VELOSSA TECH

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
Diode Dynamics RGBW Controller	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Pigtail Connector	1
8" Zip Ties	8
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
Diode Dynamics RGBW Controller	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Pigtail Connector	1
8" Zip Ties	8
Cable Clips	1
Assembled LIT 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.

VELOSSA TECH

Stock Shroud Trimming

It is best to cut a hole in the stock radiator shroud. Use the following images for your cut. It doesn't need to be perfect, just ensure the big mouth isn't binding against the shroud too much.
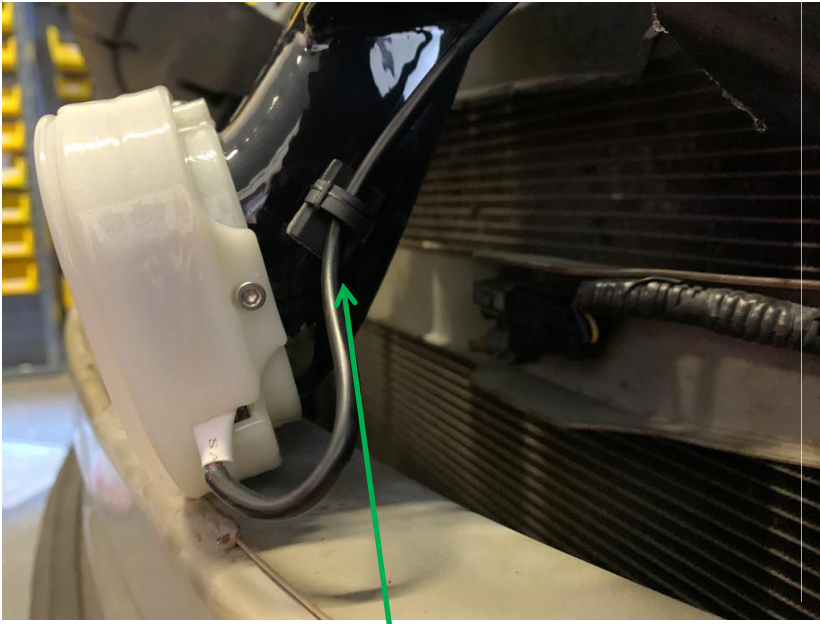

