



**Kia Stinger BIG MOUTH LIT KIT  
Ram Air Intake Installation Guide**

## Kit Contents (Full Kit)

KIT CONTENTS	Qty
Micro2 Fuse Tap	1
Micro2 Fuse	1
Butt Connector (16 AWG)	3
1/4" Ring Terminal (16 AWG)	1
16" Zip ties	5
8" Zip ties	2
3/8" Conduit (3 feet)	1
Diode Dynamics RGBW Controller	1
Diode Dynamics 1m Extension	1
Cable Clips	2
Power Wire (16 AWG)	1
Ground Wire (16 AWG)	1
Assembled LIT KIT BIG MOUTH's	2



## Kit Contents (LIT Flares Only)

KIT CONTENTS	Qty
Micro2 Fuse Tap	1
Micro2 Fuse	1
Butt Connector (16 AWG)	3
1/4" Ring Terminal (16 AWG)	1
16" Zip ties	1
8" Zip ties	2
3/8" Conduit (3 feet)	1
Diode Dynamics RGBW Controller	1
Diode Dynamics 1m Extension	1
Power Wire (16 AWG)	1
Ground Wire (16 AWG)	1
Cable Clips	4
Assembled Flares	2



**If you already own the GEN 4 Kia Stinger BIG MOUTH's, skip ahead to slide 15 for wiring instructions**

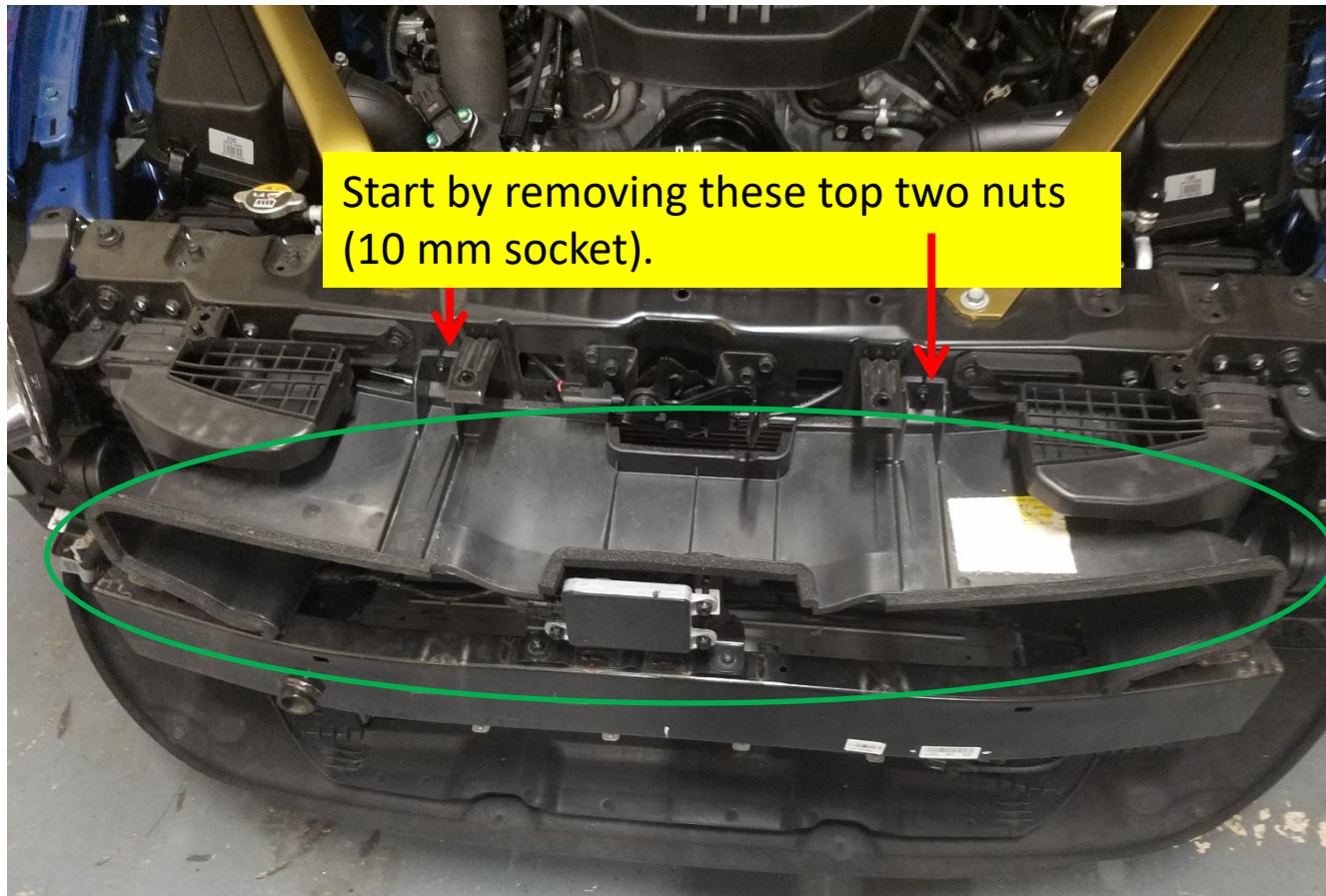


## Bumper Removal

Your best resource for bumper removal is to Google Search  
"How to remove Kia Stinger Bumper"

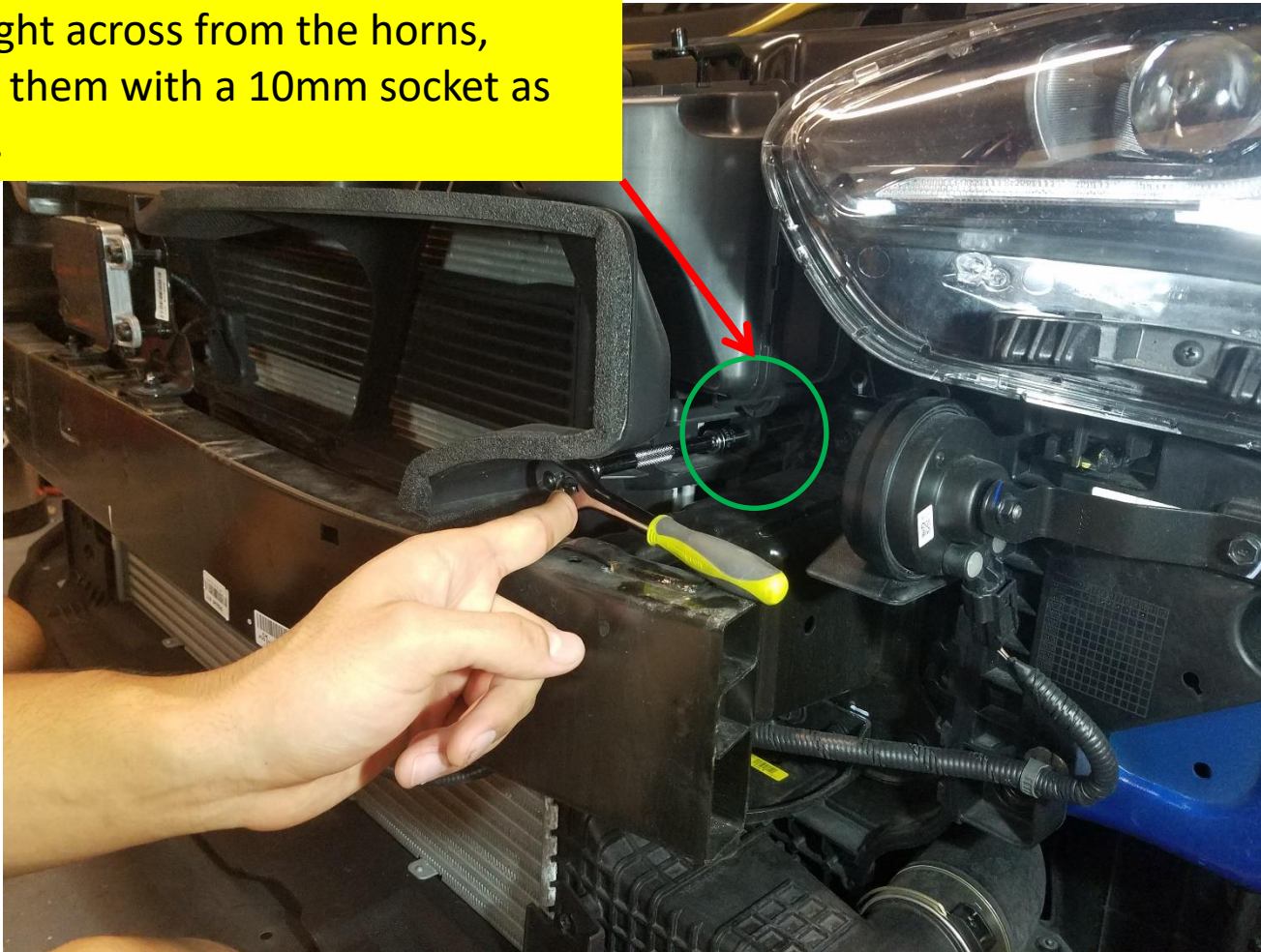
## Shroud Removal

Remove the shroud prior to installation. There are 6 screws that need to be extracted.



## Shroud Removal

There are two more screws on either side, right across from the horns, extract them with a 10mm socket as shown.



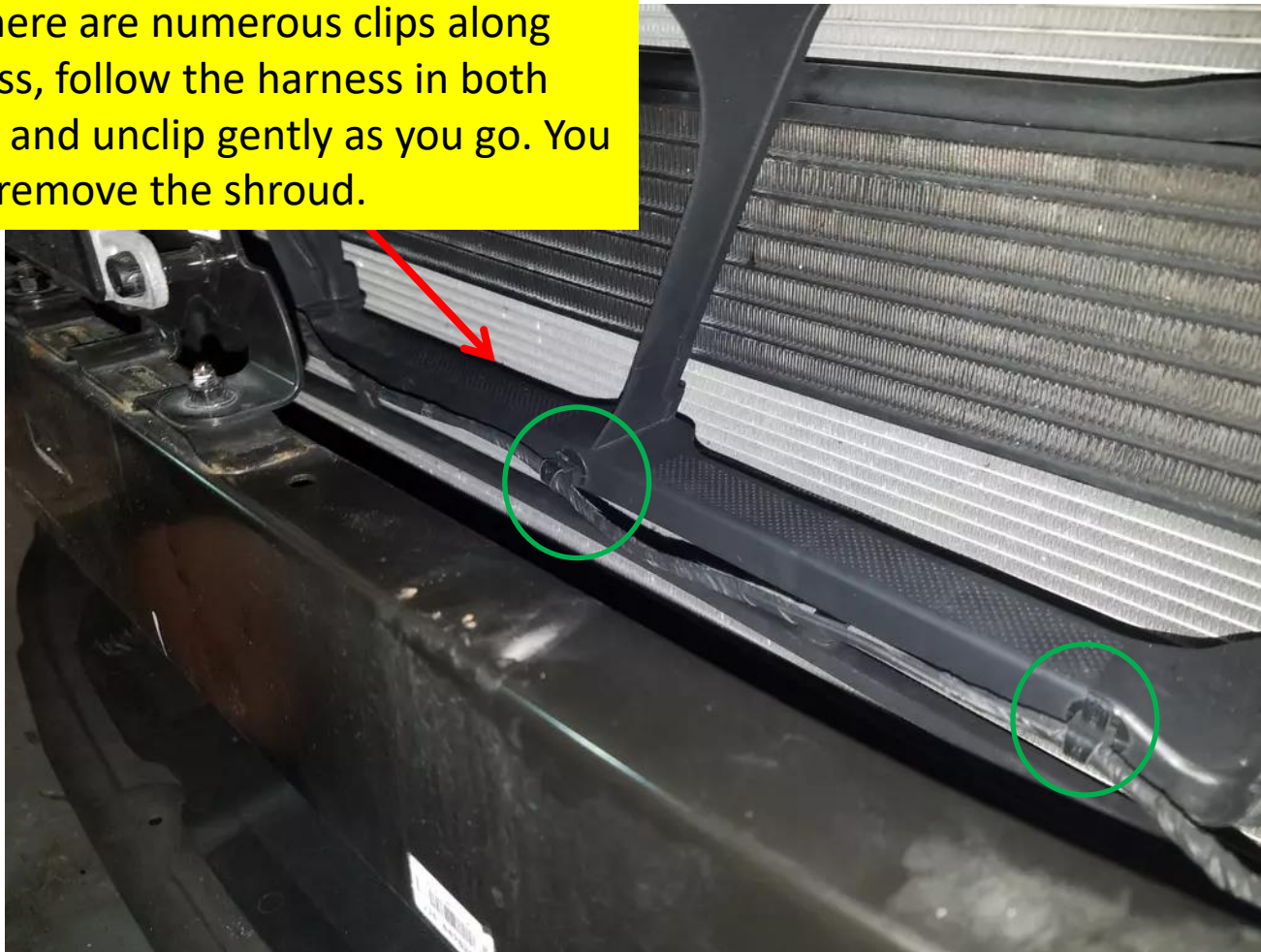
## Shroud Removal

Directly above the intercooler there is a screw (10 mm), one on each side, extract them.



