# **INSTALLATION GUIDE**

# CORVETTE C7 LED Light Kit



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 <a href="https://www.BoogeyLights.com">www.BoogeyLights.com</a> or give us a call at 800.847.1359 for assistance.

# **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. This is particularly the case with where to mount the LED strips and the routing of power leads. 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).

BENCH TEST YOUR SETUP FIRST. 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. 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; many regret it later.

**VIEW THE INSTALL VIDEO.** We have a 7 minute video showing how we installed all four of these light kits on a C7. We strongly suggest viewing this video before proceeding. It will at minimum give you an idea of what to expect for the kits you purchased. It also shows how we ran the power leads. Here's the link: <a href="https://www.boogeylights.com/c7-corvette-led-under-glow-light-kit/">https://www.boogeylights.com/c7-corvette-led-under-glow-light-kit/</a>. Click on the INSTALL VIDEO text box found in the product details.

# THE LED LIGHT KITS

This product has four LED light kits. You can install any one or all of them on your car. It's up to you. The layout for each light kit configuration is as follows:

#### **UNDER-GLOW**

- 2 65" (99 LEDs each) low profile LED strips. One mounted on each side of the car.
- 1 31" (48 LEDs) low profile LED strip mounted under the front bumper.
- 1 13.75" (21 LEDs) low profile LED strip mounted above the exhaust on the rear.
- 1 22" (30 LEDs) heavy duty LED strip mounted under the rear bumper.

#### **GRILL**

• 1 - 17.75" (27 LEDs) low profile LED strip mounted in the grill.

In our experience, the front bumper has to be removed to give you enough room to install this LED light strip in a location that illuminates the grill area without being able to see the LED directly. We know some guys have done it without removing the front bumper due to the time involved but it doesn't look nearly as good in our view.

#### **HOOD SCOOP**

- 1 17.75" (27 LEDs) low profile LED strips mounted at the top of the hood scoop
- 2 6" (9 LEDs) low profile LED strips mounted on each side of the inside of the hood scoop.

Note that the hood scoop kit includes a quick disconnect M/F connector that needs to be installed between the hood scoop assembly (where the 3 LED strips are mounted) and the power lead connection coming from the car. This allows the hood scoop assembly to be removed for service without having to cut any wires. Yes, you have to remove the hood scoop to install these lights. The installation video shows three small LED strips (each with 3 LEDs) installed in the crease of the hood scoop. This kit doesn't include those LEDs but it's something you could add if you want.

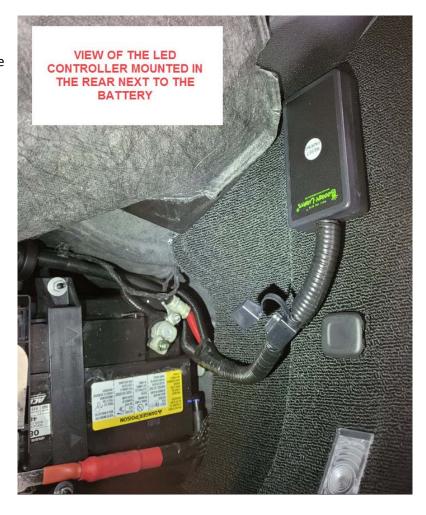
#### SIDE VENTS

- 2 13.75" (21 LEDs) low profile LED strips mounted inside the front vents
- 2 11.75" (18 LEDs) low profile LED strips mounted inside the rear vents

At the end of this guide we include photos of the placement of these LED strips on the car. The placement doesn't have to match exactly. Adding accent lighting to your vehicle is all about achieving the look YOU want. As long as the LED strips are mounted to a location that is smooth, flat, straight and doesn't span multiple surfaces, it's ultimately up to you to decide what look you like the most. When installed properly, you shouldn't be able to see the LED strips themselves – only the glow from them.

# MOUNTING THE LED CONTROLLER

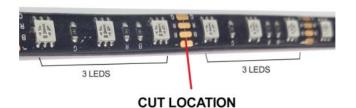
We like to install the LED controller as close to the battery as possible which for the C7, is in the rear boot area of the car. The below photo shows how we did it. The controller is about 12" away from the battery. The shorter the distance, the better since 12vdc power drops quickly over short distances with copper wire. Installing the controller here also makes it easier to route the power lead wires coming up from the bottom of the car.



# **CUTTING YOUR LEDS**

If you need to cut your LED strip you can do so as long as you cut in the proper location — which is every three LEDs as shown in the below photo. Cutting incorrectly could damage your lights and is not covered by the warranty. If you cut the strip, be sure to seal the cut end. You can also use silicone found at your local hardware store. If you do need to cut your LED strip, we strongly suggest doing so BEFORE you mount the strip to your car. NOTE: Heavy Duty LED strips CANNOT be cut. LOW PROFILE only.

# **HI-INTENSITY SURFACE**MOUNTED LED STRIPS



The LED strip can be cut one time on the copper solder pad where indicated; between the cluster of 3 LEDs. Important to cut in the center of the copper pads. Once cut, the end must be sealed using silicon, liquid electrical tape or even heat shripk to stop water intrusion from damaging the strip.

