



**2014-2019+ MK7/7.5 Fiesta ST BIG MOUTH  
LIT KIT Ram Air Intake Installation Guide**

## Kit Contents (Full kit)

Please review this entire document before attempting installation.

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

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

Kit Contents	Qty
M6 x 65mm Cap Screw	1
M6 Lock Nuts	2
Micro2 Fuse Tap	1
Micro2 5A Fuse	1
Butt Connector (16 AWG)	3
1/4" Ring Terminal (16 AWG)	1
8" Zip Ties	8
Diode Dynamics RGBW Controller	1
Power Wire (16 AWG)	1
Ground Wire (16 AWG)	1
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
M6 Lock Nuts	1
Micro2 Fuse Tap	1
Micro2 5A Fuse	1
Butt Connector (16 AWG)	3
1/4" Ring Terminal (16 AWG)	1
8" Zip Ties	8
Diode Dynamics RGBW Controller	1
Power Wire (16 AWG)	1
Ground Wire (16 AWG)	1
Cable Clips	1
Assembled Flare	1



**If you already own the Velossa Tech GEN 4 Fiesta ST BIG MOUTH, skip to slide 7 to see install and wiring instructions.**



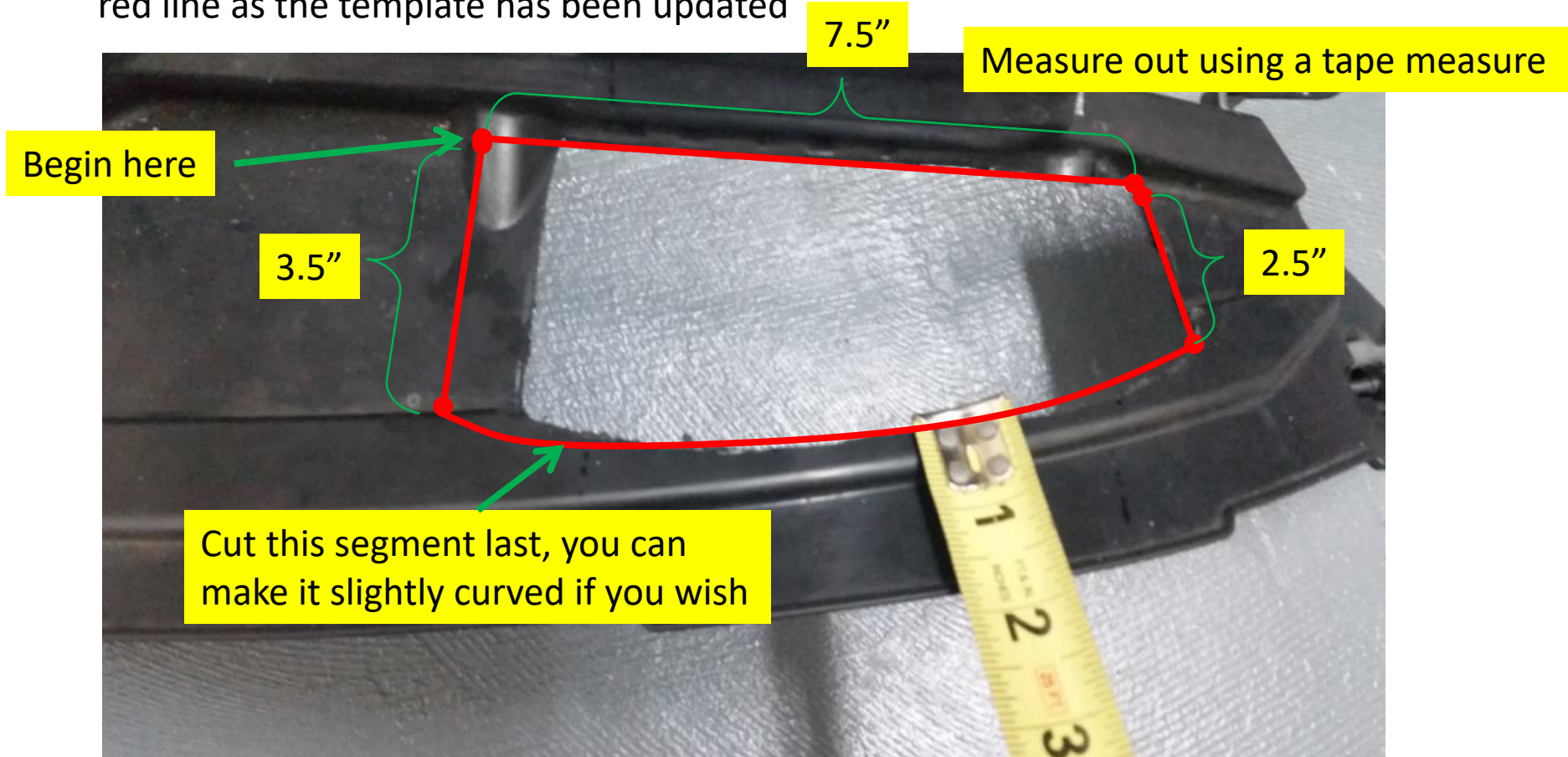
## Bumper Removal

For installation of the BIG MOUTH, you will need to remove the bumper. For best instruction, use YouTube videos to guide you on bumper removal.

## Stock Shroud

It is best to cut a hole in the stock radiator shroud. Use the following dimensions for your cut.

**Note:** the image shows a smaller cut than what is outlined in red; follow the red line as the template has been updated