## Shroud Removal

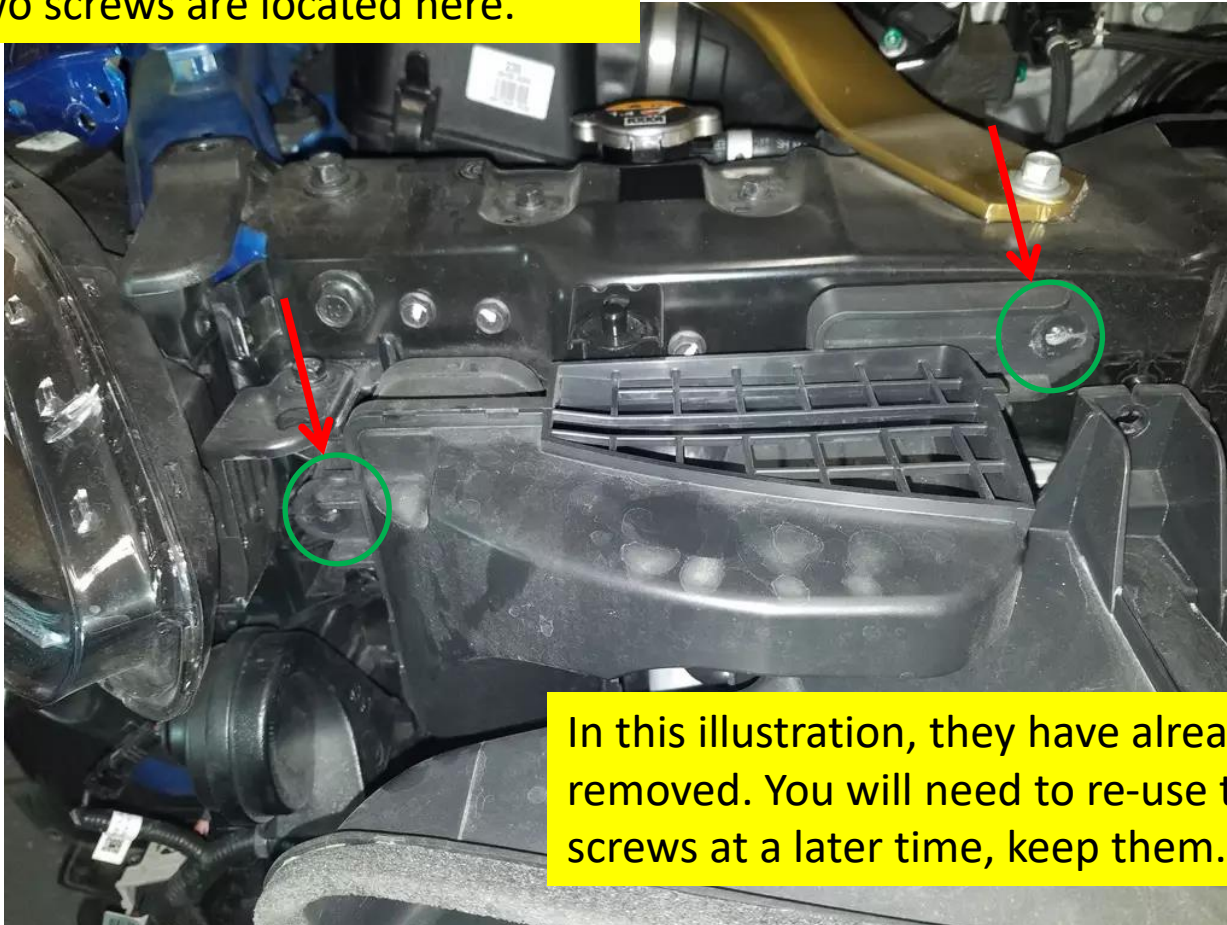
Carefully unclip the wire harness from the shroud, there are numerous clips along the harness, follow the harness in both directions and unclip gently as you go. You may now remove the shroud.





## Stock Snorkel Removal

The stock snorkels are an eye-sore, get rid of them by removing the three screws. The first two screws are located here.



In this illustration, they have already been removed. You will need to re-use these screws at a later time, keep them.

## Stock Snorkel Removal

The stock snorkel bottom screw is located here. Remove it.



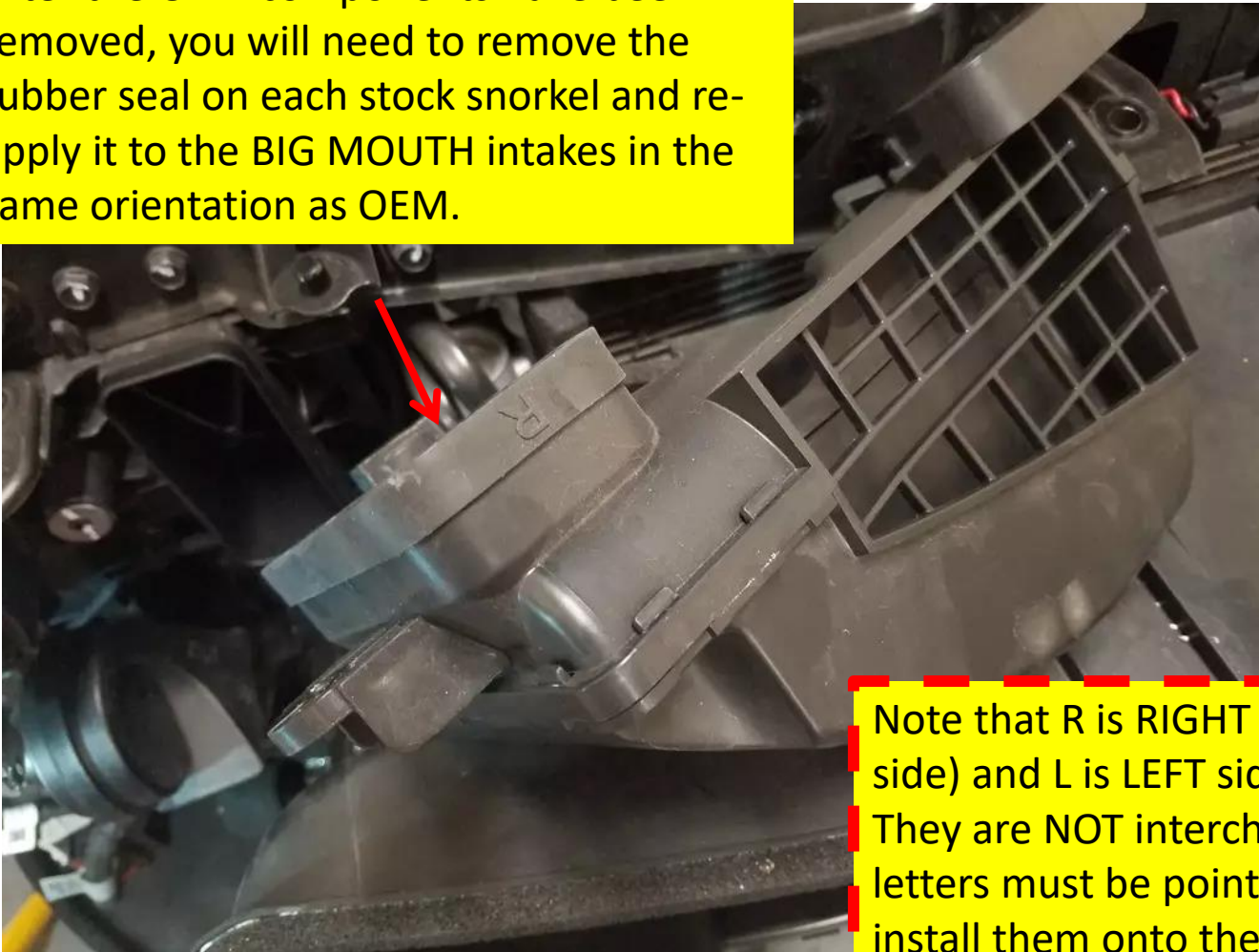
## Stock Hardware

You will need to re-use two of the three screws from each side of the OEM snorkels. Keep them handy.



## Apply Seal to BIG MOUTH Intakes

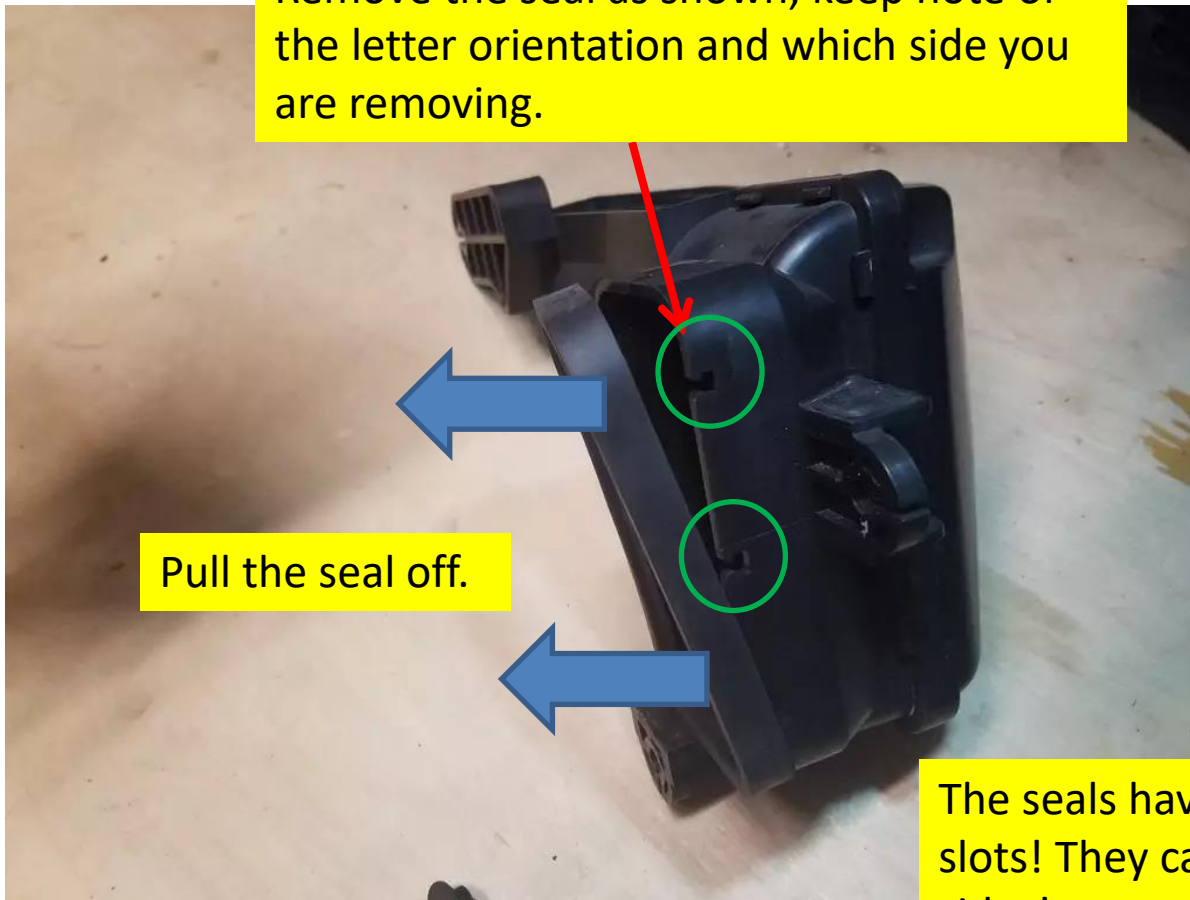
After the OEM components have been removed, you will need to remove the rubber seal on each stock snorkel and re-apply it to the BIG MOUTH intakes in the same orientation as OEM.