Cut a slight hump here

VELOSSA TECH
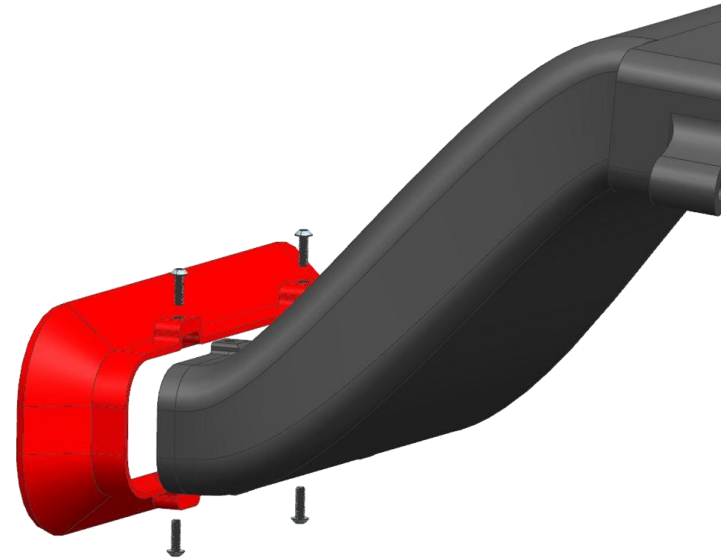## Stock Shroud Trimmed

Install the LIT BIG MOUTH Flare

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

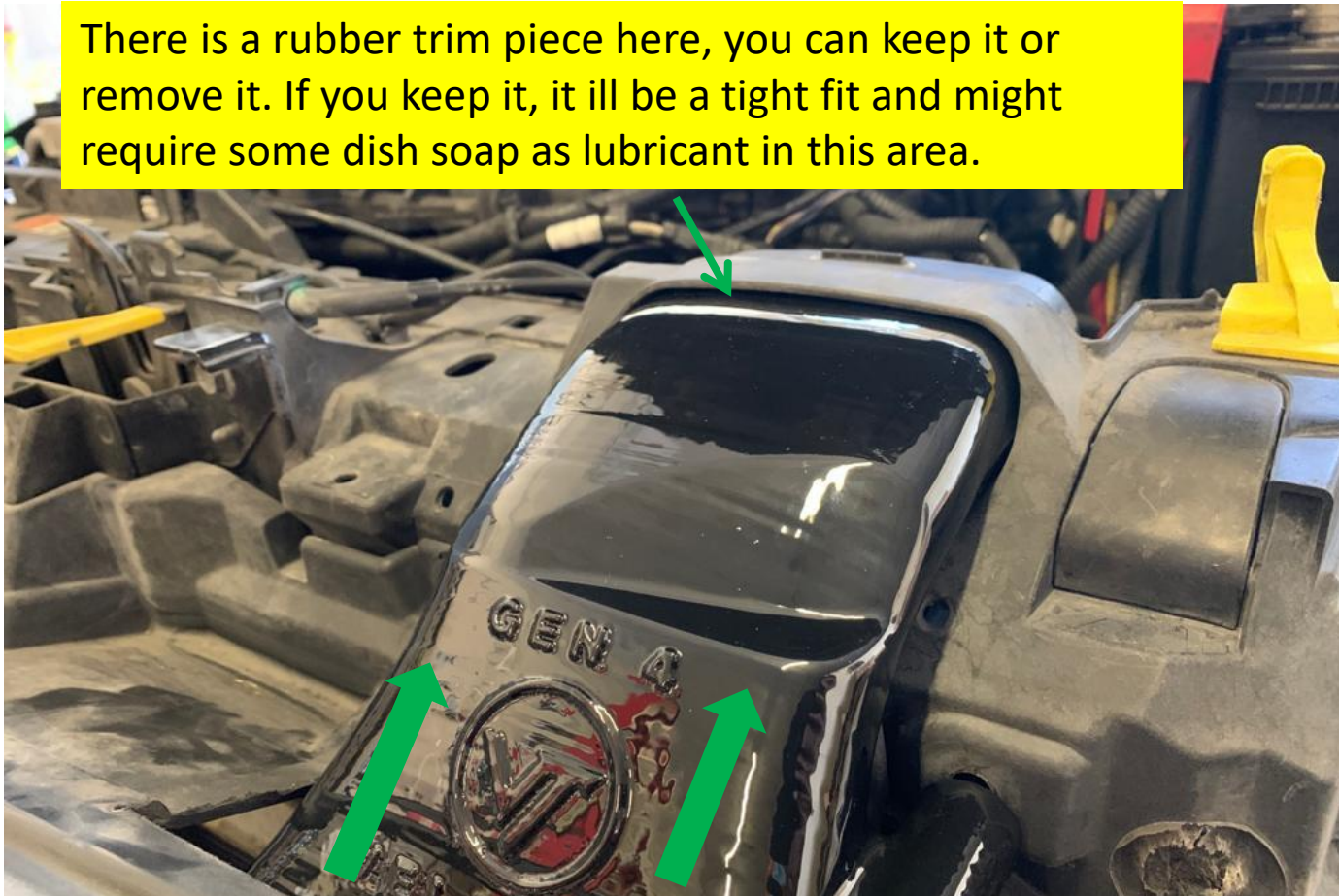**LED power cable must exit the <u>driver side</u> of the flare once installed!**

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

There is a rubber trim piece here, you can keep it or remove it. If you keep it, it ill be a tight fit and might require some dish soap as lubricant in this area.