# VELOSSA TECH

## Stock Shroud

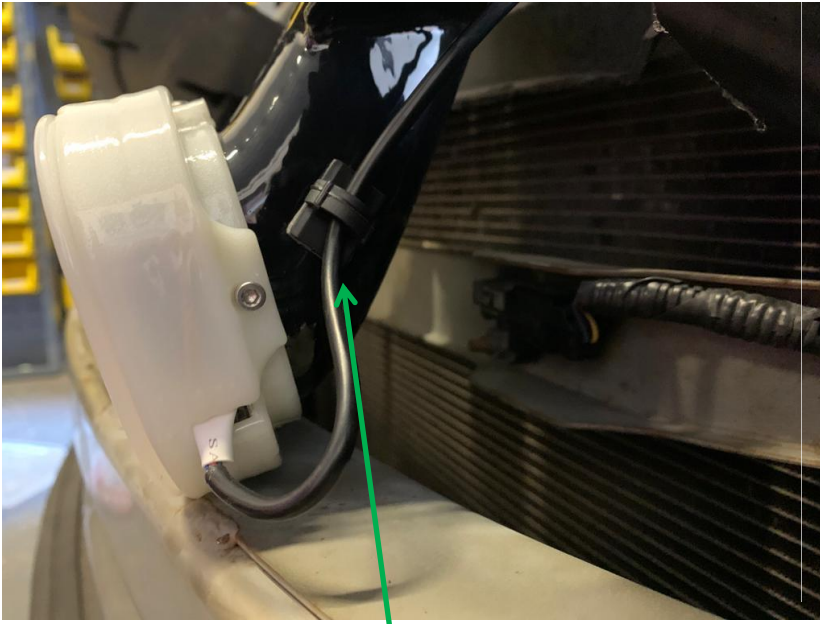




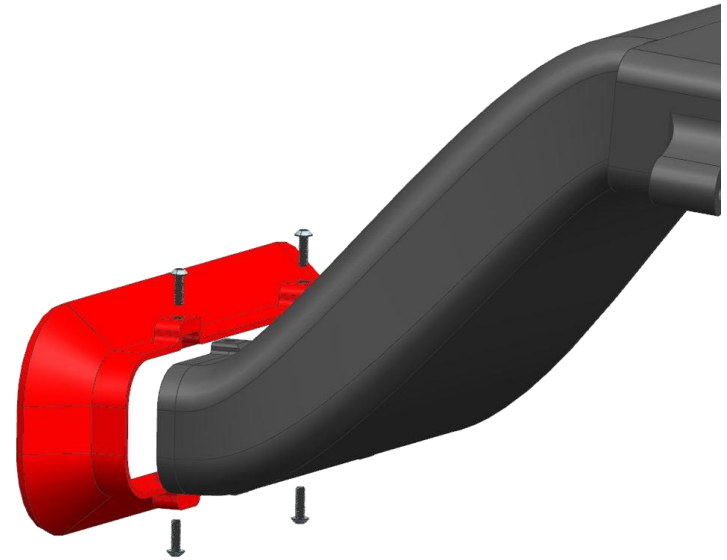
## Install the LIT BIG MOUTH Flare

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.



LED power cable must exit the driver side of the flare once installed!

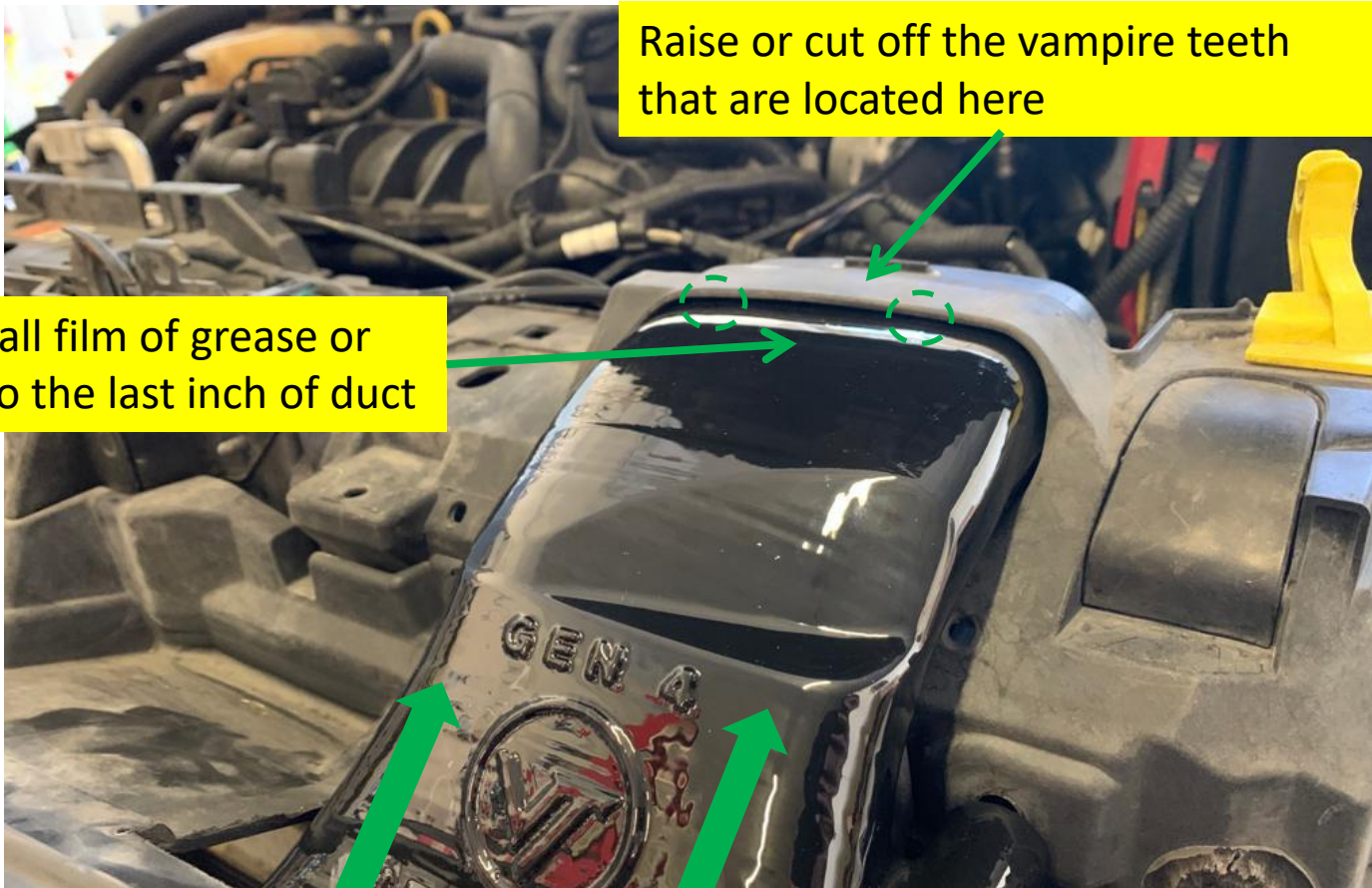


If you purchased a LIT flare-only and already have a Gen 4 BIG MOUTH. Remove old flare and install the LIT flare with the 4 screws as shown.



# VELOSSA TECH

## BIG MOUTH Installation



Raise or cut off the vampire teeth that are located here

Apply a small film of grease or dish soap to the last inch of duct

Keep everything loose, slide the intake into the stock port after it has been lubricated. You may apply light pressure to slide it into the stock gasket.



## BIG MOUTH Installation

This next part will require some patience. Grab the M6 lock nut and have the M6 bolt handy. Line the M6 nut up with the indicated hole by forcing it up against the inner wall of the radiator shroud and pushing up. Once aligned, thread the screw into the nut by hand (only a few turns).



Use caution not to drop the nut, it is best to place a towel or buffer object below your hand.



## BIG MOUTH Installation

Use a 10mm box wrench to keep the nut from rotating while tightening. Try to maintain the position shown for easiest install.