Note that R is RIGHT side (or passenger side) and L is LEFT side (or driver side). They are NOT interchangeable and the letters must be pointing up when you re-install them onto the BIG MOUTH intakes!

## Remove OEM Seals

Remove the seal as shown, keep note of the letter orientation and which side you are removing.

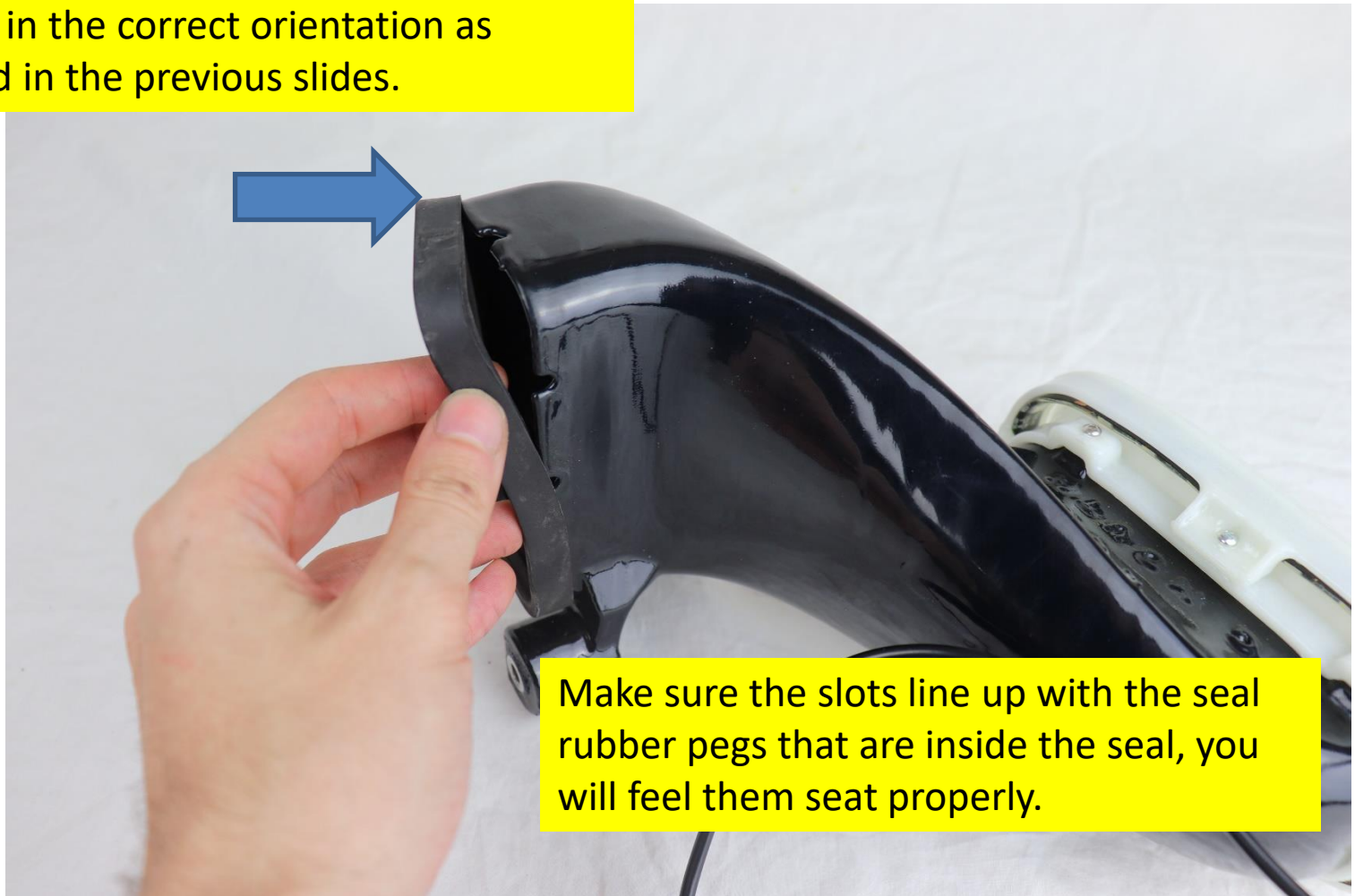


Pull the seal off.

The seals have asymmetric alignment slots! They cannot be flipped or swapped sides!

## Apply Seal to BIG MOUTH Intakes

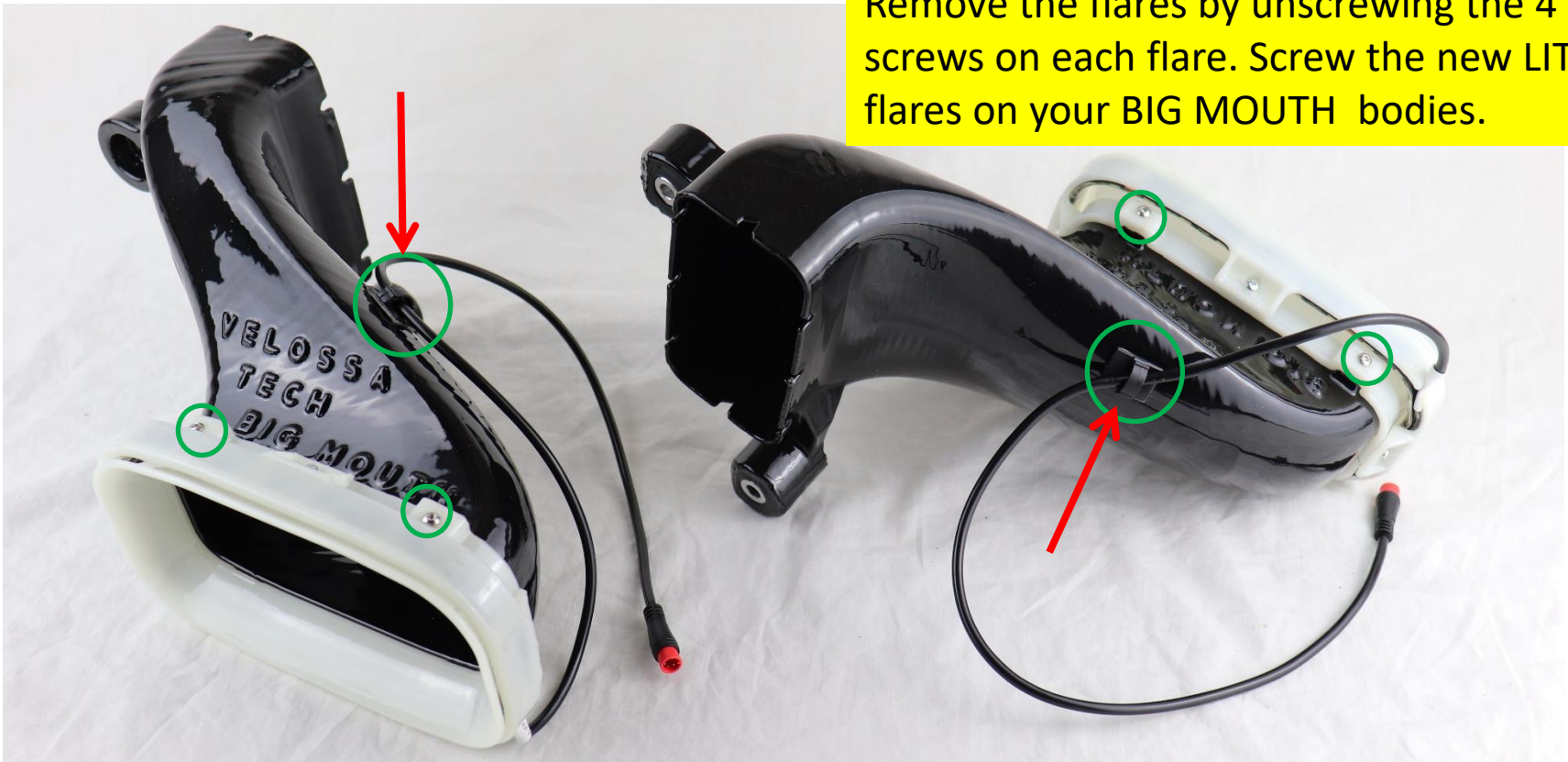
Apply the seal to the BIG MOUTH as shown, in the correct orientation as dictated in the previous slides.



## Install the LIT BIG MOUTH Flares

SKIP THIS SLIDE IF YOU PURCHASED A FULL KIT

Remove the flares by unscrewing the 4 set screws on each flare. Screw the new LIT KIT flares on your BIG MOUTH bodies.



NOTE: The exit direction of the LED power wires must follow this illustration.

Clean the surfaces well, and apply the strain relief cable clips, apply modest pressure.



# VELOSSA TECH

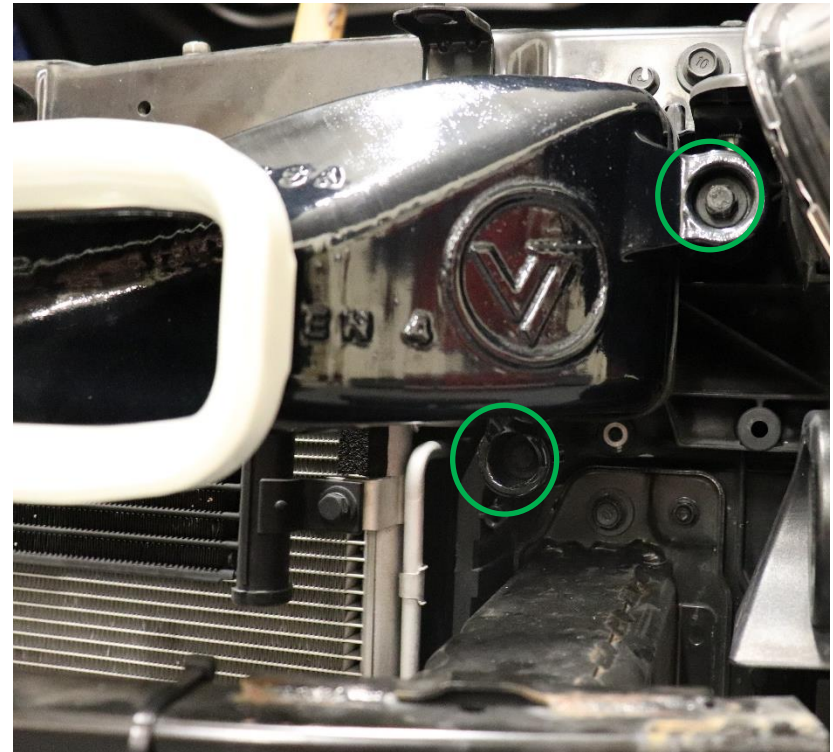
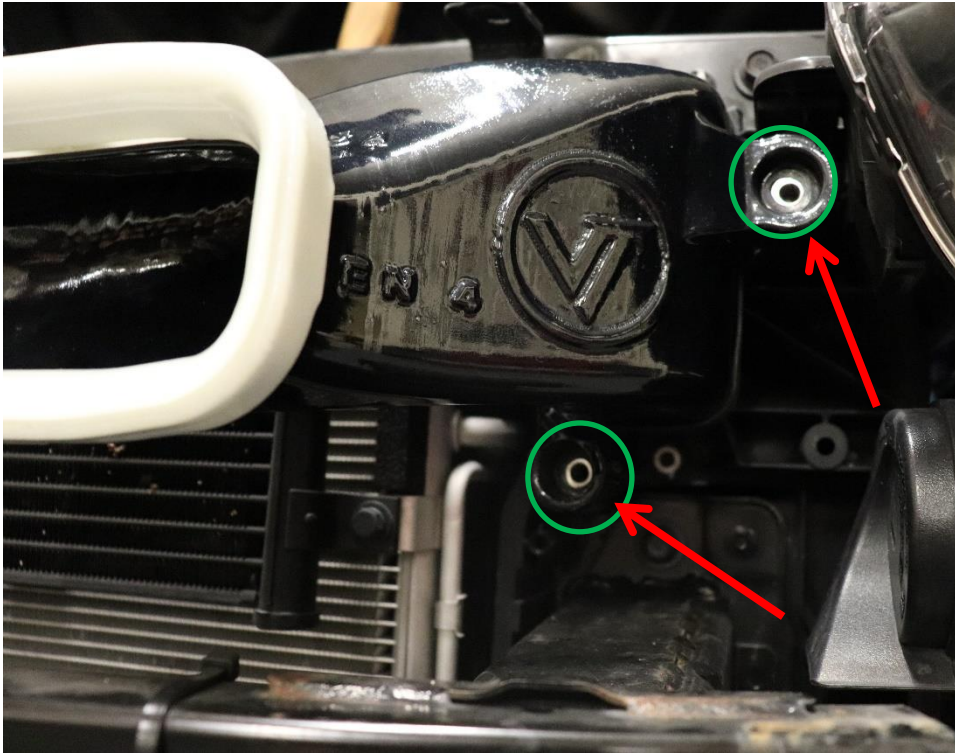
## Install the LIT BIG MOUTH