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).
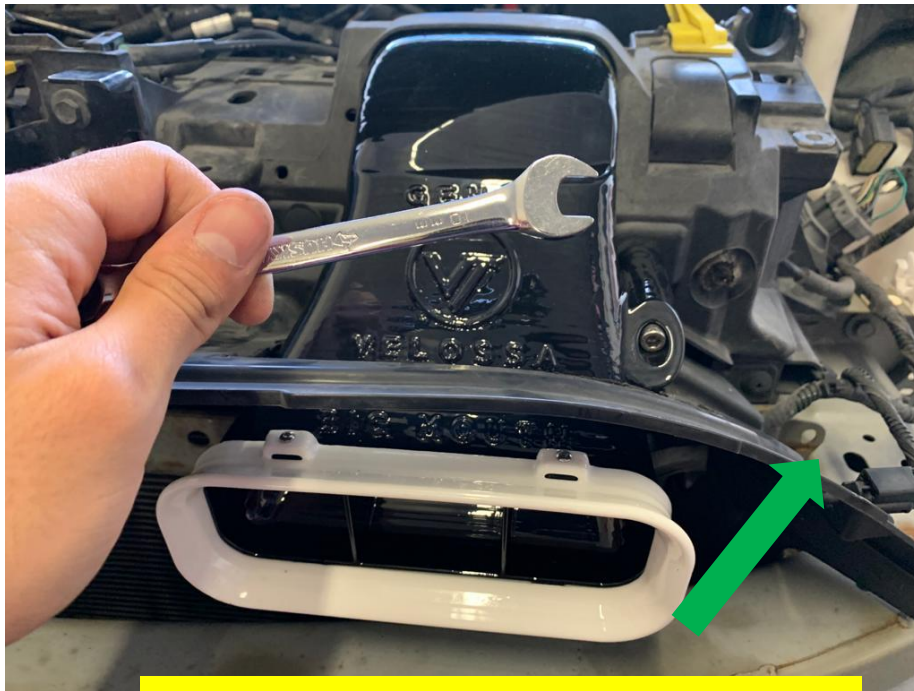

<u>Use caution not to drop the nut</u>, it is best to place a towel or buffer object below your hand.

VELOSSA TECH

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 ill exit from here.