#### MOUNTING THE LED STRIPS

Once you have your LED strips cut (if necessary) and you know where you are going to attach them, follow these steps:

- 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 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 without reading the section "A Word About 3M Tape & 3M Promoter" further on in this document).
- Next, use the 3M Adhesion Promoter supplied with your kit to "paint" on the promoter where you are going to mount the LED strip. See the note below (on page 6) about the proper way to use promoter.
   This is an important step. Do not bypass. Allow the promoter to dry for 30-60 seconds.

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



Do NOT bend the LED strip on a horizontal plane.



- 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.
- Secure all power leads. Do not leave the power lead cable hanging. Doing so will place too much stress on the LED strip itself causing it to fall off or fail where the power lead connects to the LED strip.

# 3M Tape & 3M Adhesion Promoter (aka Primer)

All Boogey Lights® LED strips have 3M Tape backing affixed to them. This 3M Tape is designed to make a more-or-less permanent bond between the LED strip and the surface to which it is attached. When properly prepared, 3M Tape can be affixed to polyethylene, polypropylene, ABS, PET/PBT blends, concrete, wood, glass, metal and painted metal surfaces. To make this bond you must however prepare the surface to which the LED strip will be affixed. You do this by first cleaning the surface with isopropyl alcohol (50/50 mixture with water) and then painting on 3M Adhesion Promoter. YOU CANNOT SKIP THIS STEP. Always apply 3M Adhesion Promoter to any surface Boogey Lights® LED strips will be mounted. The promoter acts as a primer that ensures maximum adhesion. Porous surfaces may require 2 applications of 3M Promoter for uniform coverage and good adhesion. If you are going to add a second coat, allow the first application of promoter to dry before applying the second coat. Our lighting kits include a small bottle of 3M Adhesion Promoter. Simply use a clean, dry cloth to apply it to the mounting surface.

Using Acetone on Heavy Oiled or Greasy Surfaces: 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.

Important Reminder! 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.

### **NEED HELP? HAVE MORE QUESTIONS?**

Links to all product specs and installation information including remote control functions, wiring diagrams, APP control instructions and operating instructions can be found on our website in the **INSTALLATION INSTRUCTIONS** section (<a href="https://www.boogeylights.com/installation-resources/">https://www.boogeylights.com/installation-resources/</a>). We also offer a number of How To Videos which can be found here: <a href="https://www.boogeylights.com/how-to-videos/">https://www.boogeylights.com/how-to-videos/</a>. For Trouble Shooting, refer to this page here: <a href="https://www.boogeylights.com/trouble-shooting-guide/">https://www.boogeylights.com/trouble-shooting-guide/</a>.

If you need additional assistance or have questions, we offer a number of options. If it's during regular business hours you can call us TOLL FREE at 800.847.1359, M-F 9-5 Eastern. We also offer TEXT support (859.955.8155). If it's after hours, you can check our website. We include as much information as we can online for 24x7 access. You can also send us an email by visiting the CONTACT US link at the top of every page of our website.

# WARRANTY INFORMATION

The Boogey Lights® original-owner warranty is only available to customers who purchase genuine Boogey Lights® products from the Boogey Lights website or an authorized Boogey Lights® dealer and present the original sales receipt from that dealer. THIS WARRANTY IS NULL AND VOID IN THE ABSENCE OF AN ORIGINAL SALES RECEIPT FROM AN AUTHORIZED BOOGEY LIGHTS® DEALER. This warranty is a product-only warranty and does not cover reimbursement for labor or any other charges you may incur having a defective product replaced. Complete warranty details can be found here: https://www.boogeylights.com/warranty/

You can register your purchase for warranty by visiting our website at <a href="http://www.BoogeyLights.com/warranty-registration/">http://www.BoogeyLights.com/warranty-registration/</a>. This is especially important if you purchased this product from someone other than the Boogey Lights website directly.

# INSTALLATION PHOTOS

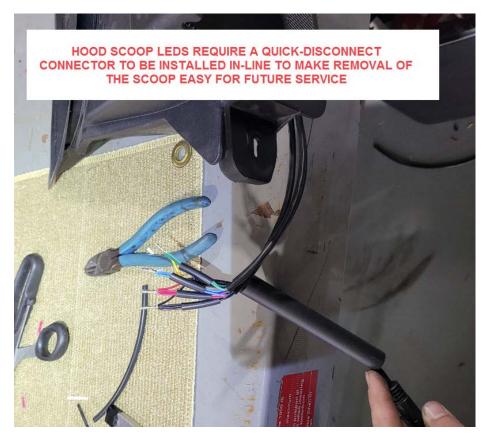


















This product includes a quick disconnect connector as well as a Heavy Duty LED strip. You will need to extend the power leads on the Heavy Duty LED strip as well as add the quick-disconnect connectors. The below diagram shows you how we use the heat shrink to make these power lead connections.

