



**2022+ Hyundai Elantra N BIG
MOUTH Lit Kit Intake Installation
Guide**



Kit Contents

Please review this document before attempting installation.

You will need basic hand tools and about 2 hours of installation time.

This product reuses OEM hardware.

Kit Contents	Qty
#14 x 1-1/2" Screw	1
Diode Dynamics RGBW Controller	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Crimped Connector	1
8" Zip Ties	8
Cable Clip	2
Assembled LIT KIT BIG MOUTH	1



Kit Contents (LIT Flare Only)

Please review the table below and make sure you have received the kit contents.

Kit Contents	Qty
Diode Dynamics RGBW Controller	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Crimped Connector	1
8" Zip Ties	8
Cable Clip	2
Assembled LIT KIT BIG MOUTH	1



If you already own the Velossa Tech Ford Maverick BIG MOUTH, skip to slide 7 to see install and wiring instructions.



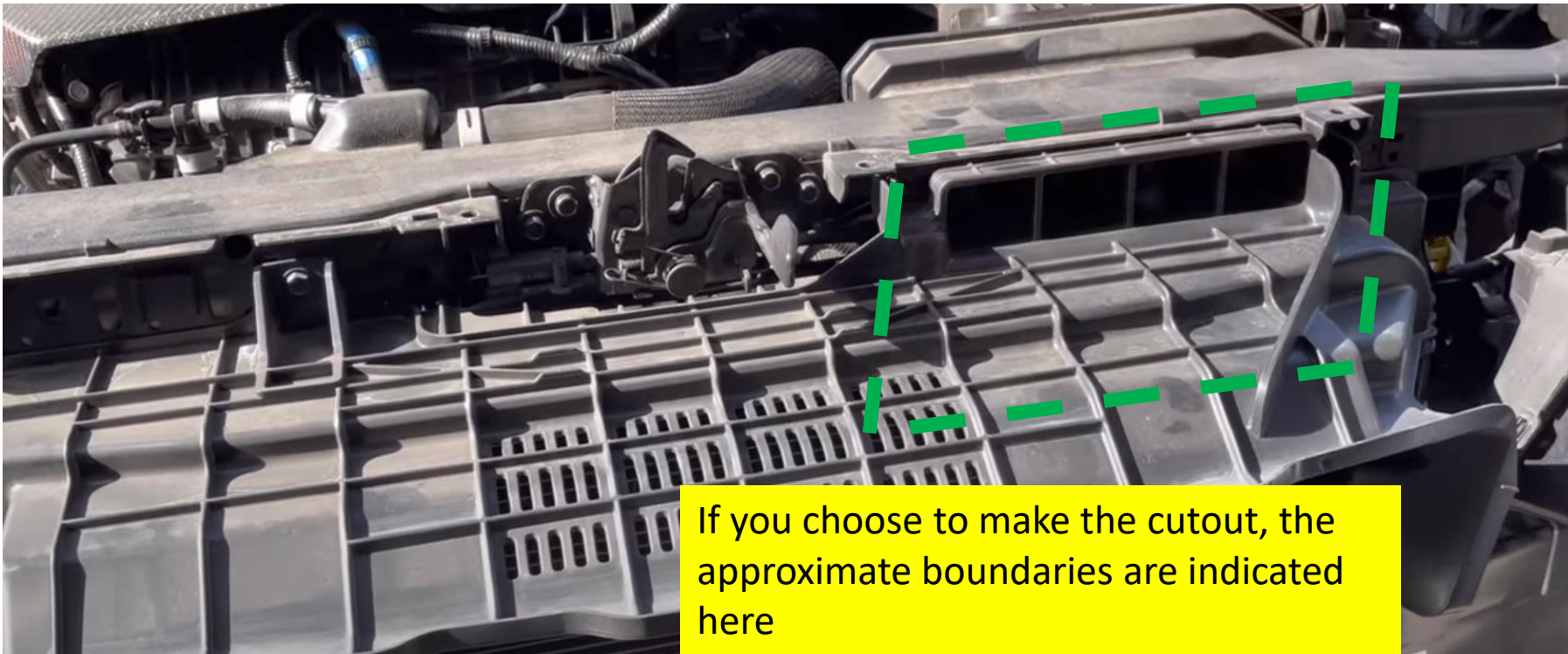
Bumper Removal

REMOVE BUMPER PRIOR TO ATTEMPTING INSTALLATION.

Use YouTube as a resource, there are many bumper removal videos to guide you.

Stock Components Removal

Shown below is the OEM radiator shroud. To install the Big Mouth, you will need to either: (a) remove the shroud altogether or (b) modify the shroud using a rotary tool (Dremel) to create a cutout for the Big Mouth (not detailed in this instruction manual). **In either case, hold on to at least one of the OEM screws that retain the shroud because it will be used to install the Big Mouth.**



Big Mouth Installation

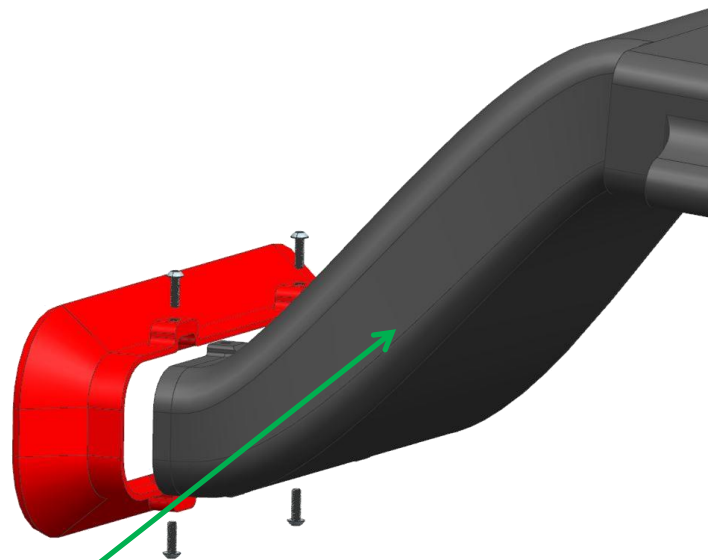
Slide the BIG MOUTH over the opening and attach using the OEM hardware and the supplied #14 screw. **Use the OEM screw on the passenger side ear and the #14 screw on the driver side ear.** **DO NOT OVERTIGHTEN.**