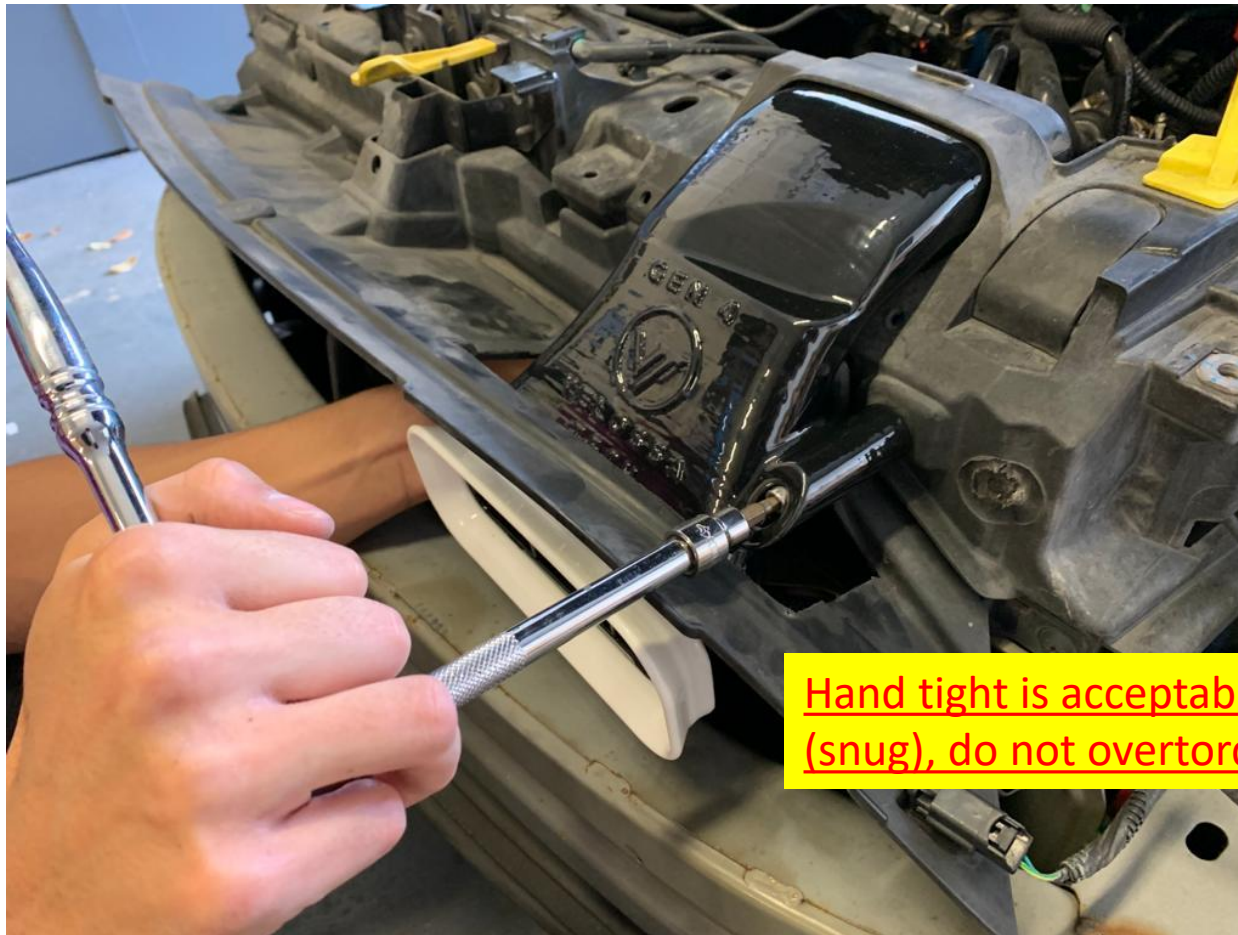


LED power wires must exit from here



## BIG MOUTH Installation

Tighten using a 5mm Allen key while keeping the box wrench in the same position. Be careful not to tighten too much. Snug is fine.



Hand tight is acceptable (snug), do not overtorque.

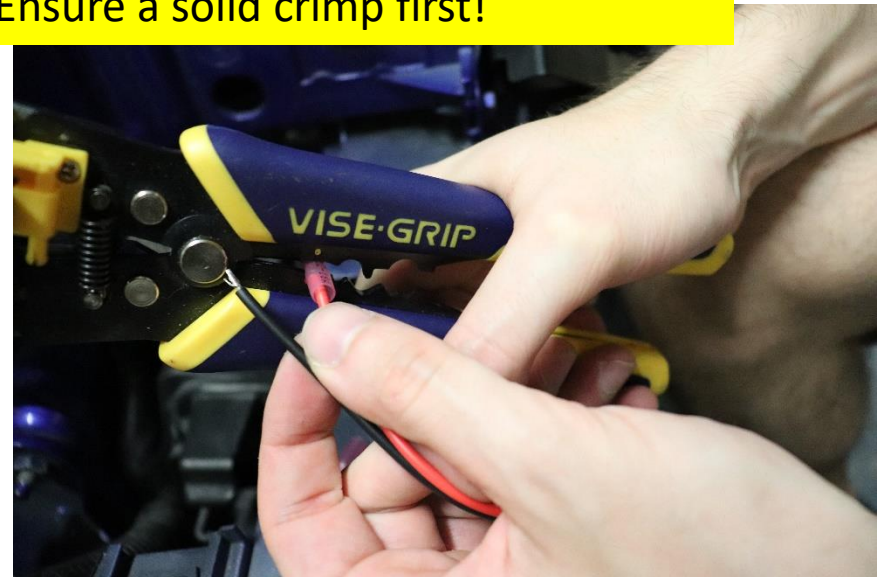
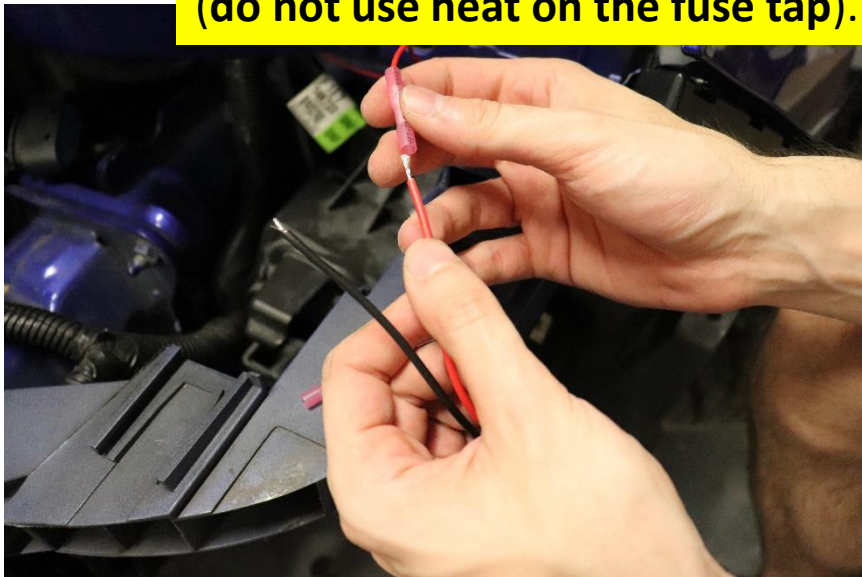
## Wiring the LIT KIT