VELOSSA TECH

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.
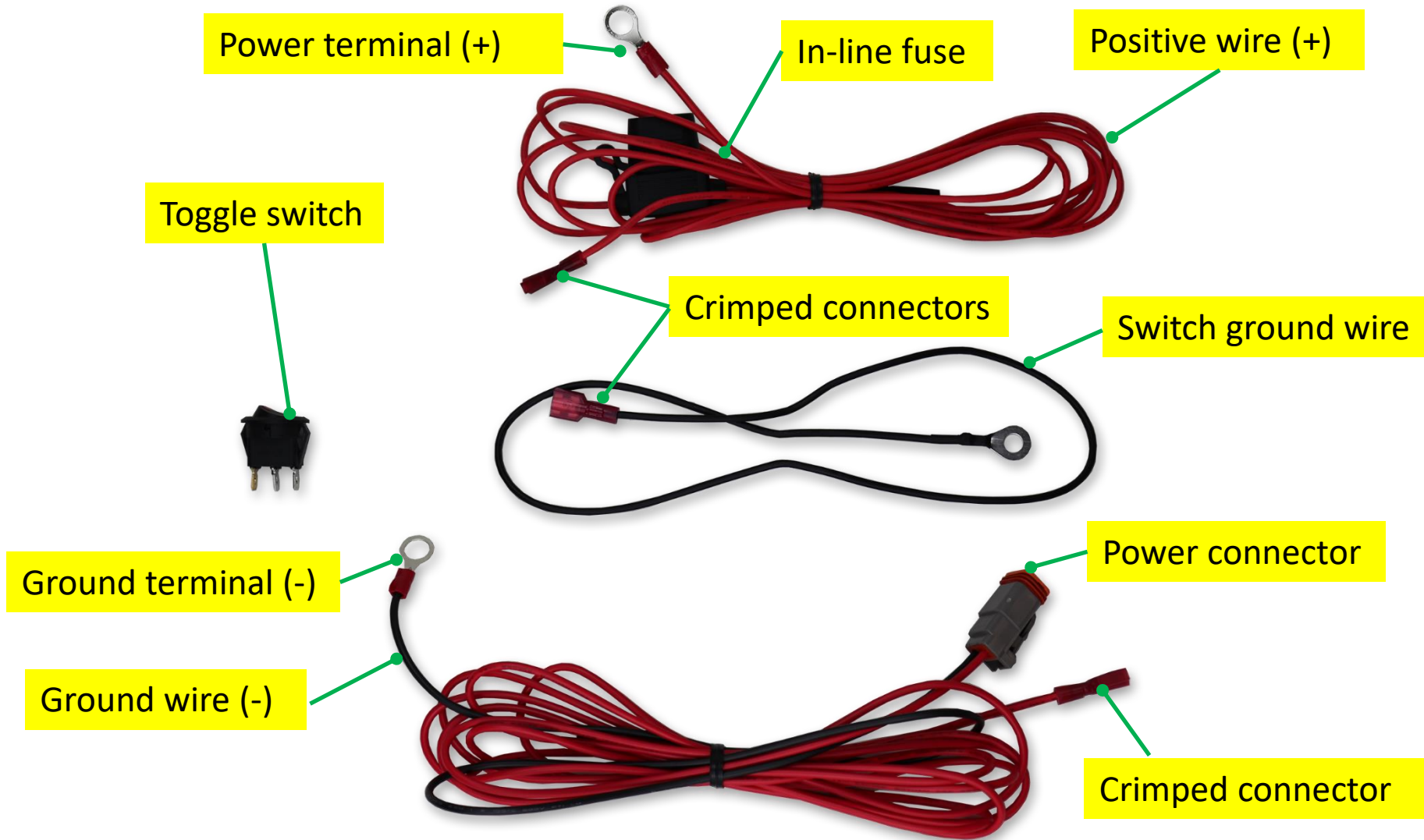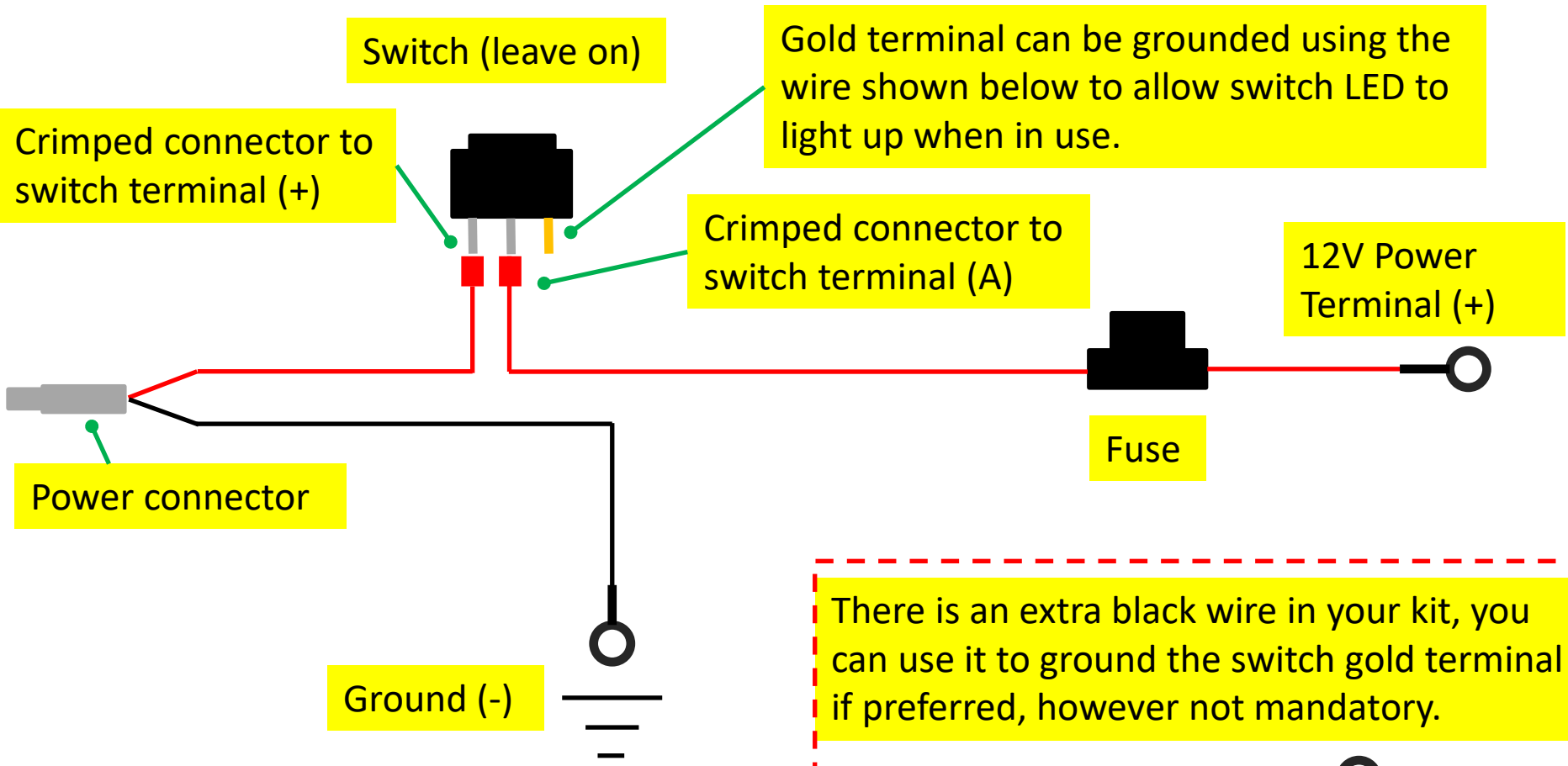

