



Thank you for your purchase of **BOOGEY LIGHTS® Volvo VNL HOOD AIR INTAKE VENT LIGHT KIT**. This light kit is available in both SINGLE COLOR and MULTI-COLOR (RGB) versions. The RGB version requires a Boogey Lights controller to operate. The Single Color version simply need to connect to 12vdc power.

All **Boogey Lights®** LED strips are **COMMON CATHODE LEDs**. They share a common ground and will only work with 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.

Attaching Your Light Strips

The following instructions apply to all series of LED 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 ride. Bench testing takes 10 or 15 minutes. It's simple to do and can potentially save you hours of time and frustration down the road.

Mounting Steps:

1) Clean the mounting surface with the supplied alcohol towels first. Once the alcohol dries, 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 THIS STEP**. Always apply 3M Promoter to any surface Boogey Lights® LED strips will be mounted. Note - Do not get the promoter on your hands. Let the promoter dry before proceeding.

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.

2) We suggest you position the flexible 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.

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

If you need to remove a light strip once placed, you can do so using a hair dryer/heat gun and carefully pulling the light strip off. We recommend using a hard plastic card or similar object (e.g. old credit card) to help pry the light strip off the surface to which it was mounted. If you have to remove the light strip for any reason, the 3M tape on the back of the light strip will not be reusable. It's likely too the light strip won't be reusable either.

The 3M adhesive tape on the back of Boogey Lights® LED stripes are one-use only. If you apply them to a surface that has not been properly prepared, the holding power of the 3M adhesive tape will be greatly diminished perhaps making the light strip unusable. **If you take the time to properly prepare the surface in accordance with our instructions here, you won't have any problems mounting your LEDs.**

INSTALLATION

- Total installation time is about one hour. 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 two surface mounted LED strips. One is 36" long with 54 LEDs on it. The other is 18" long with 27 LEDs on it. These two strips come together to form a 'V' which connects to the power lead. The longer LED strip is designed to mount above the air intake vent opening. The shorter mounts below the air intake vent opening. The power lead cable exits the hood through the hole you drilled.
- 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® promoter. 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 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. Both power leads can be brought back to the battery compartment via the frame rails.

- As with all lighting products, make sure you are familiar with the state highway regulations about displaying lights. Not all states allow every color to be displayed while on public highways. Orange is the only color that can be used while driving.(In our demo truck we have one button pre-programmed for ORANGE which we also dim by 50% so it isn't so bright.) We've found that white is very helpful when parked for working around the truck
- This kit assumes you will be tapping into existing 12vdc marker light or similar switched and properly fused circuit. We offer additional **22awg power lead wire** if you need to extend the power leads to these lights
- These LED strips are not intended to be used in areas that are exposed to diesel fuel. We therefore do not recommend affixing them to fuel tanks. We also do not recommend mounting them on areas of the truck where road debris, gravel and rocks might hit and damage them.