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**

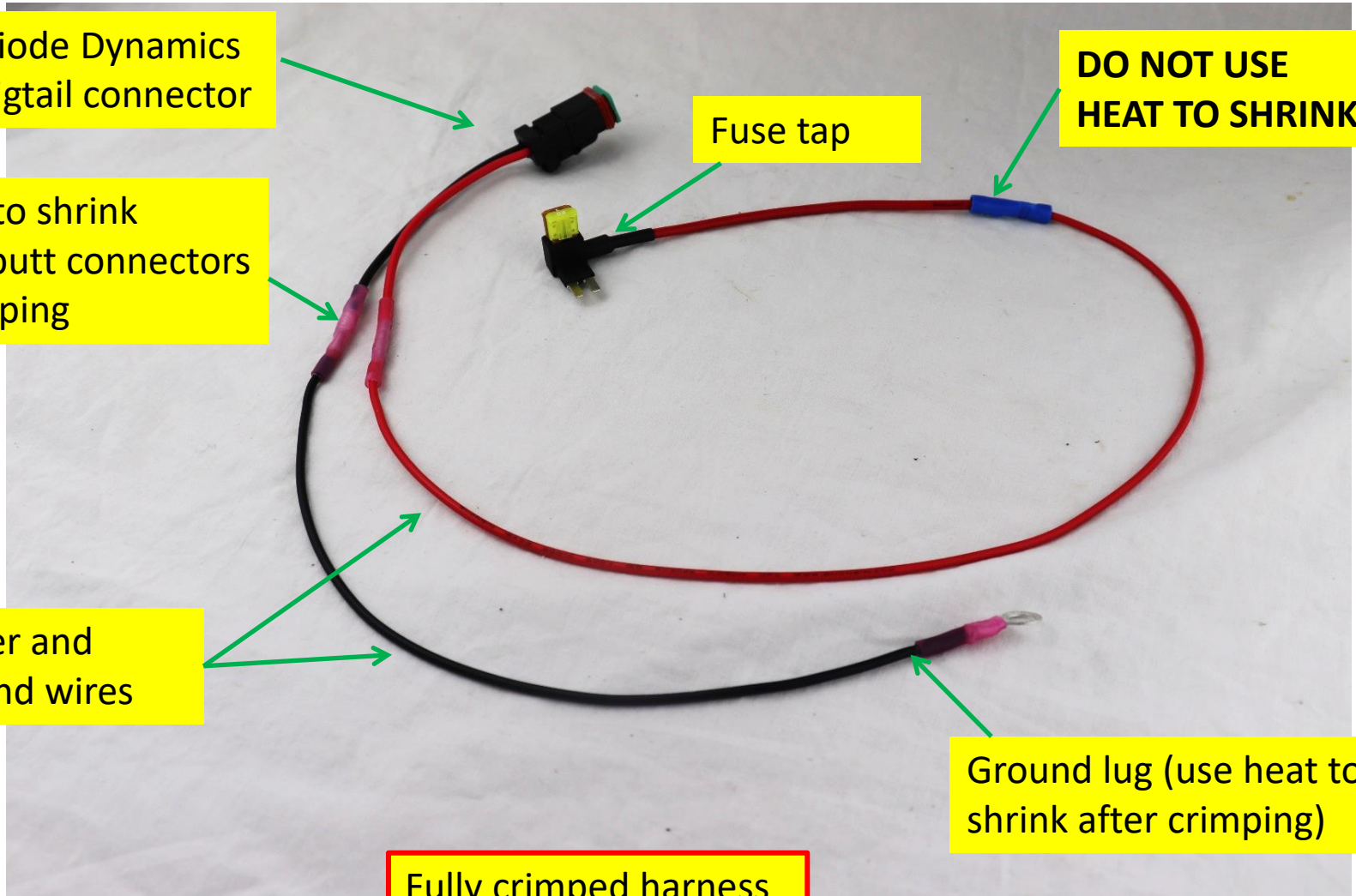
Fuse tap

Use heat to shrink supplied butt connectors after crimping

Power and ground wires

Ground lug (use heat to shrink after crimping)

Fully crimped harness





## Fuse Slots

Open the fuse box in your engine compartment (driver side) and confirm its layout is like that shown in the image.

Choose whether you would like your LIT KIT to have supplied power at all times or only when accessories are on. (You can manually turn off the controller using the Diode Dynamics app).

### Choosing a Fuse

#### (Recommendations)

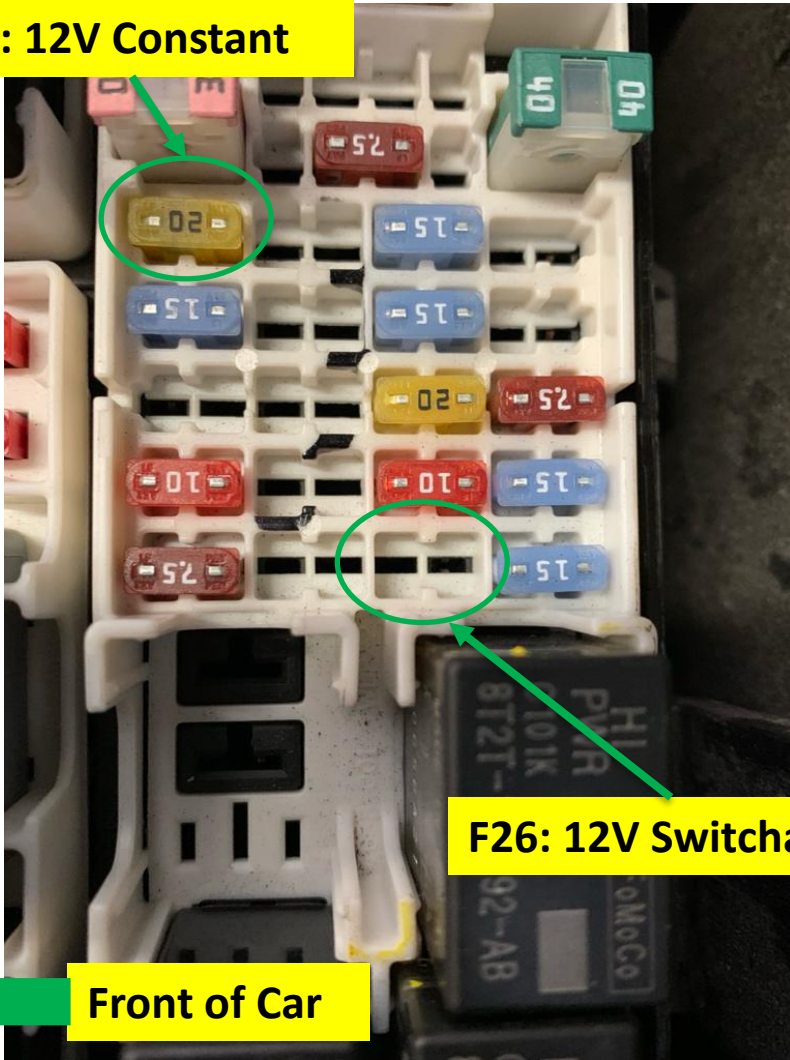
**12V Switchable (Accessories):**

F26

**12V Constant:**

F38 (Horn)