Hand tight is acceptable (snug), do not overtorque.

Wiring Harness

Power terminal (+)

In-line fuse

Positive wire (+)

Toggle switch

Crimped connectors

Switch ground wire

Ground terminal (-)

Power connector

Ground wire (-)

Crimped connector

VELOSSA TECH

Wiring Harness Schematic

Switch (leave on)

Gold terminal can be grounded using the wire shown below to allow switch LED to light up when in use.

Crimped connector to switch terminal (+)

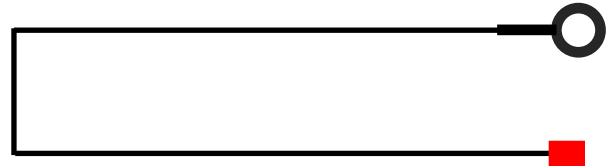Crimped connector to switch terminal (A)

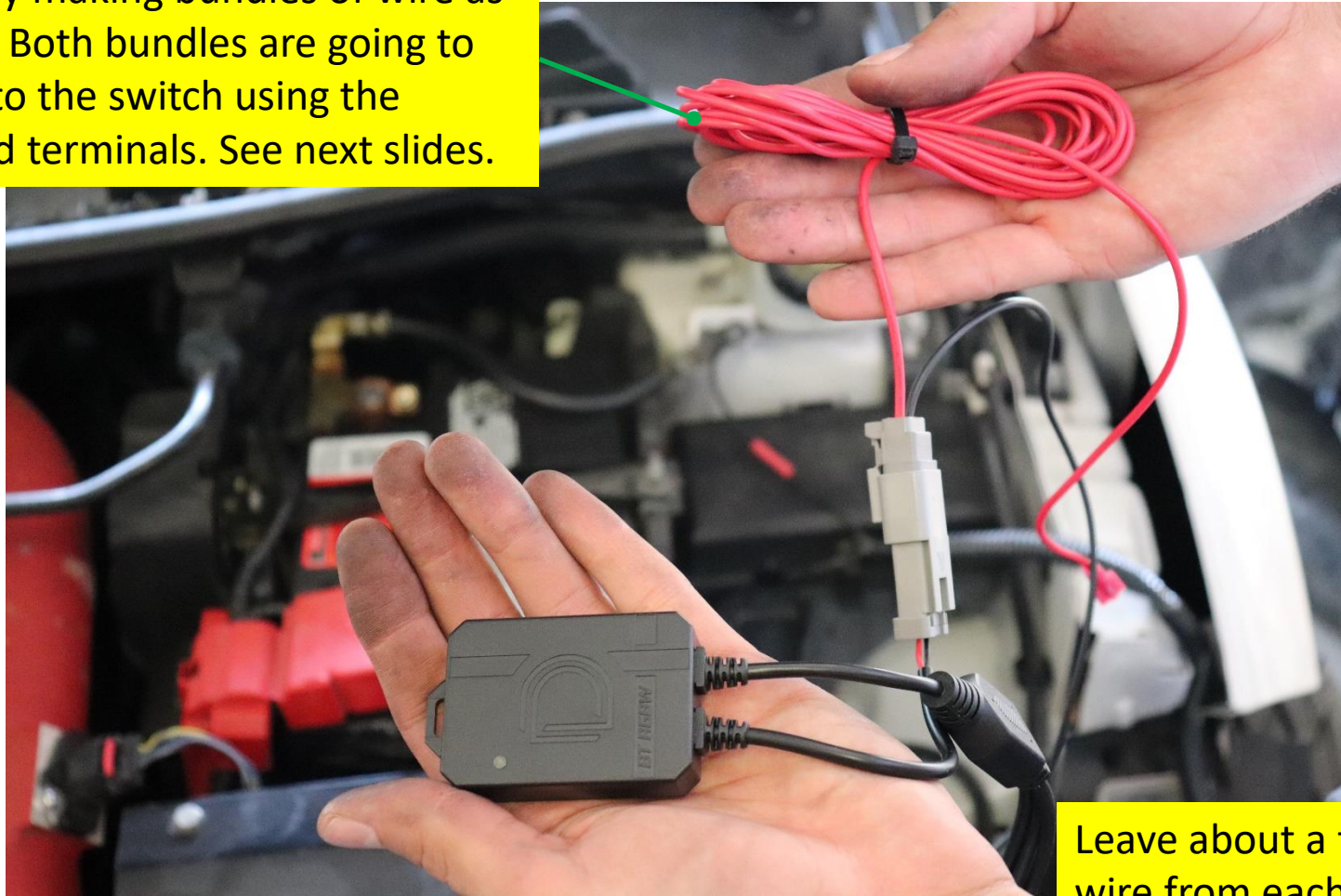12V Power Terminal (+)

Fuse

Power connector

Ground (-)