Carefully slide the BIG MOUTH intakes over the stock ports and ensure the bolt holes line up.



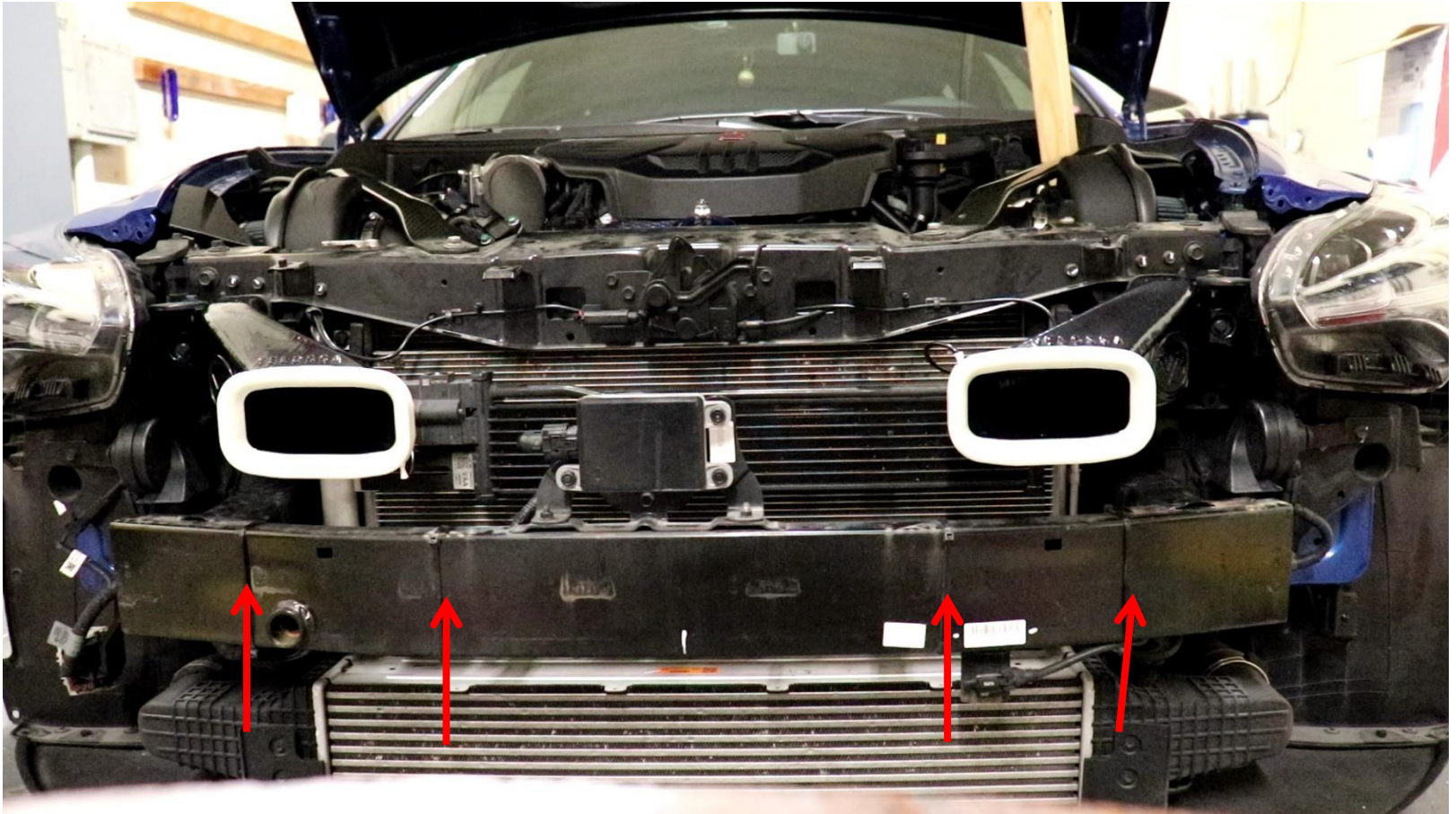


## Install the LIT BIG MOUTH



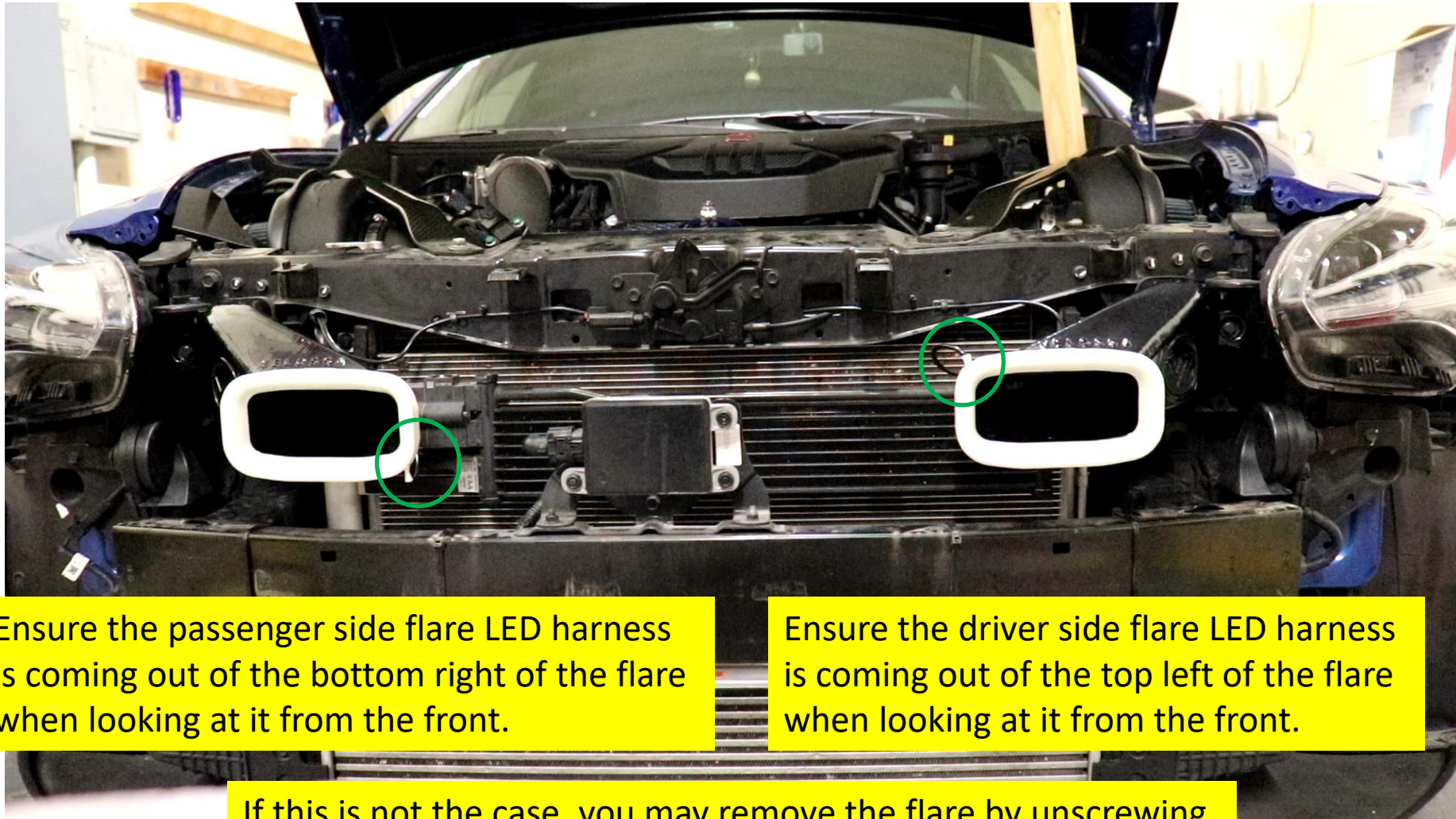
From slide 10, re-use the two screws, begin threading by hand and torque down hand tight. Do not over-torque. Blue thread-locker is advisable to use but not necessary.

## Zip Tie OEM Harness



You will need to zip tie the OEM electrical harness behind the frame rail in a clean fashion using four of the supplied 16" zip ties.

## BIG MOUTH LIT Kit Prep



Ensure the passenger side flare LED harness is coming out of the bottom right of the flare when looking at it from the front.