**F38: 12V Constant**



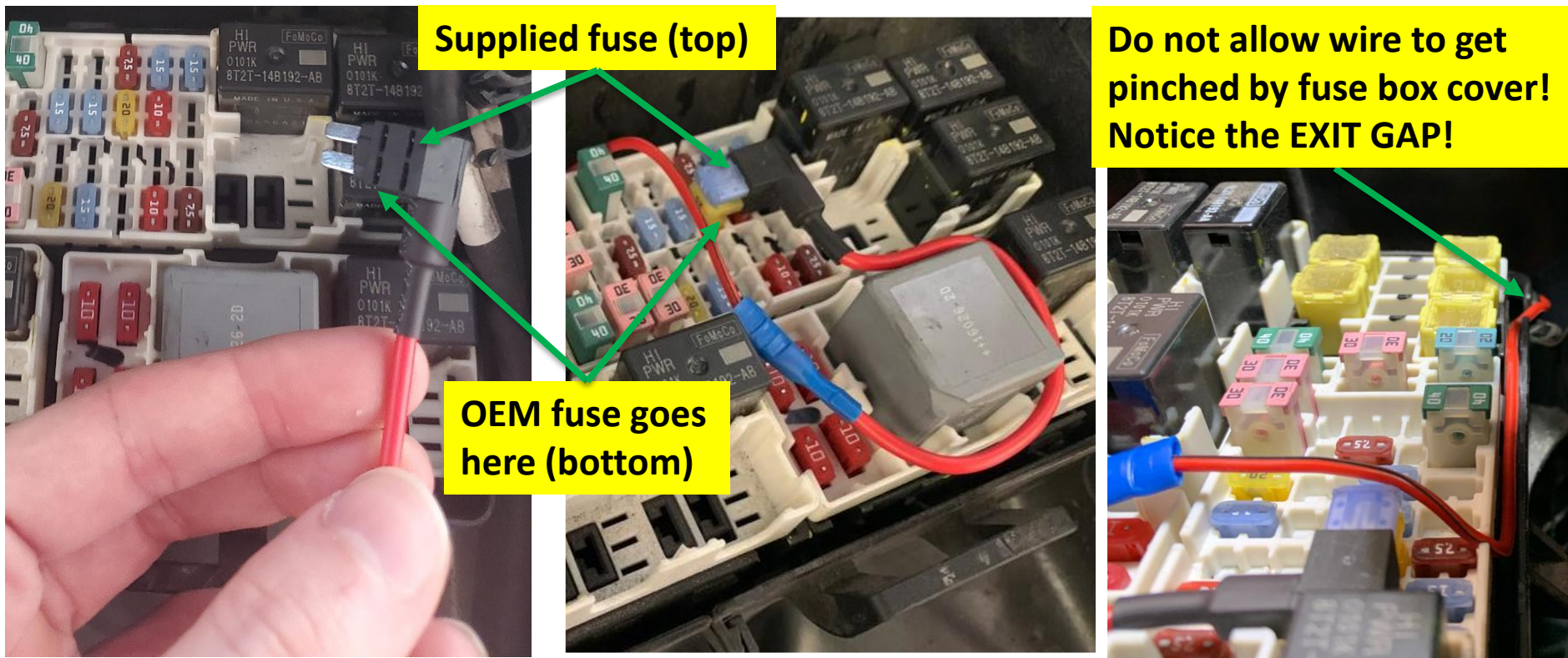
**F26: 12V Switchable**

**Front of Car**

## Power the LIT KIT

Once you have chosen a fuse to tap, pull it out and place the OEM fuse in the **bottom slot** of the fuse tap. Place the LIT KIT supplied fuse in the **top slot**. Plug the fuse tap into the slot of the original fuse.

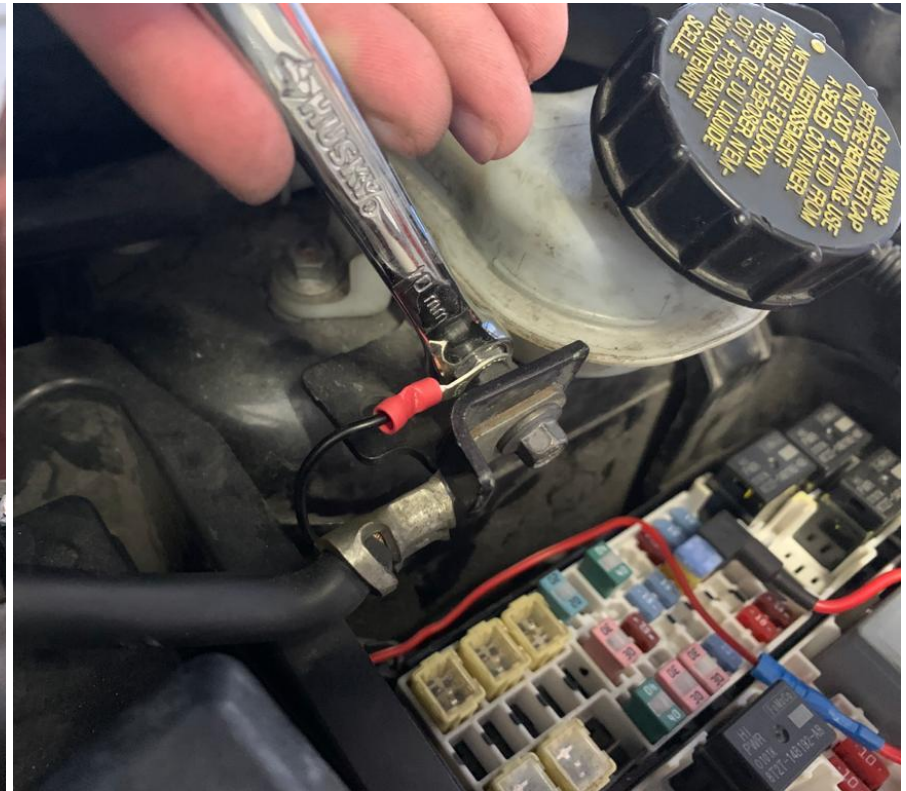
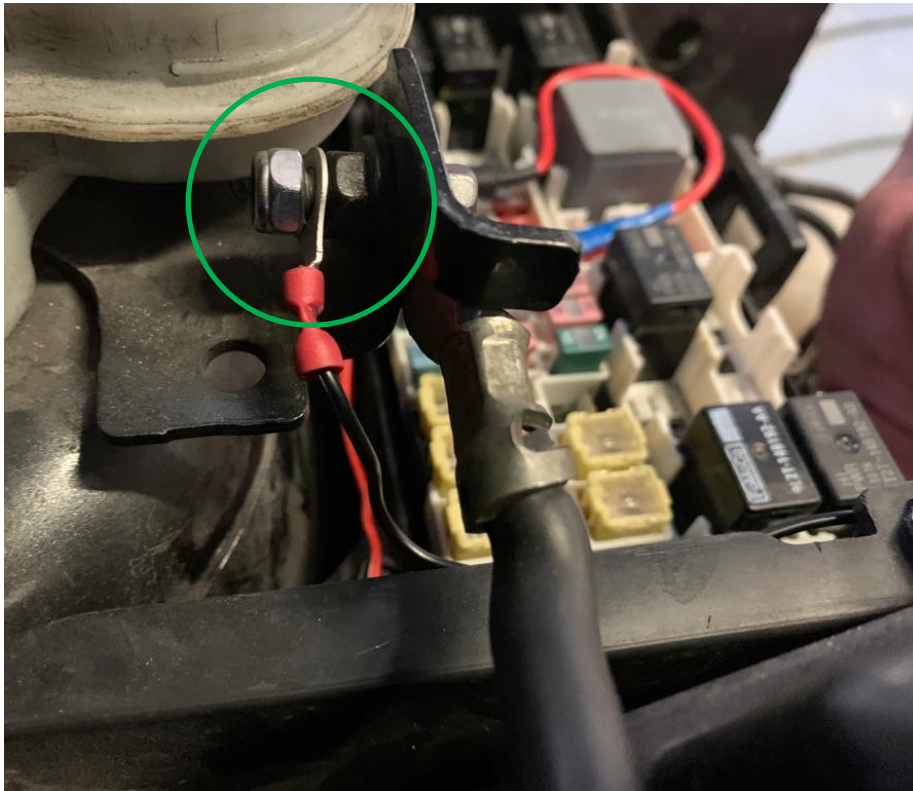
Manage the wire such that it does not go through any sharp turns or kinks. **Have the power wire exit the fuse box through the back of fuse box** as shown in the image.