Install the LIT BIG MOUTH Flare

SKIP THIS SLIDE IF YOU PURCHASED A FULL LIT KIT

Attach the supplied cable clip to your BIG MOUTH as shown. Fasten the cable and provide enough slack to not strain the cable.



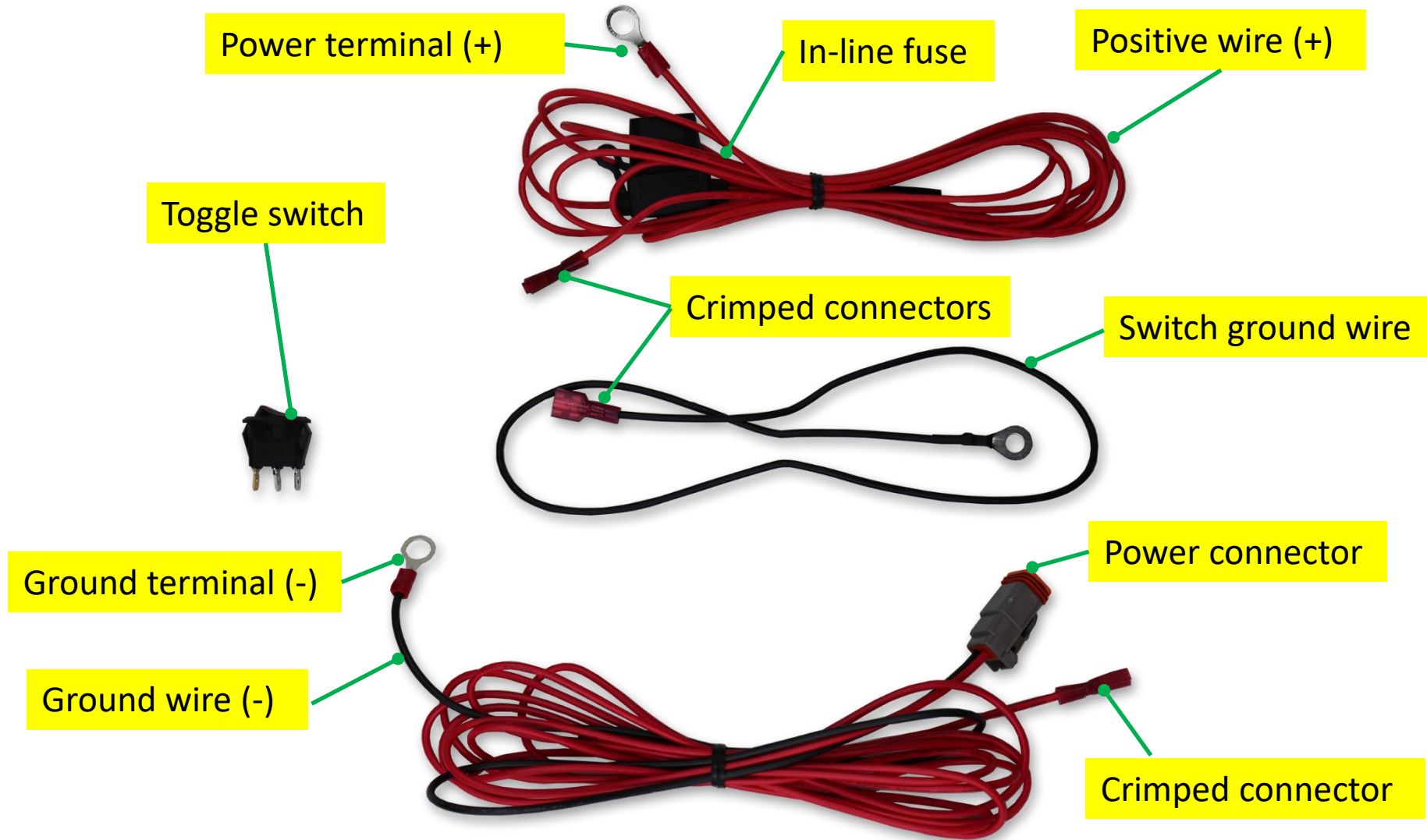
Attach the 3M cable clip here

If you purchased a LIT flare-only and already have a Gen 4 BIG MOUTH. Remove old flare and install the LIT flare with the 4 screws as shown.