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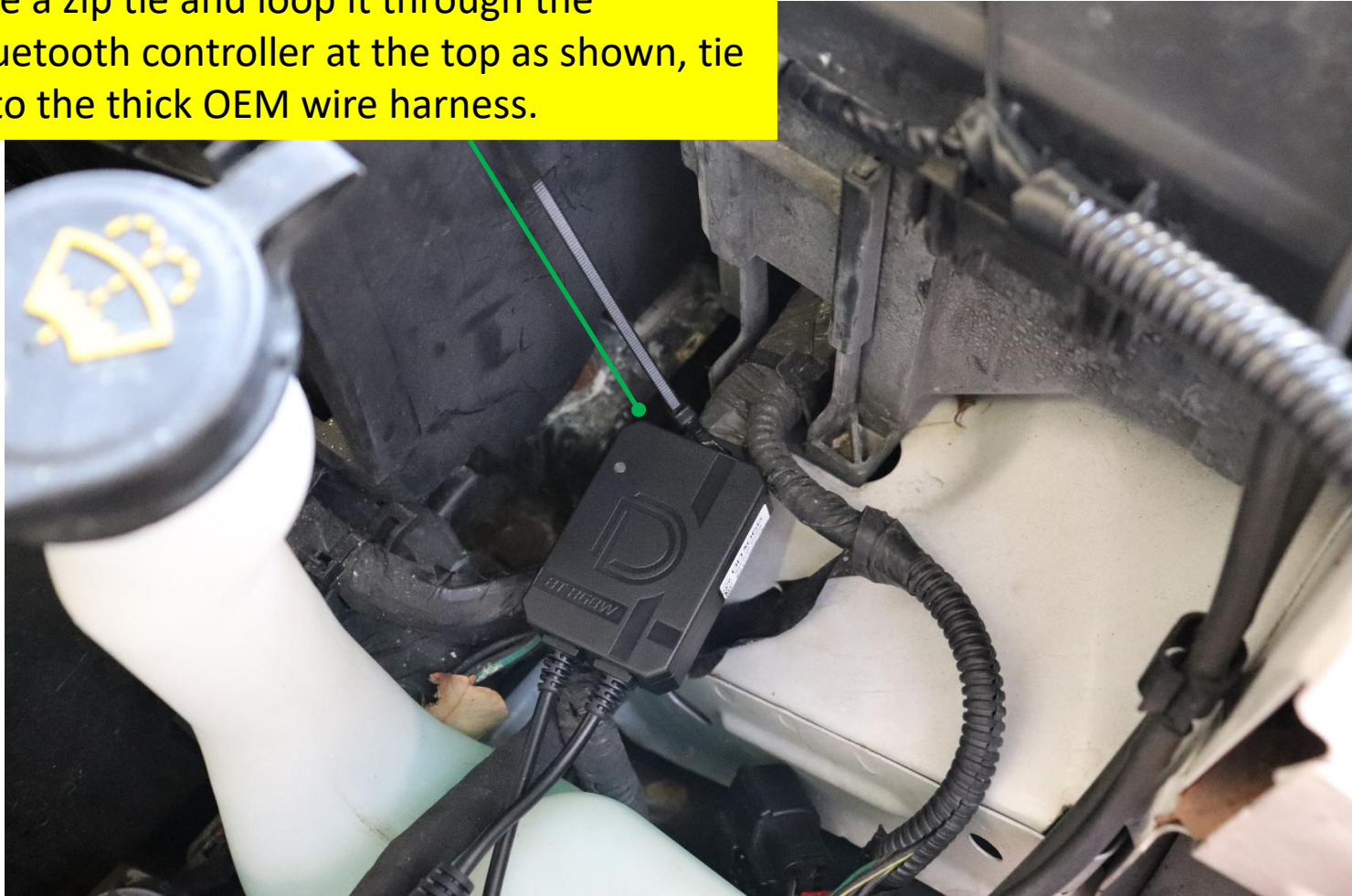
![VELOSSA TECH logo]

Wire Management

Leave about a foot of wire from each bundle.