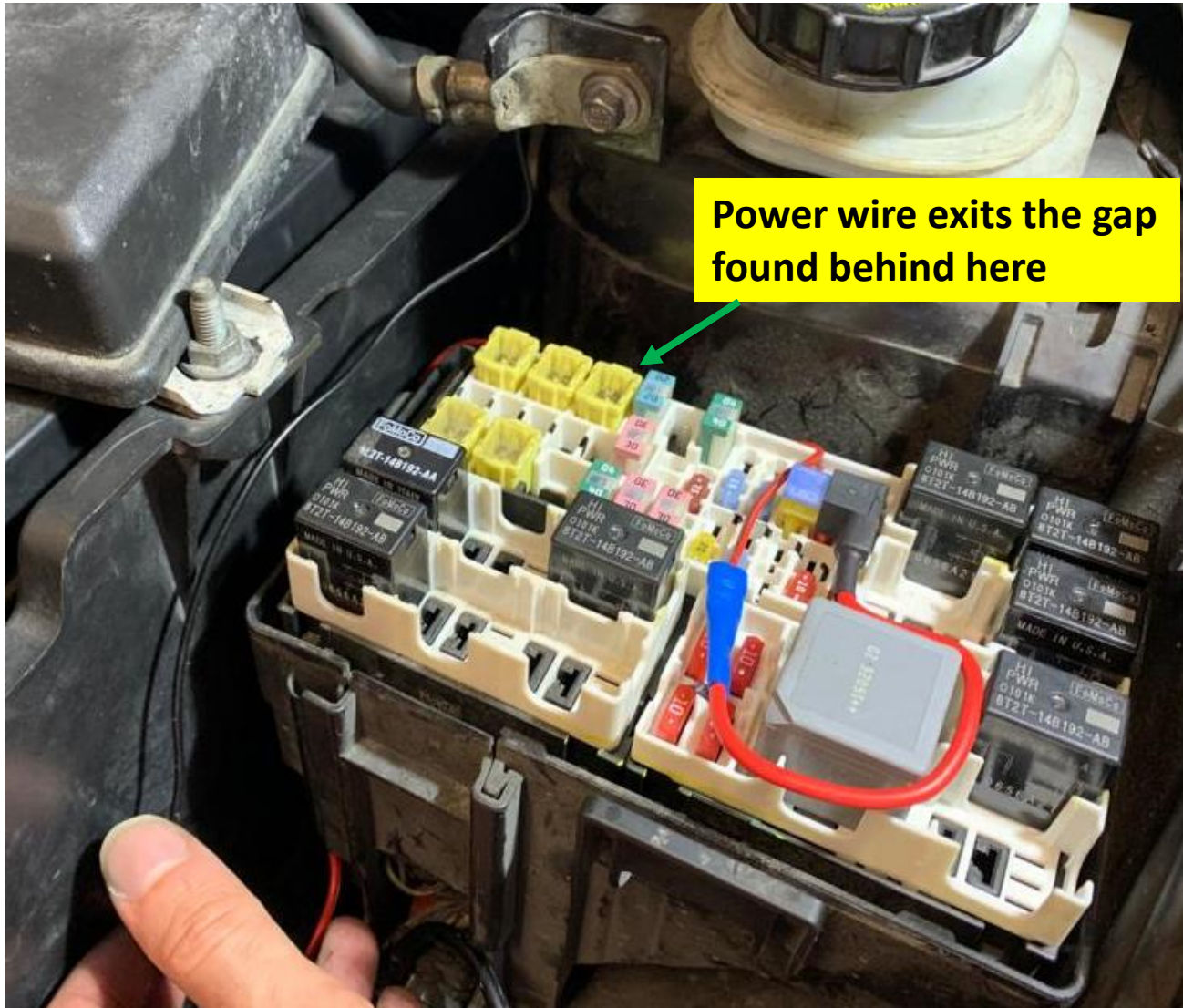


## Wiring the LIT KIT

Ground the circuit at the location shown below. Use the supplied M6 lock nut and a 10mm box wrench to fasten the ring terminal to the back of the bolt as shown.