VELOSSA TECH

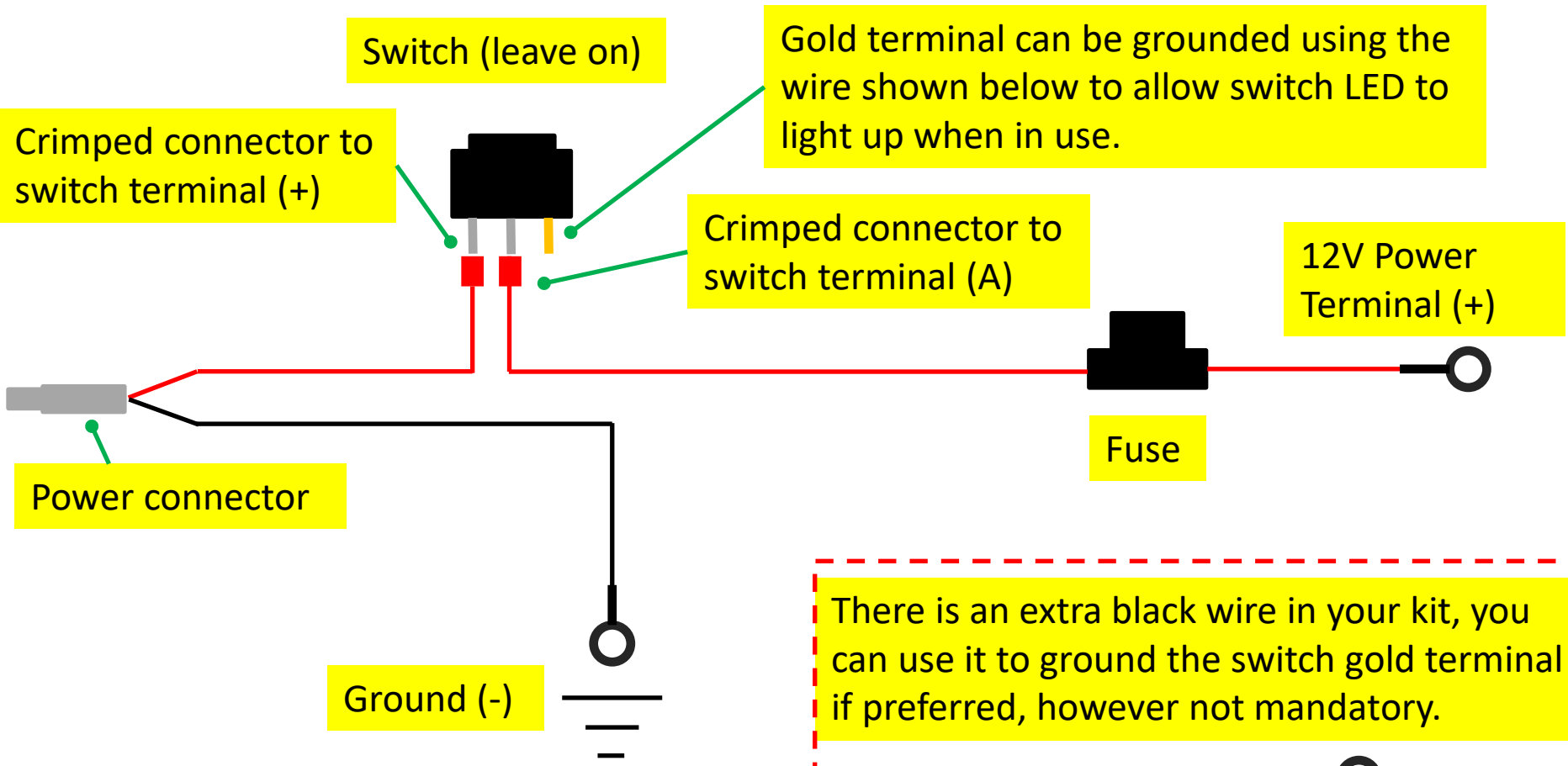
Wiring Harness





VELOSSA TECH

Wiring Harness Schematic

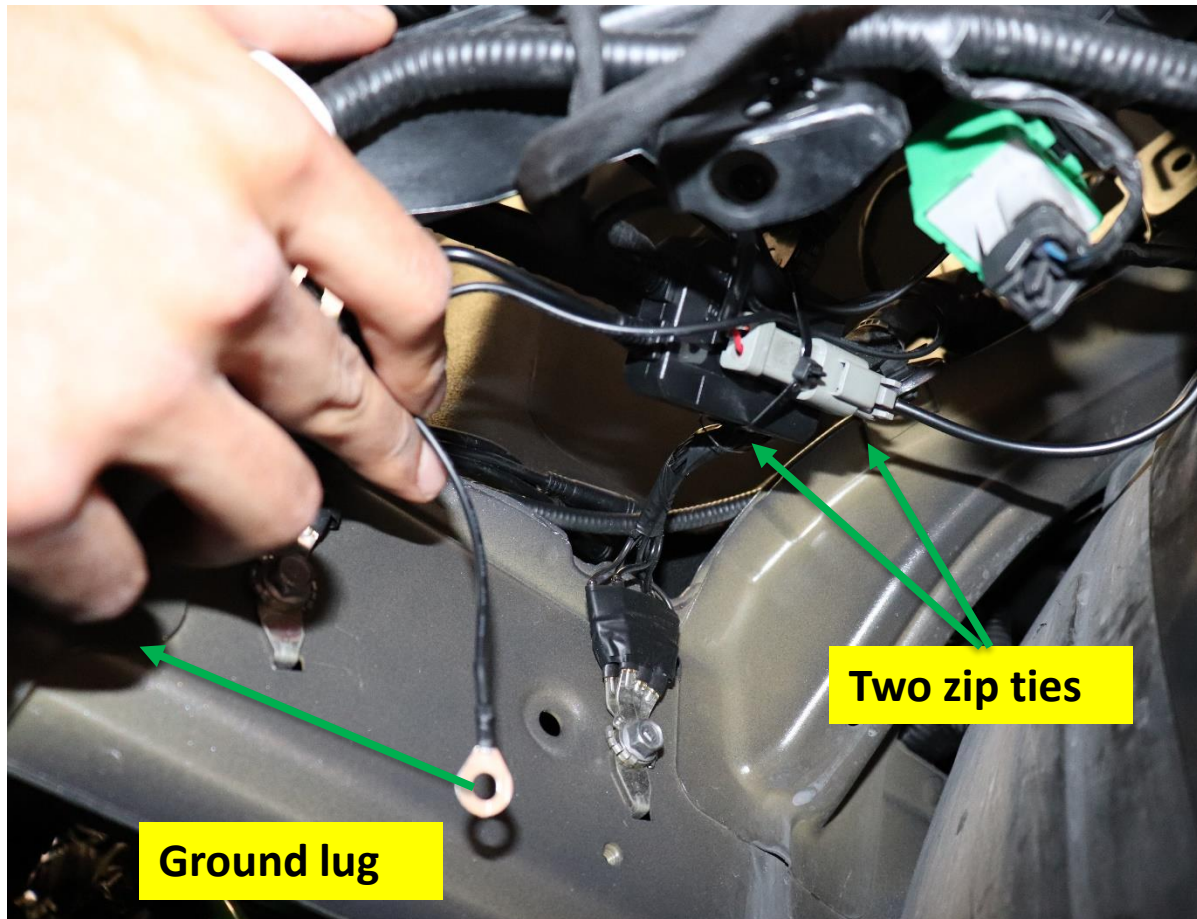


There is an extra black wire in your kit, you can use it to ground the switch gold terminal if preferred, however not mandatory.

The diagram shows a black wire connected to a ground terminal (represented by a circle with a horizontal line) and a red terminal (represented by a red square).

Controller Placement

Zip tie the controller to the following location behind the driver side headlight. The controller is zip tied to the thick OEM electrical harness using two zip ties, one zip tie should loop through the DD controller slot and the other zip tie goes around the body and plug.

