly against the inside of the hood. We recommend doing the lower strip first. Then the upper. The tight quarters of the vent opening can make this process difficult so peel the red protective covering slowly as you go. It will give you more control over where the strip is placed.
- Repeat the process for each strip on each side of the truck. The power lead will need to be routed back to your power source and wire tied along the way. The power lead coming from the

passenger's side should be routed with the cable bundle at the base of the hood where the radiator is located. Wire tie the power lead to the existing cable bundle.

- If you purchased the RGB multi-color version, you'll need to connect the power leads to the Boogey Lights LED controller. If you purchased the single color version, you'll need to connect the power leads to an existing 12vdc switched circuit that is properly fused or install a 12vdc heavy duty relay that is triggered by your marker lights. Both power leads can be brought back to the battery compartment via the frame rails.







On GEN 3 trucks, the same 3 LED strips will work but the placement changes to provide the most light as shown here.