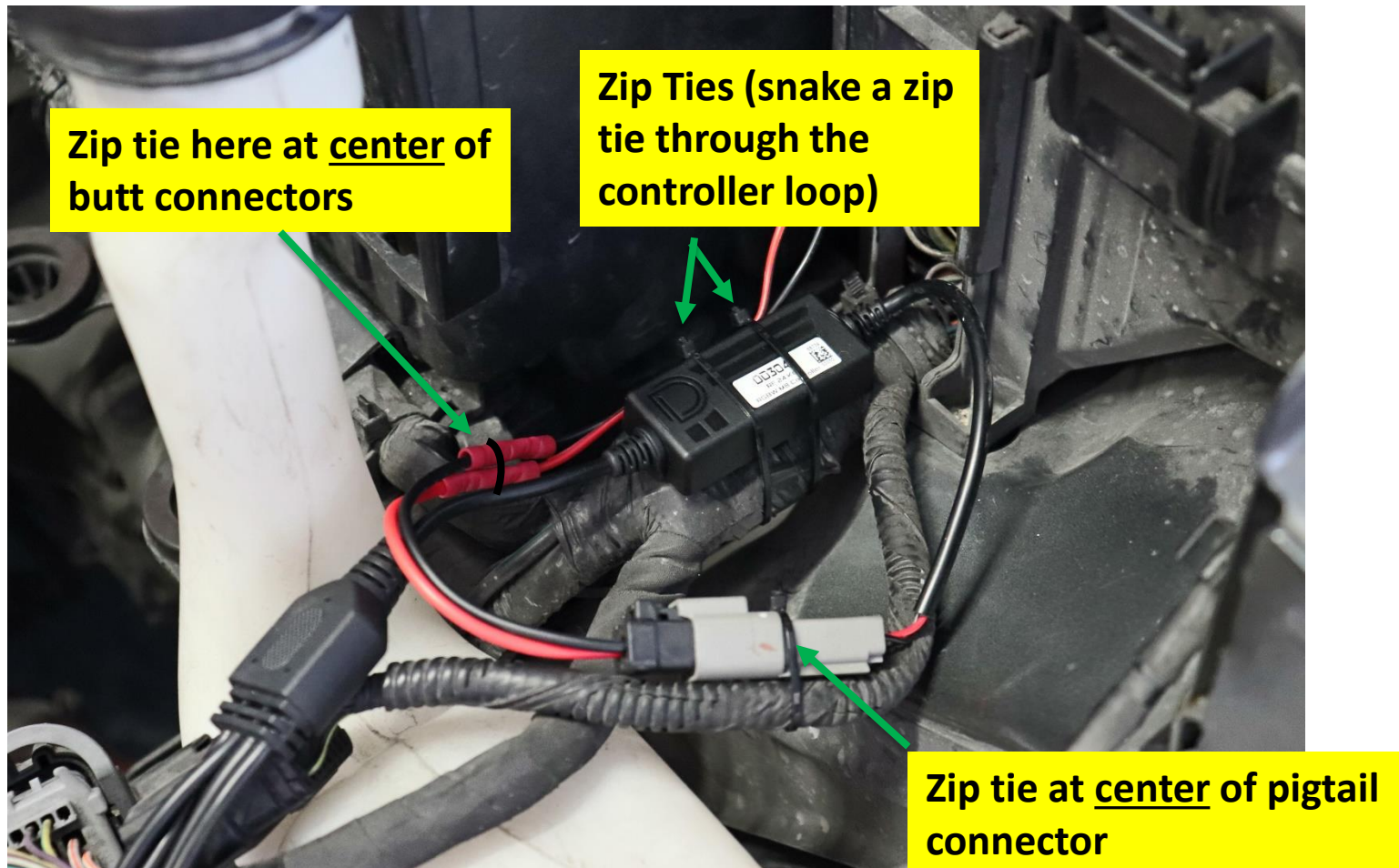
## Wire Management





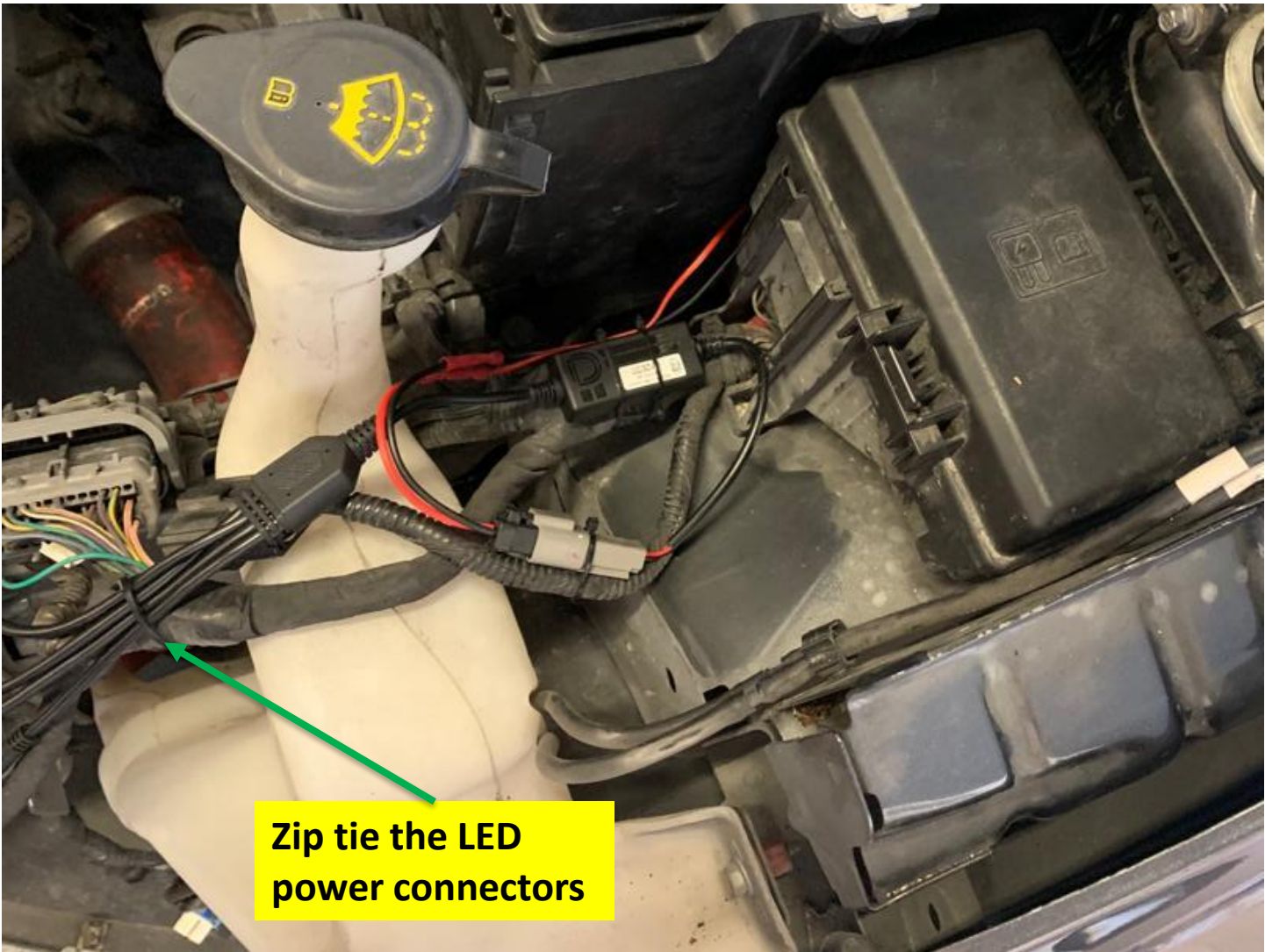
## Wire Management

Removing the stock airbox is required for this step. Removing the driver side headlight is not required but it is advisable in order to gain access to our recommended tie-down spots.