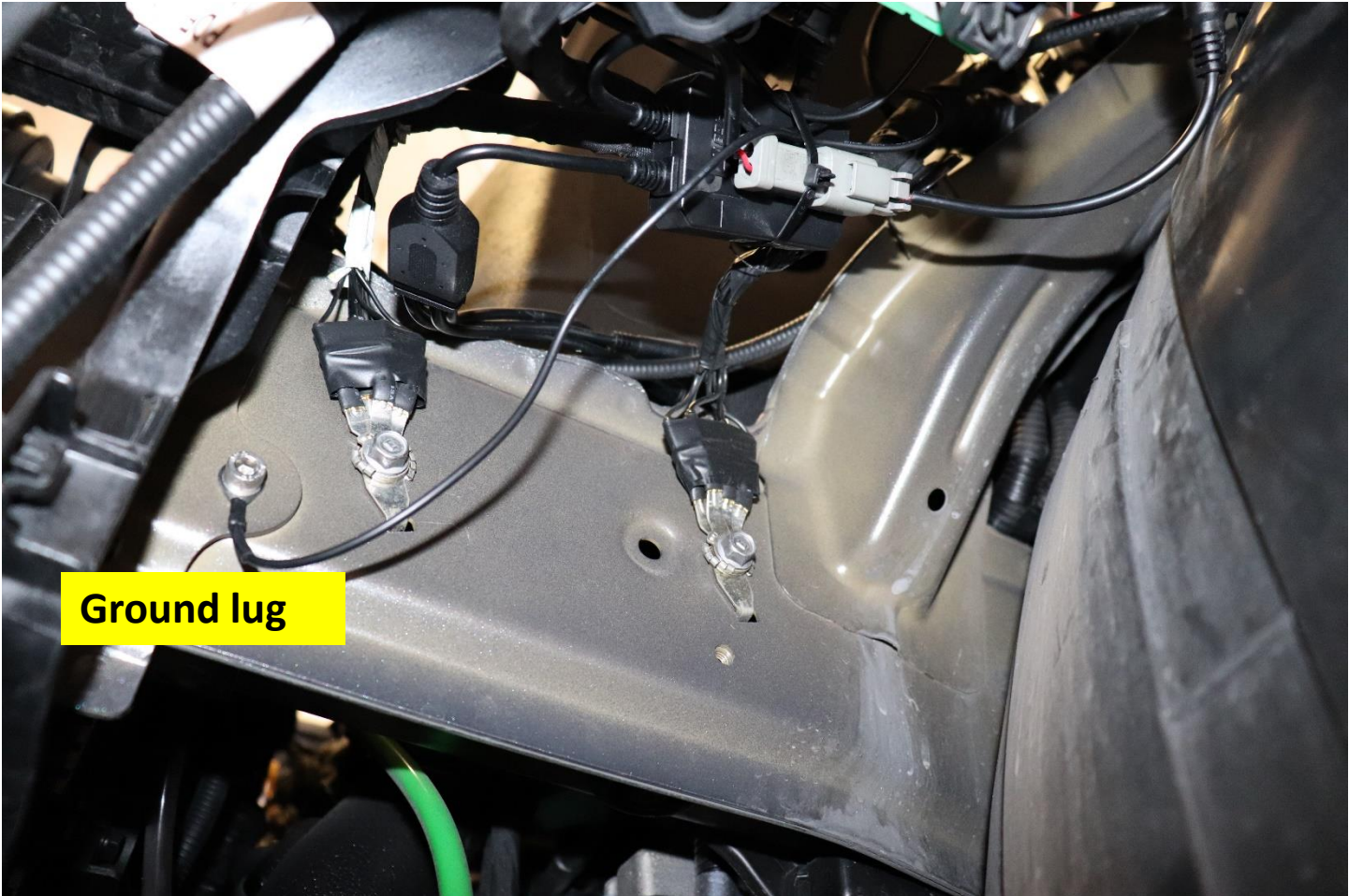




VELOSSA TECH

Big Mouth Wiring

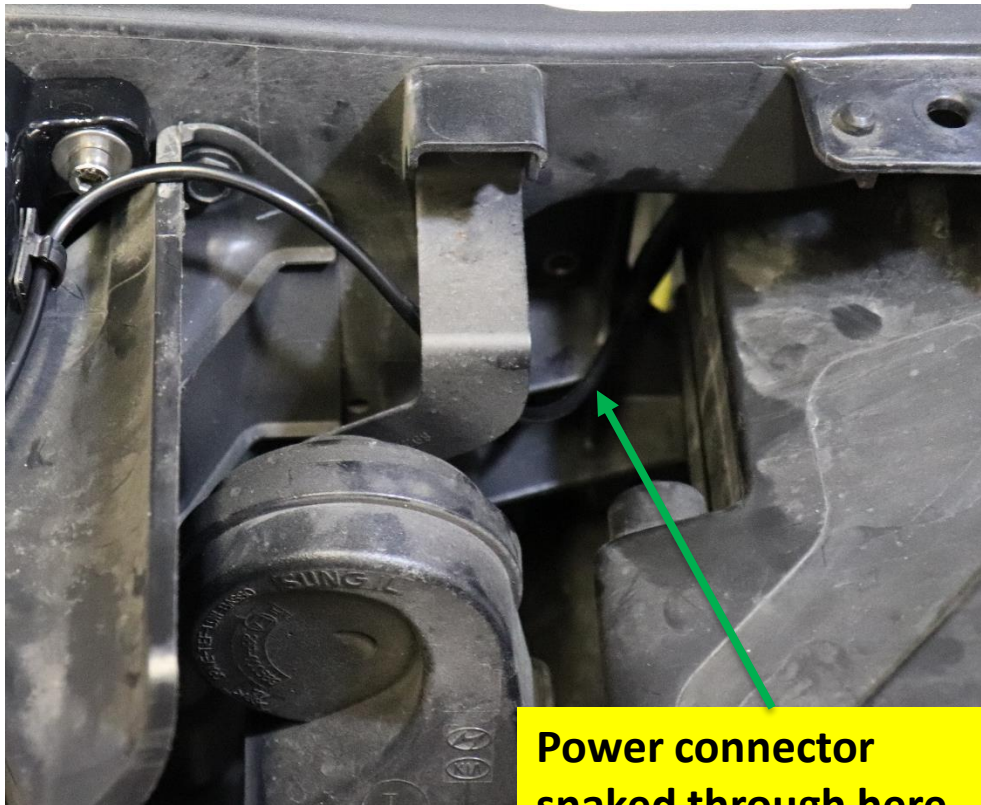
Ground the controller as shown with supplied 6mm bolt.



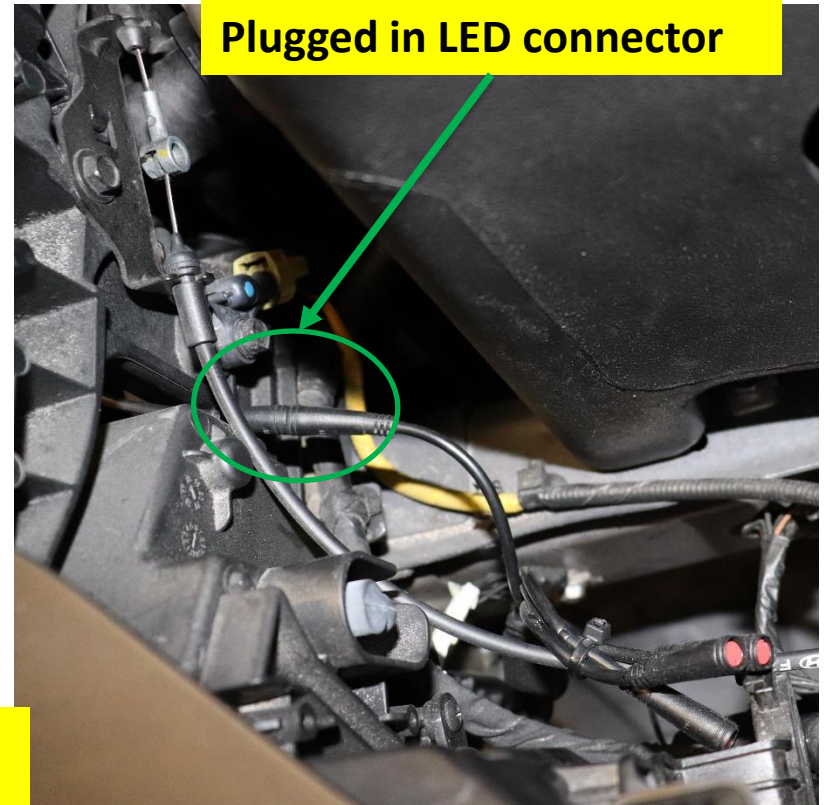
Ground lug

Big Mouth Wiring

Snake the Diode Dynamics LED power wire from the BIG MOUTH as shown and connect to one of the four ports into the controller (**make sure the arrows are lined up**). The other 3 ports can be used for more Diode Dynamics lighting products