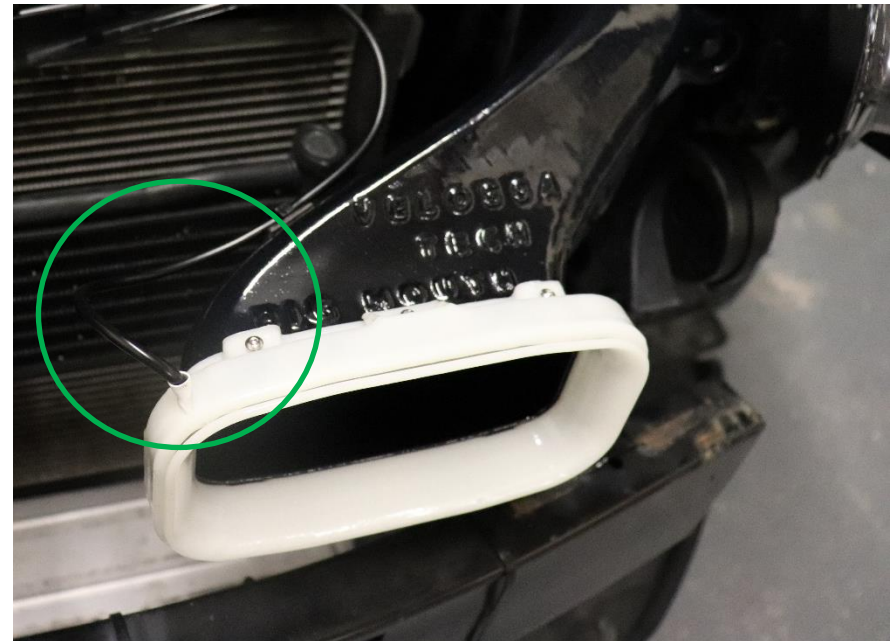
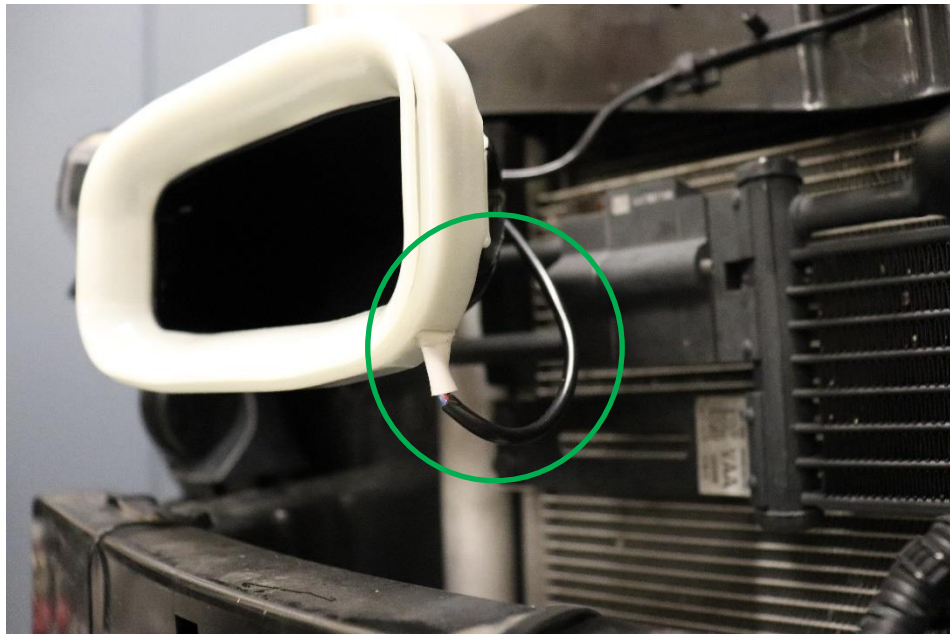
Ensure the driver side flare LED harness is coming out of the top left of the flare when looking at it from the front.

If this is not the case, you may remove the flare by unscrewing it, rotate it to obtain the correct wiring exit points.

## BIG MOUTH LIT Kit Strain Relief

Passenger Side

Driver Side

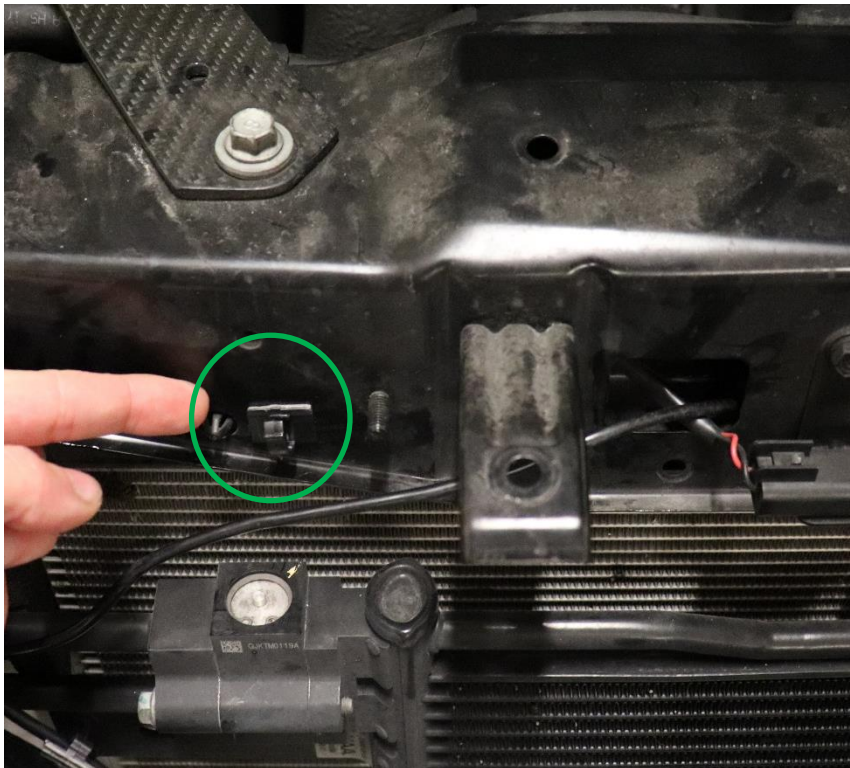


Ensure there is **ample strain relief** at the **LED power wires** coming out of the flares. Route the wires through the back of the wire support clips that are on the BIG MOUTHS (this would already be done on a full kit with clips pre-installed).

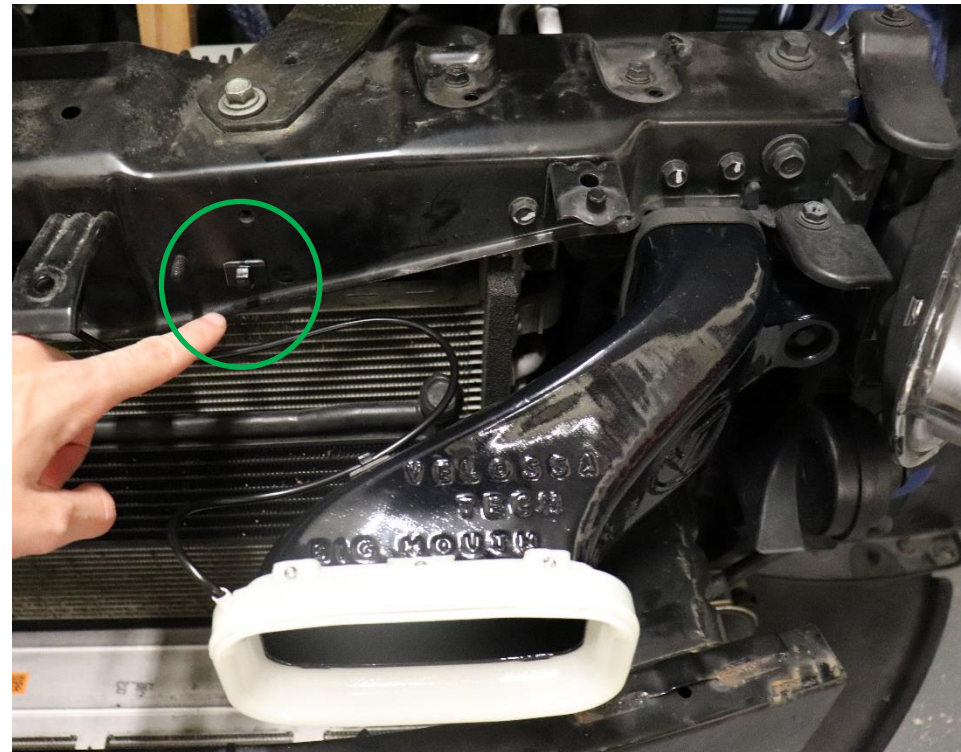
## BIG MOUTH LIT Kit Prep

Prepare the following location by wiping down with a clean cloth or paper towel, let dry. Apply the LED cable relief clip as shown.

Passenger Side



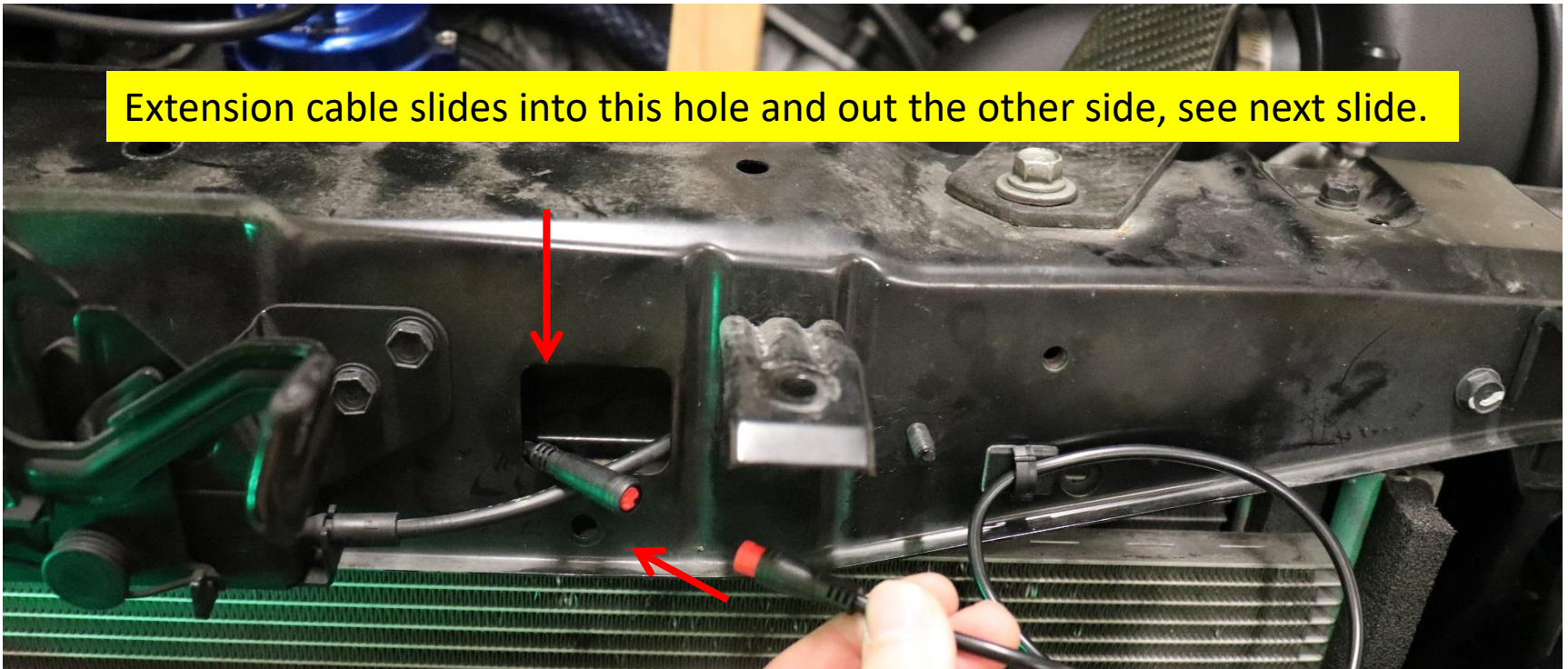
Driver Side



## BIG MOUTH LIT Kit Prep

Plug the supplied Diode Dynamics LED extension cable into the driver side LED as shown, slide into the radiator support.

Extension cable slides into this hole and out the other side, see next slide.