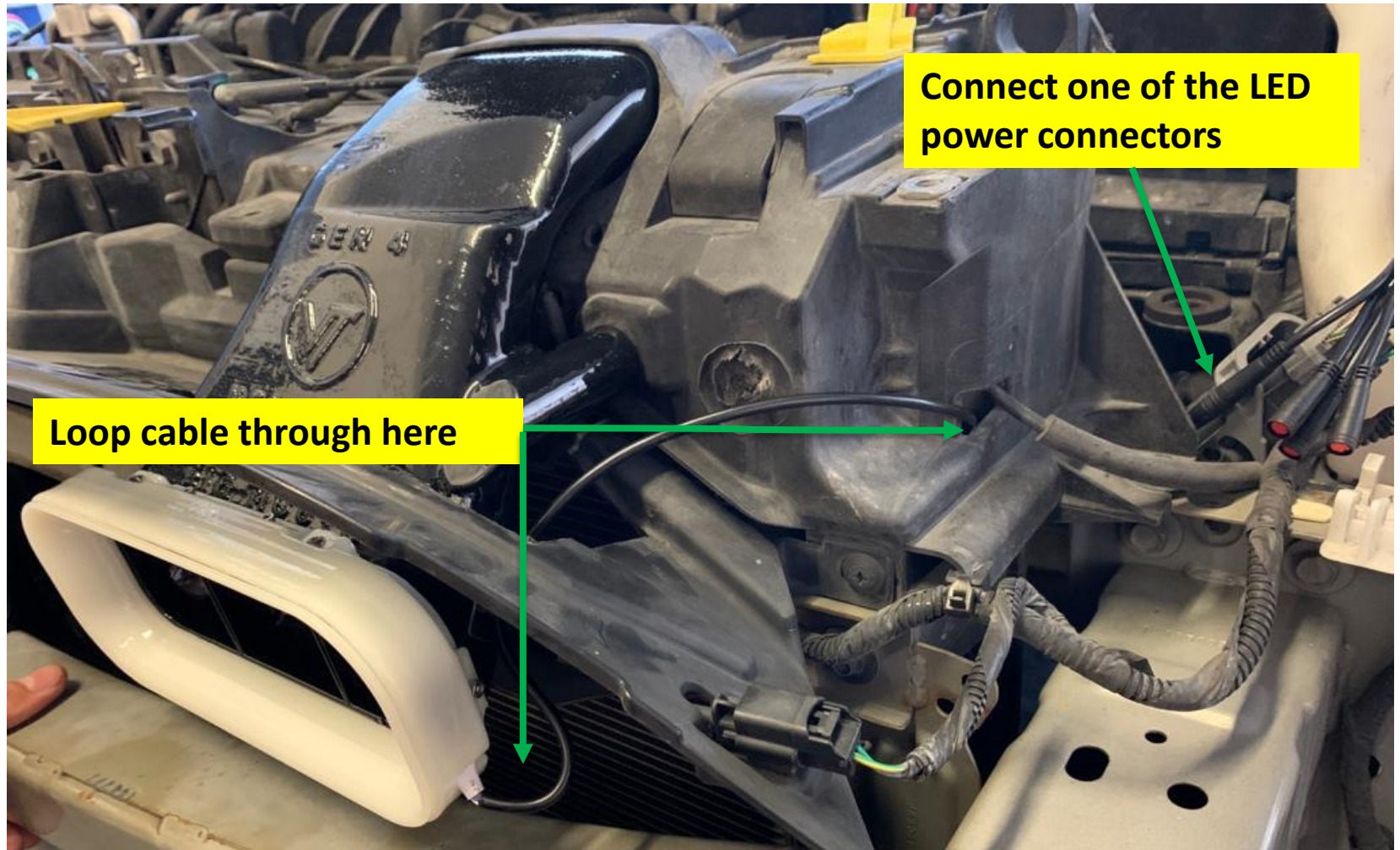


## Wire Management



**Zip tie the LED  
power connectors**

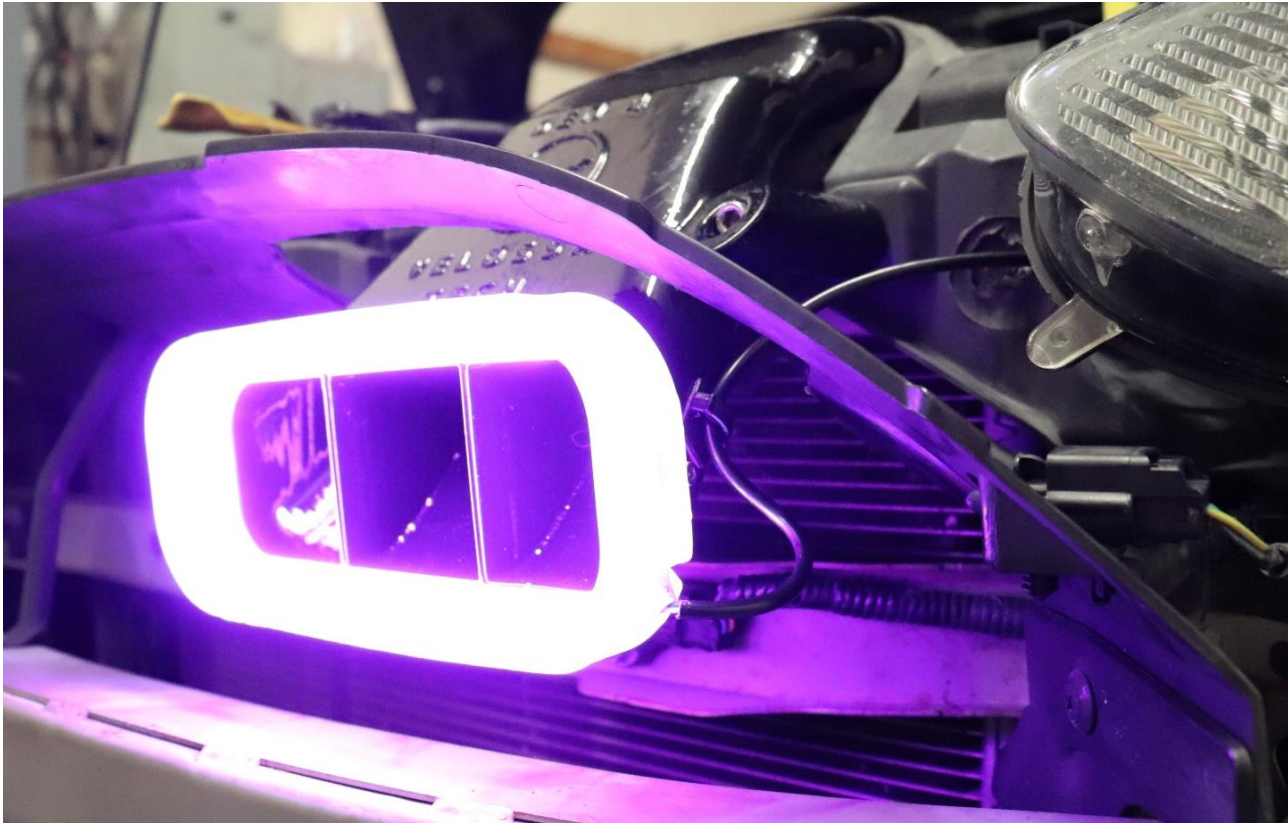
## Wire Management





## Phone App

Download the Diode Dynamics app and connect via Bluetooth.  
Re-install the bumper in the reverse order and installation is complete.



# VELOSSA TECH