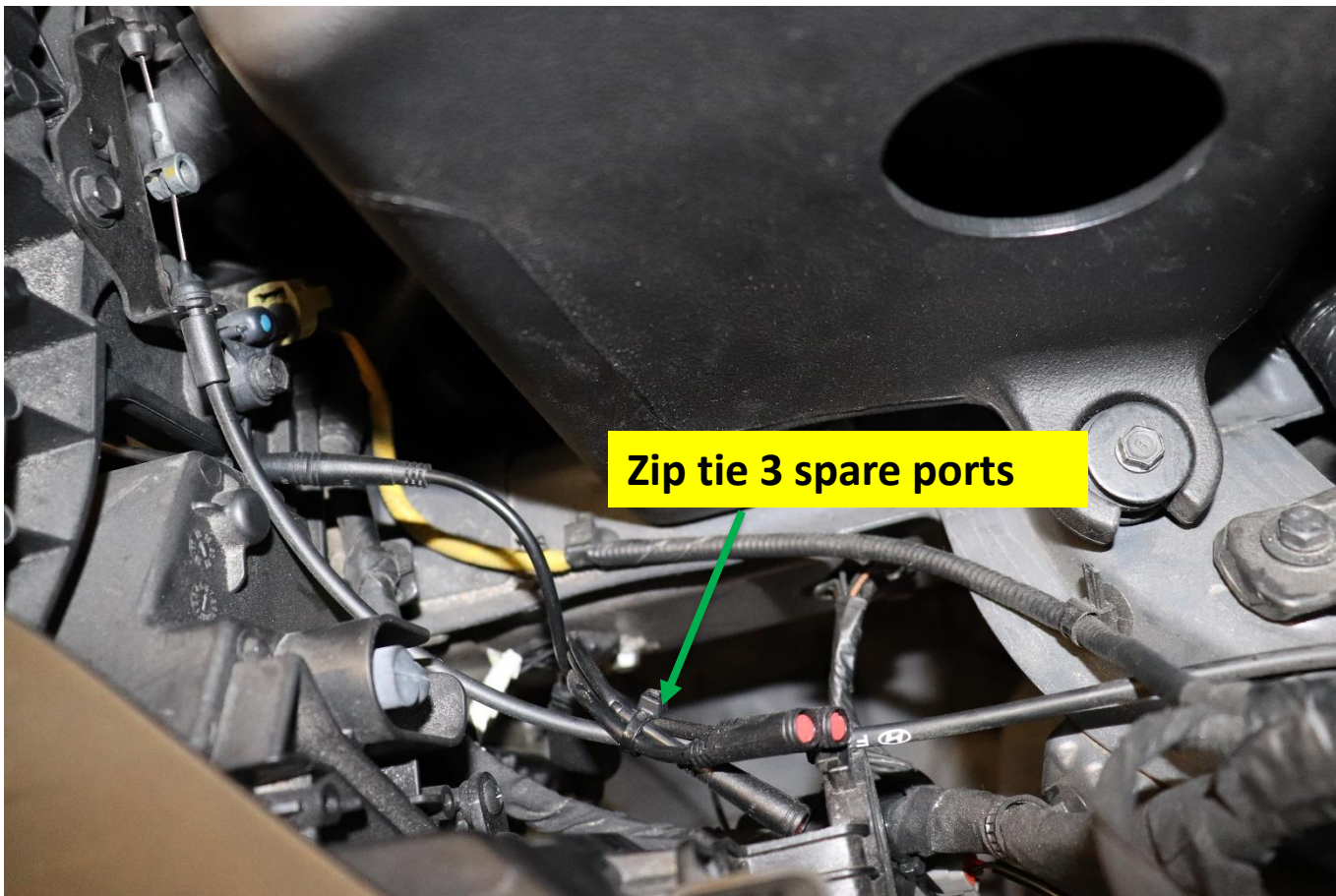
**Power connector
snaked through here.**