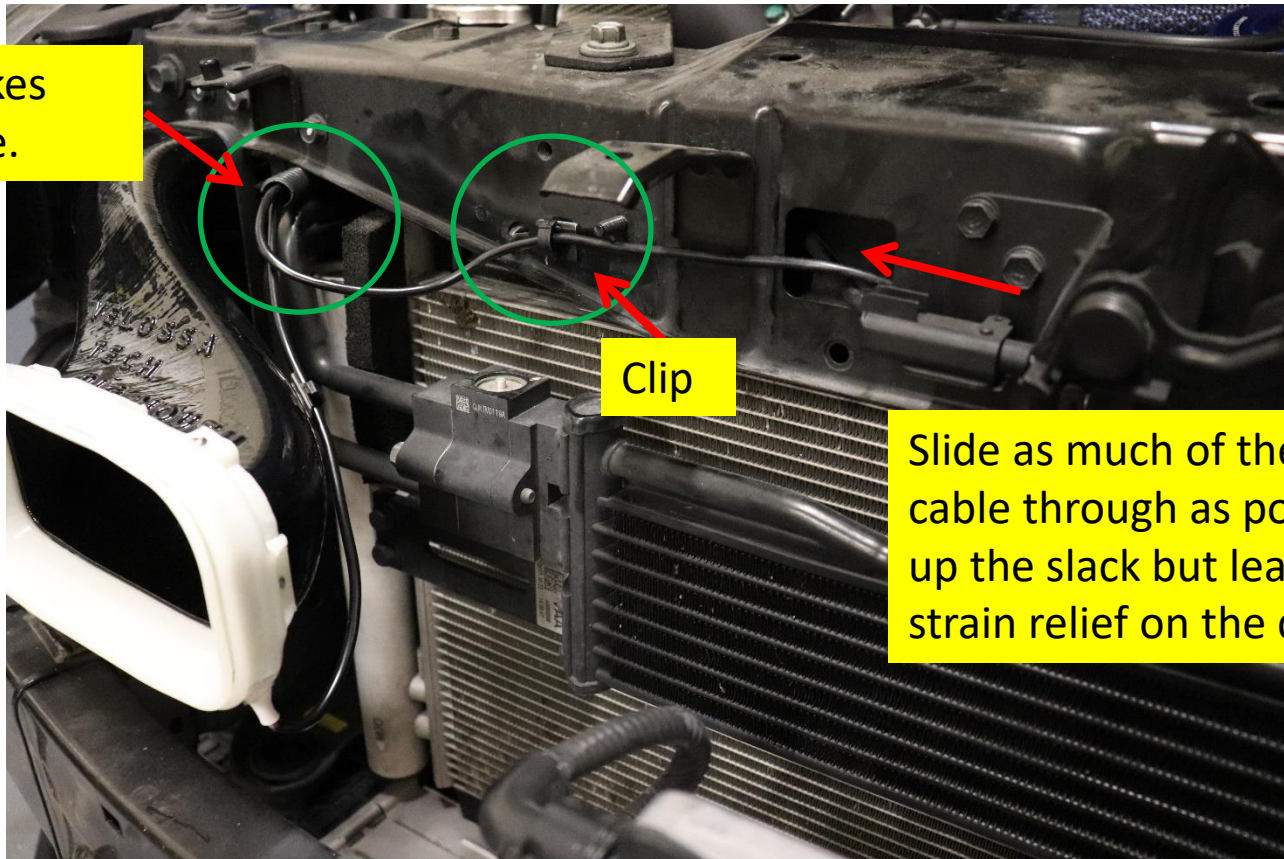


Take notice of the notch within the M8 female connector. The connectors must be properly oriented and should not require very much force to connect. Improper alignment can damage the pins within the male connector.

## BIG MOUTH LIT Kit Prep

Clip the extension cable into the second strain relief clip and join both cables together at the join point. Cut a 6" piece of conduit supplied in the kit and wrap the two Diode Dynamics cables in the conduit at this location and snake through as shown below.

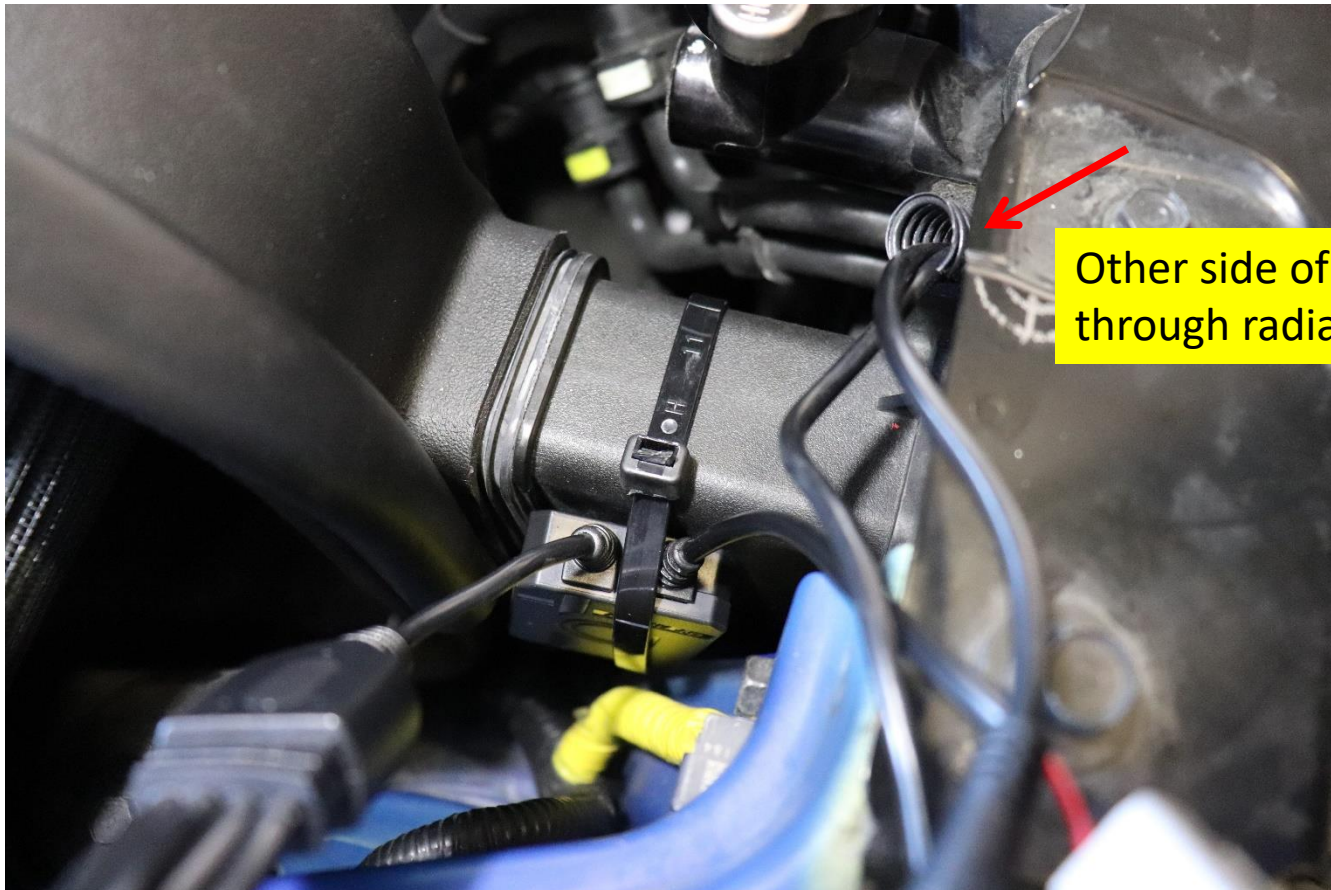
Conduit snakes through here.



Slide as much of the extension cable through as possible to take up the slack but leave some strain relief on the driver side!

## BIG MOUTH LIT Kit Prep

Using a 16" zip tie, fasten the Diode Dynamics controller in the following orientation to the stock transition duct as shown. Both main output cables should be facing up.



Other side of conduit,  
through radiator support.

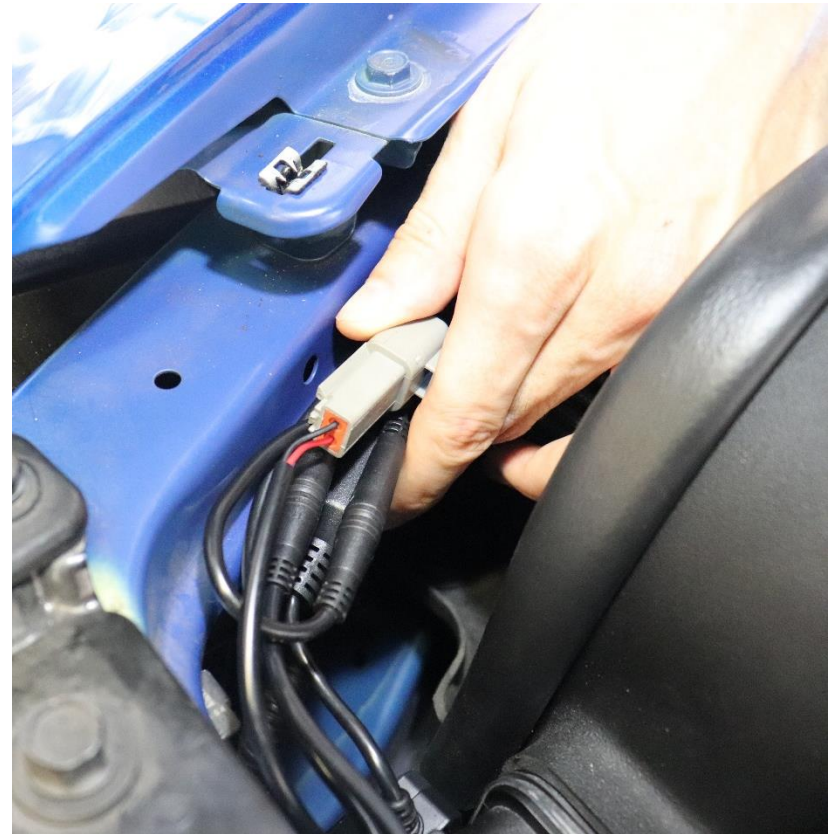


## BIG MOUTH LIT Kit Prep

Plug both LED power cables into the Diode Dynamics RGBW Bluetooth controller and bunch the cables together neatly. Do not strain the cables with tight radius bends or tugging in any place.



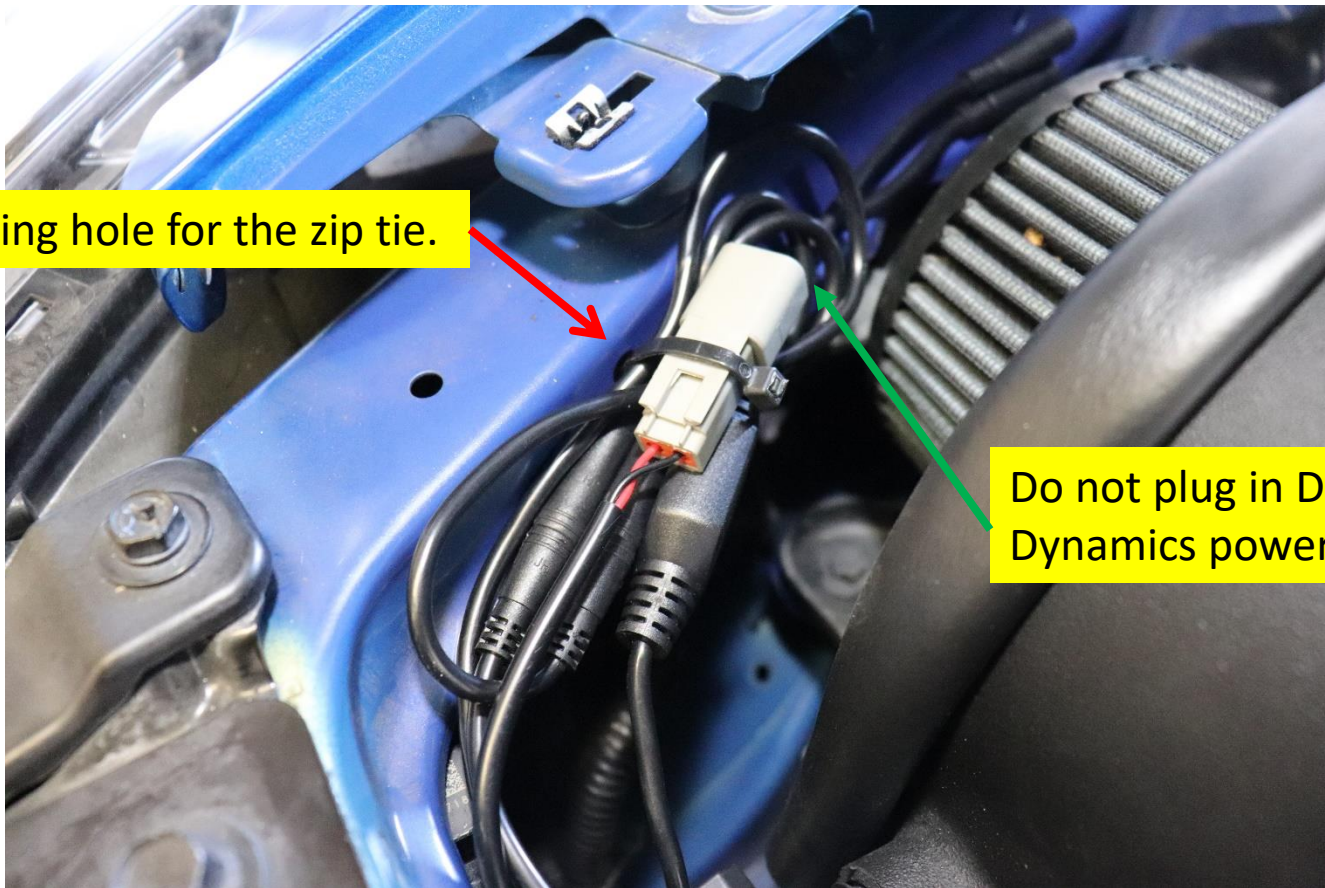
Remove this panel, underneath it the cables will be neatly packed and fastened.



## BIG MOUTH LIT Kit Prep

Fasten the bundle with an 8" zip tie in the following manner.

Use this existing hole for the zip tie.



Do not plug in Diode Dynamics power harness.

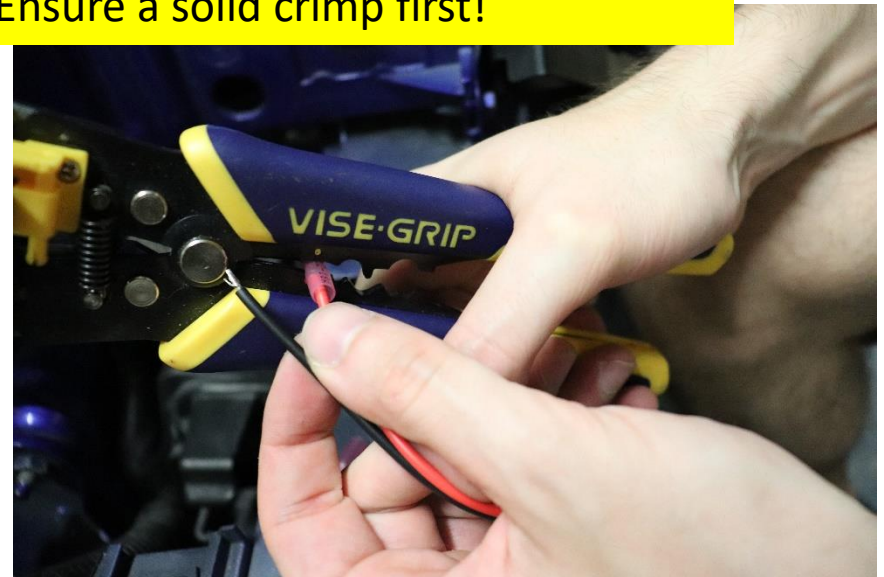
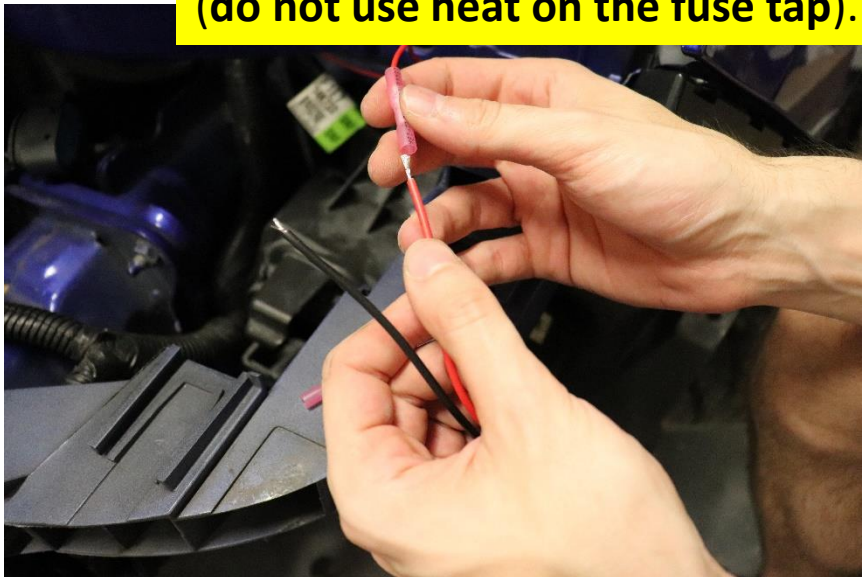
## Wiring the LIT KIT

To begin the wiring install, grab your (1) Diode Dynamics Controller package, (2) Micro2 fuse tap, (3) ¼" ring terminal, (4) butt connectors and (5) red and black silicone wire.

**Red wire:** Strip ¼" of insulation and crimp to the **Micro2 fuse tap**. Crimp the other end to the red wire on the Diode Dynamics pigtail using one of the butt connectors.

**Black wire:** Strip ¼" of insulation and crimp to the **ring terminal**. Crimp the other end to the black wire on the Diode Dynamics pigtail using one of the butt connectors.

Use heat to shrink the **butt connectors** and **ring terminal** after crimping (**do not use heat on the fuse tap**). Ensure a solid crimp first!



## Wiring the LIT KIT

Diode Dynamics pigtail connector

**DO NOT USE HEAT TO SHRINK**

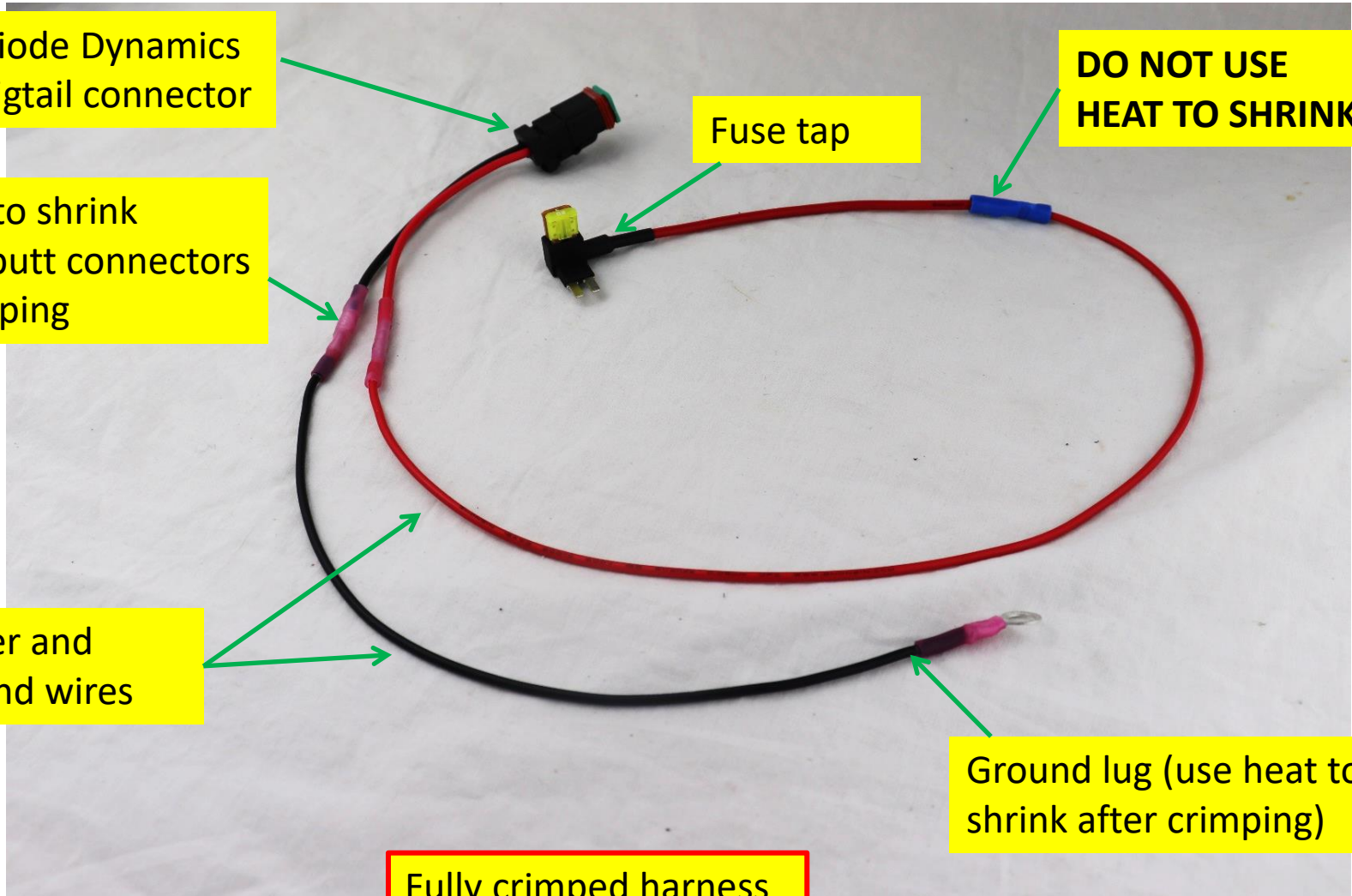
Fuse tap

Use heat to shrink supplied butt connectors after crimping

Power and ground wires

Ground lug (use heat to shrink after crimping)

Fully crimped harness

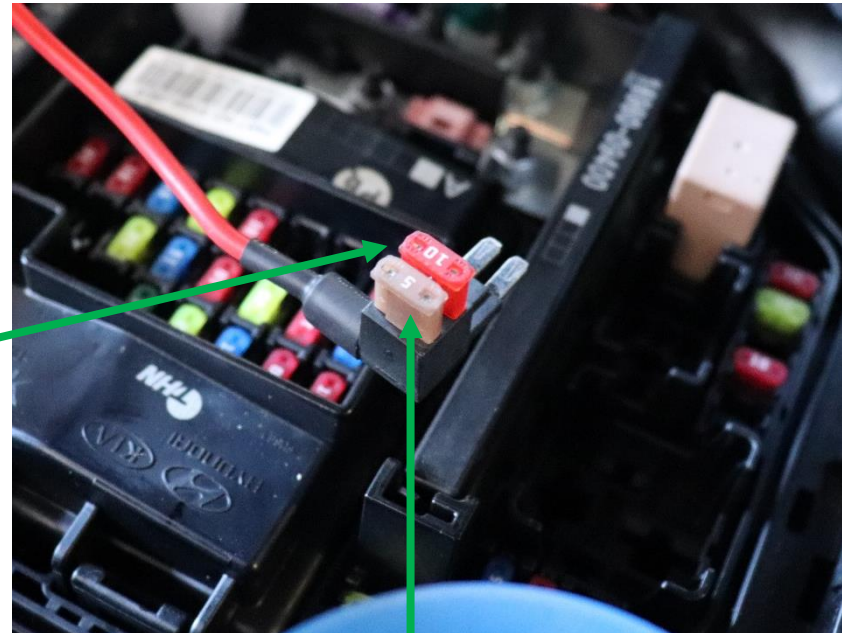


## BIG MOUTH LIT Kit Power

Locate the fuse box in the engine bay in front of the passenger side firewall. To power your LIT KIT with 12V constant power, pull out the indicated fuse and put it in the **bottom slot** of the fuse tap. Place the LIT KIT supplied fuse in the **top slot**.