Plugged in LED connector

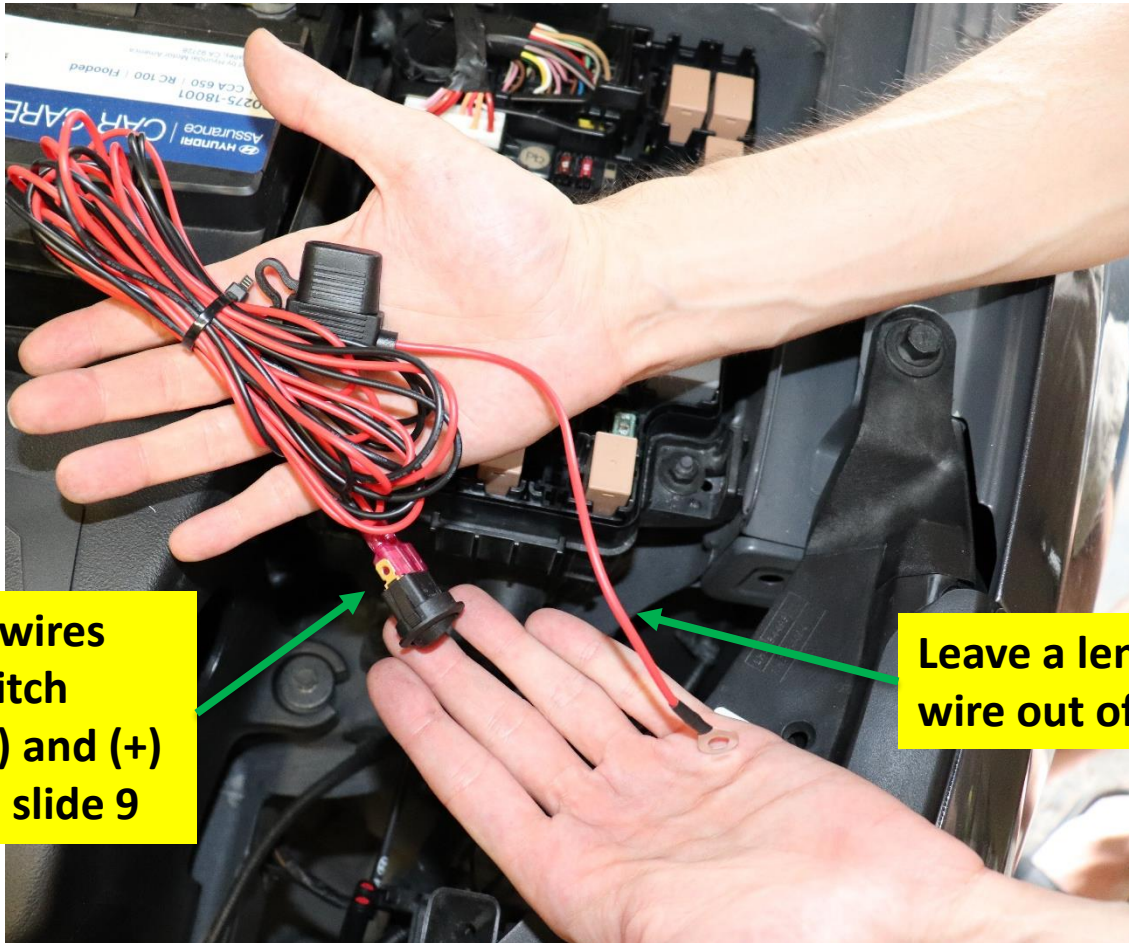
Big Mouth Wiring

You may zip tie the other 3 ports as shown.



Big Mouth Wiring

Connect the switch according to the wiring harness schematic (**slide 9**). There will be excess power wire coming out of the power connector, bundle