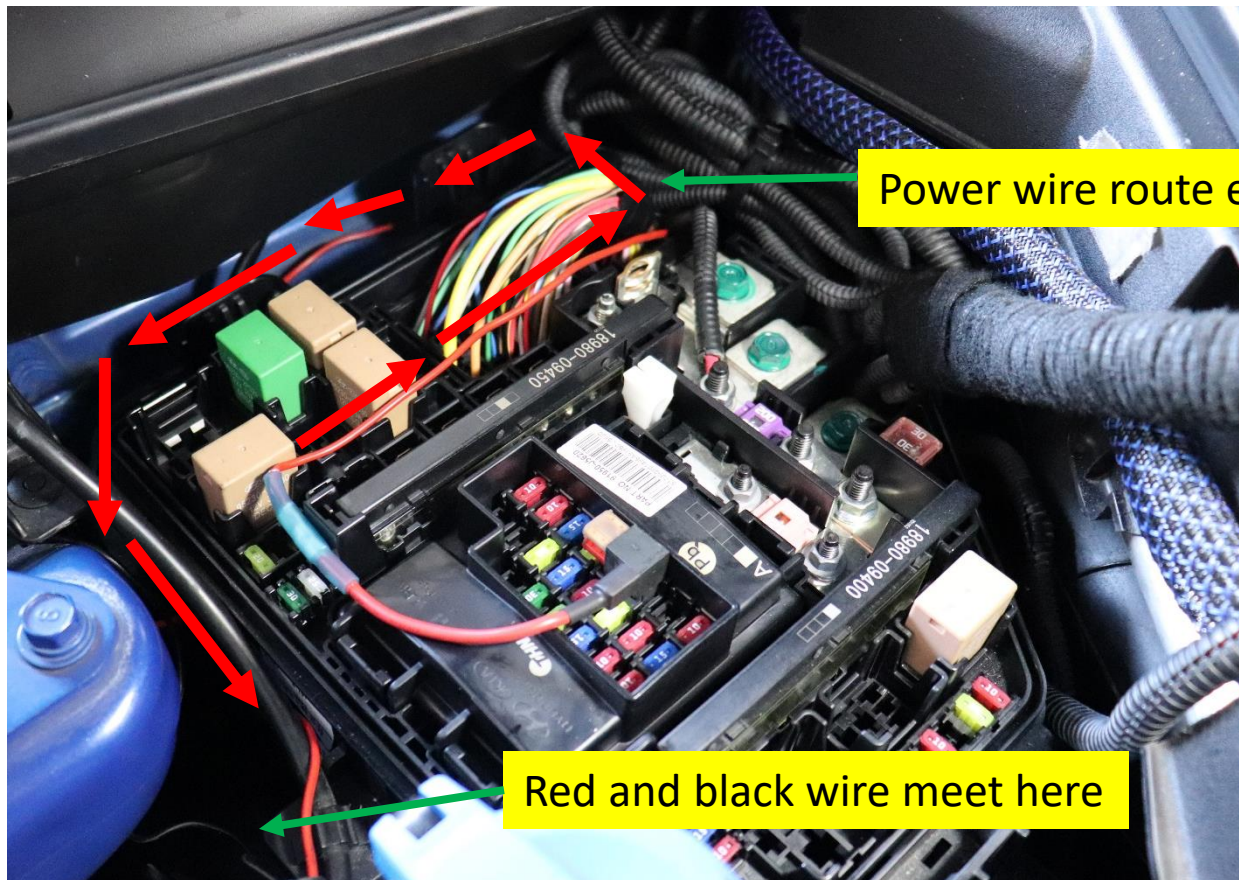
OEM 10 amp fuse gets inserted into bottom slot of fuse tap. (3<sup>rd</sup> fuse from the bottom on the rightmost row as shown)



Supplied fuse, top slot

## BIG MOUTH LIT Kit Power

Insert fuse tap into the slot where the OEM fuse was originally. Route the power wire in the following fashion, the power wire must NOT be pinched by the fuse box cover, route it through the top right of the box, there is an opening that allows wires to pass through.

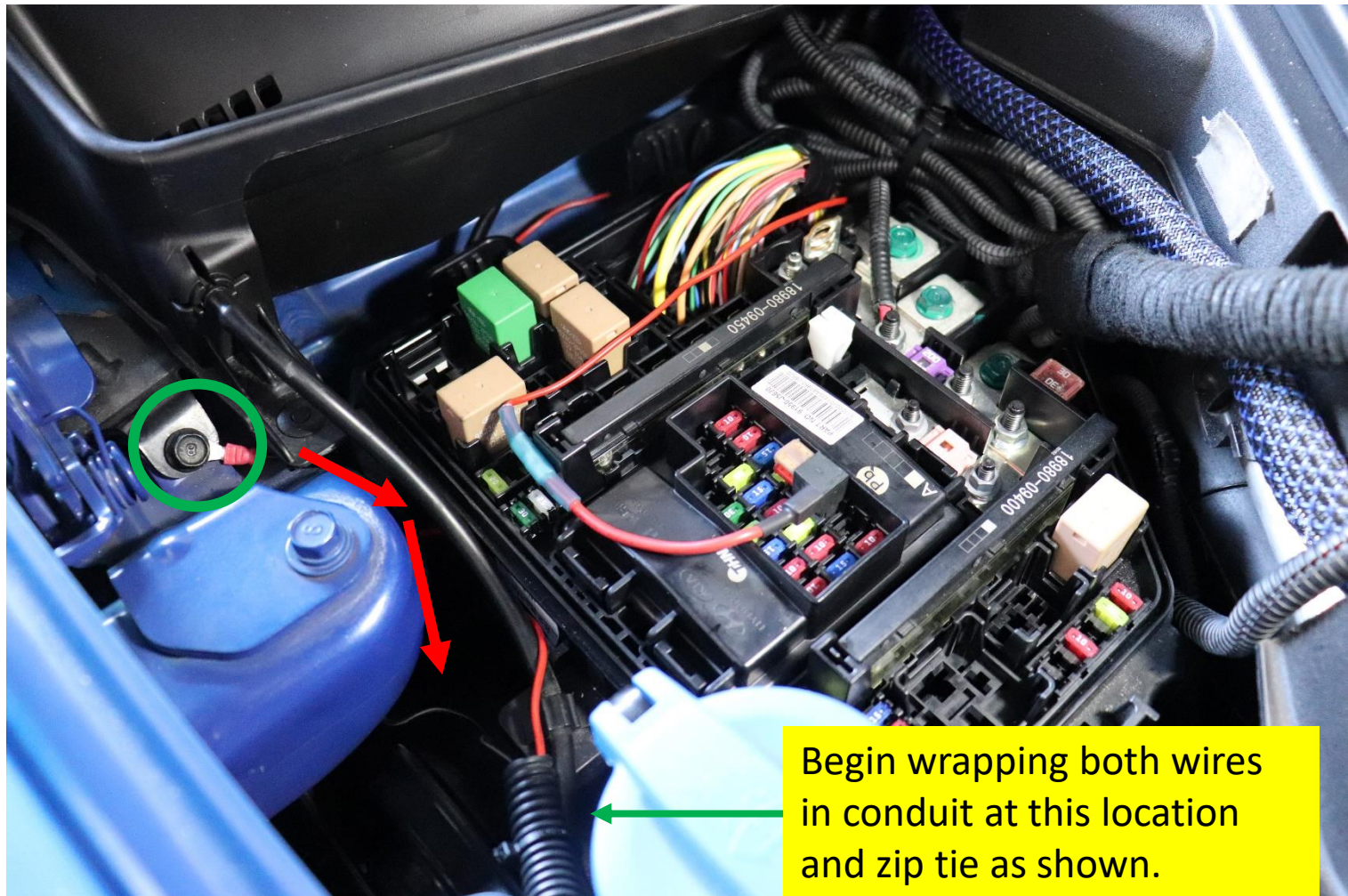


Power wire route exits box here

Red and black wire meet here

## BIG MOUTH LIT Kit Power

Fasten ground here using this OEM bolt and tuck underneath as shown.



Begin wrapping both wires in conduit at this location and zip tie as shown.

## BIG MOUTH LIT Kit Routing

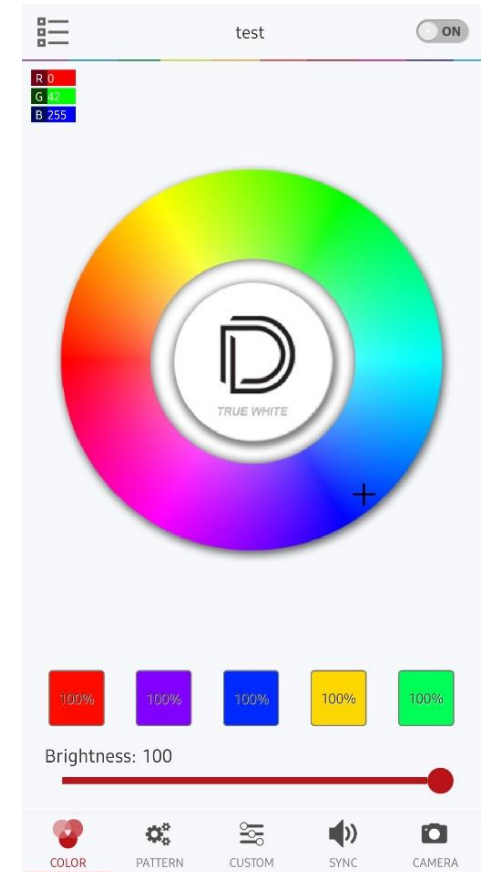
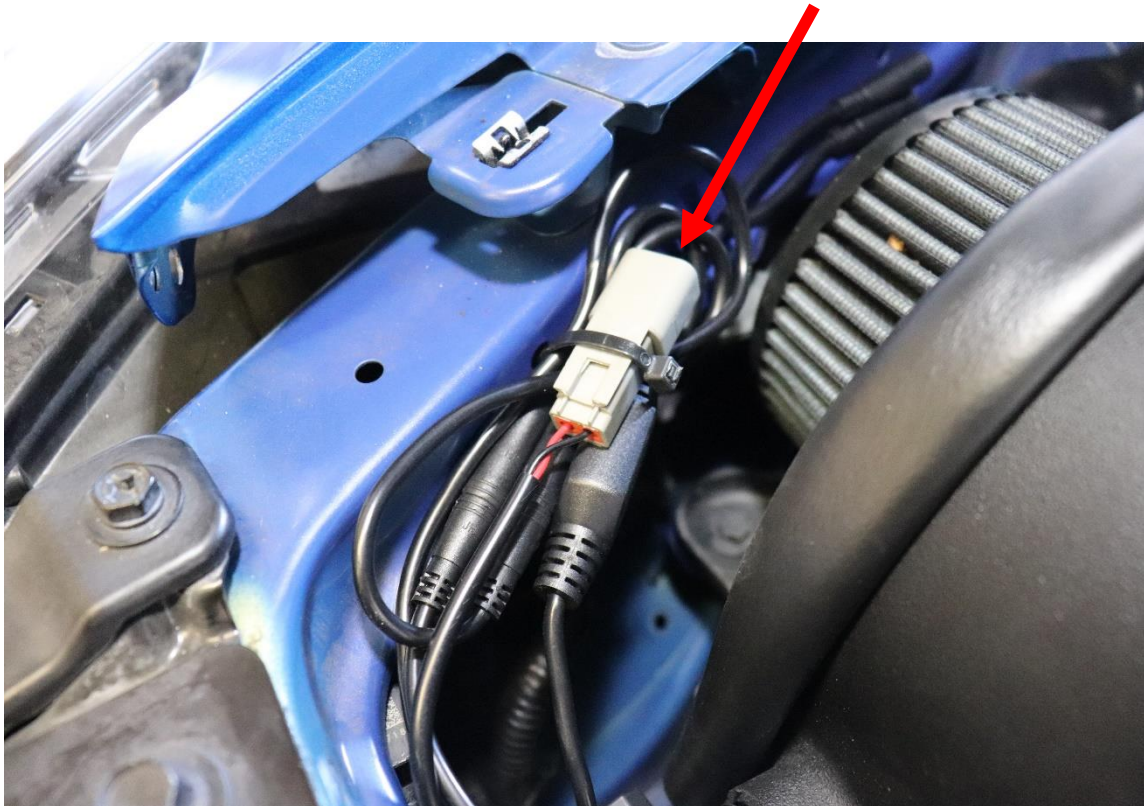
Route the remaining wires and conduit as shown, tuck underneath for a clean look.





## Phone App

Finalize the installation by plugging in the Diode Dynamics power harness into the controller, download the Diode Dynamics app and connect via Bluetooth.





**VELOSSA TECH**

## Re-install Bumper

Re-install the bumper and plastic cover plate, enjoy!



**VELOSSA TECH**

**DIODE DYNAMICS**  
PERFORMANCE LIGHTING TECHNOLOGY