it neatly and zip tie, leave about a foot of power wire to make the power connection.

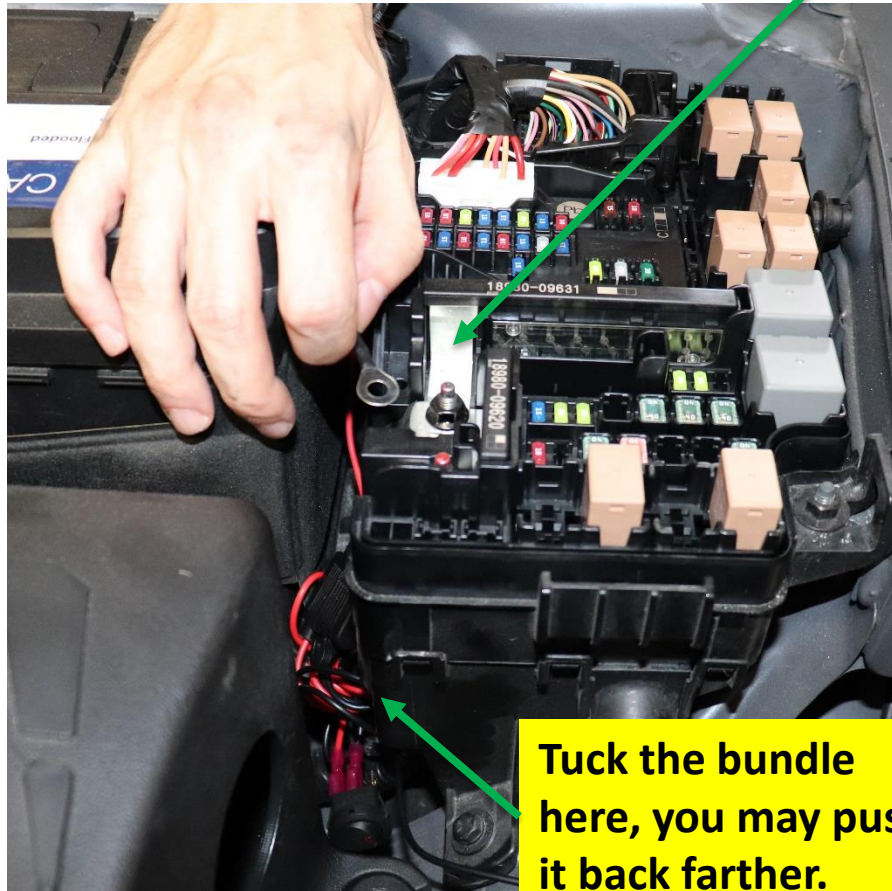


Both power wires plug into switch terminals (A) and (+) as shown on slide 9

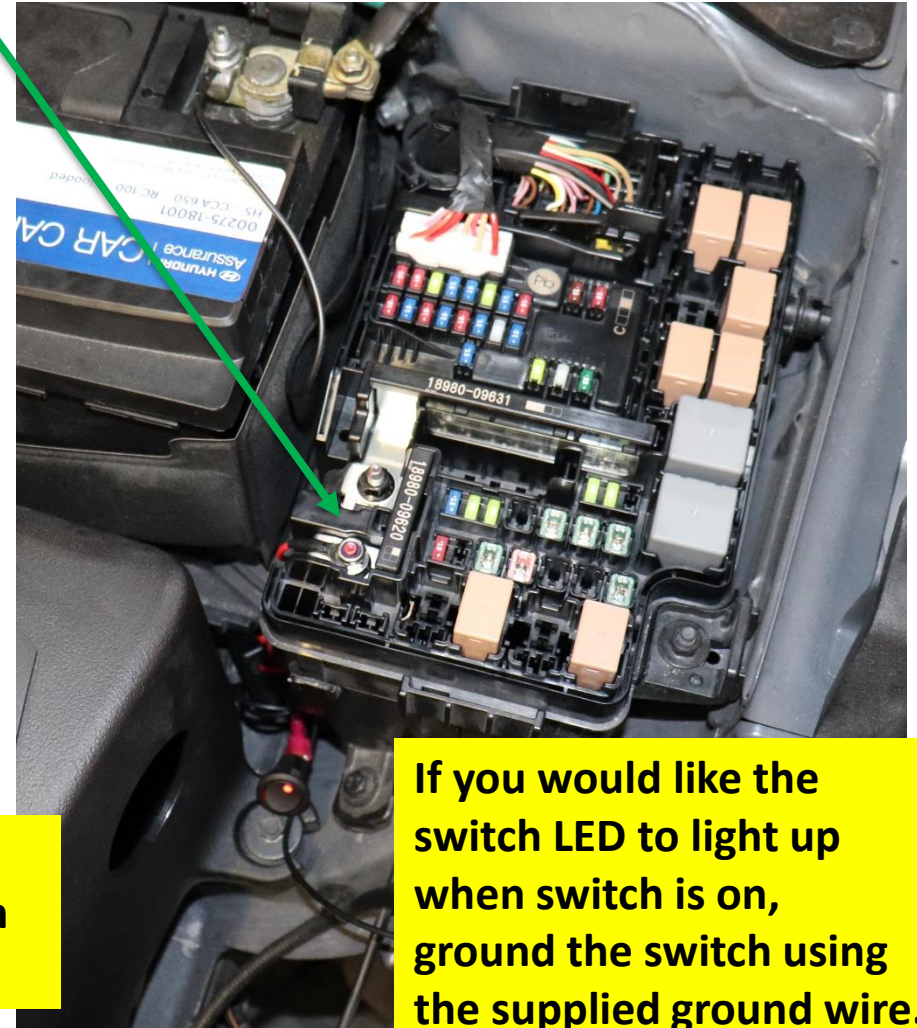
Leave a length of power wire out of the bundle

Power Hook-up

Tuck away the bundle as shown, fasten power lug to (+) terminal in the fuse box on top of the OEM stud, use supplied M6 nut.



Tuck the bundle here, you may push it back farther.



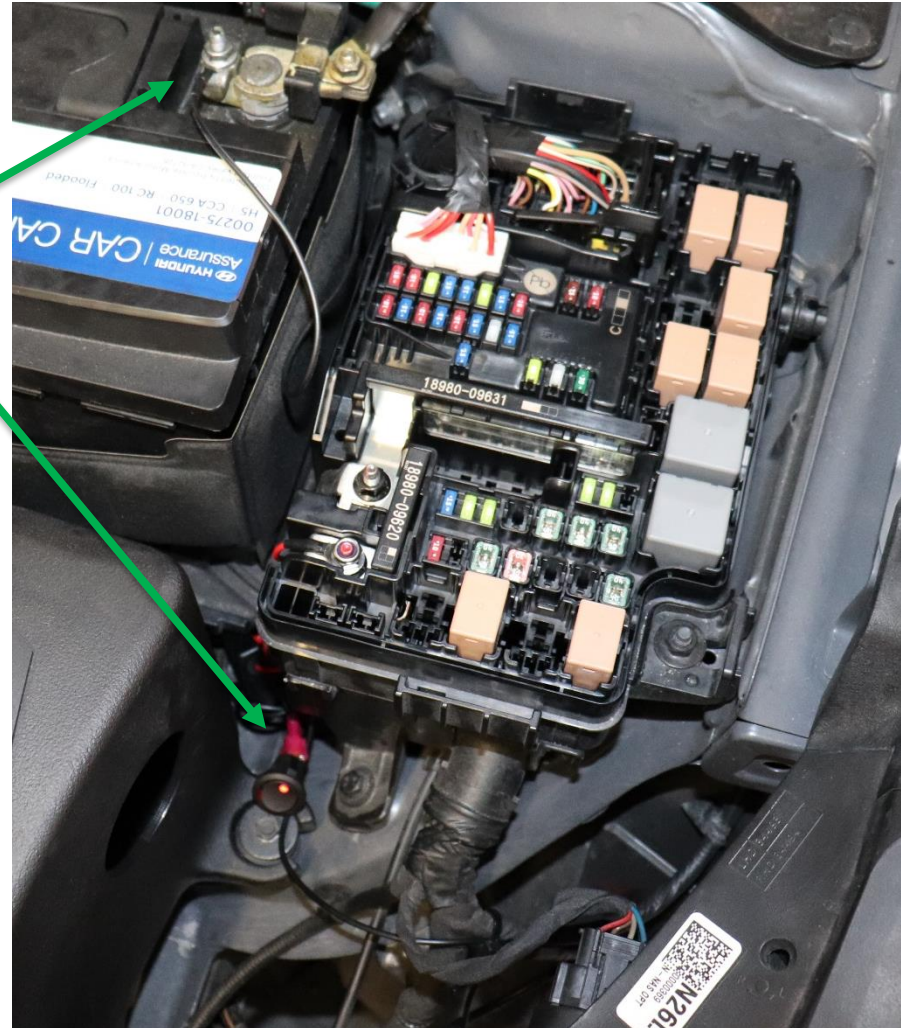
If you would like the switch LED to light up when switch is on, ground the switch using the supplied ground wire.

Power Hook-up

Switch ground: Optional

If you would like the switch LED to light up when switch is on, ground the switch using the supplied ground wire.

Once complete, put the fuse box cover back on, ensure no wires are pinched by the fuse box!



Phone App

Download the Diode Dynamics app and connect via Bluetooth.

How to connect to the app:

1. After installing the app from the app store, open the app on your device.
2. Cycle the power to the Bluetooth controller by unplugging it and plugging it back in or flick the power switch and wait a few seconds, then turn it back on.
3. Wait for the app to detect the controller, it will pop up on the app screen as a Bluetooth controller. If necessary, cycle the power once more to refresh the controller.
4. Once the controller shows up on the app, click it and connect. You have 30 seconds to select the controller once it shows up on the app. After 30 second you will need to refresh again to detect the controller again.
5. Note that if you mounted your controller behind a lot of metal components, this may degrade the signal and range.





Finalize

Re-install the bumper the same way it was removed and ENJOY!