Wire Management

Use a zip tie and loop it through the Bluetooth controller at the top as shown, tie it to the thick OEM wire harness.
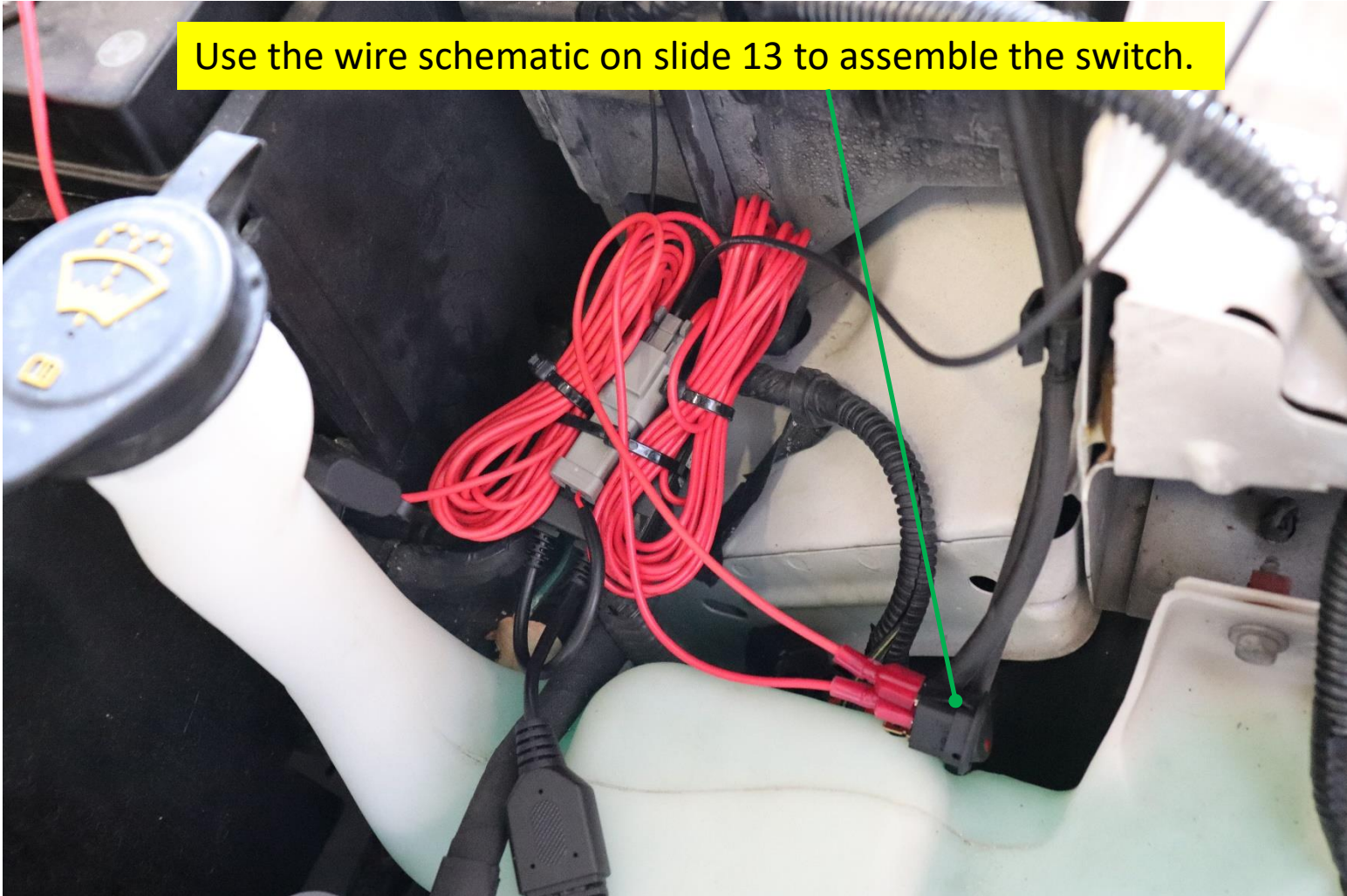
VELOSSA TECH

Wire Management

The two bundles of power wire will be zip tied separately first. Then, they will be zip tied to the controller around the thick OEM wire harness. If you find it hard to secure the zip tie, go through the bundles with the zip tie instead of over them. See picture.

There are a total of 4 zip ties in this picture, 1 for each separate bundle packet and 2 zip ties to fasten the controller and bundles together around the OEM thick harness.
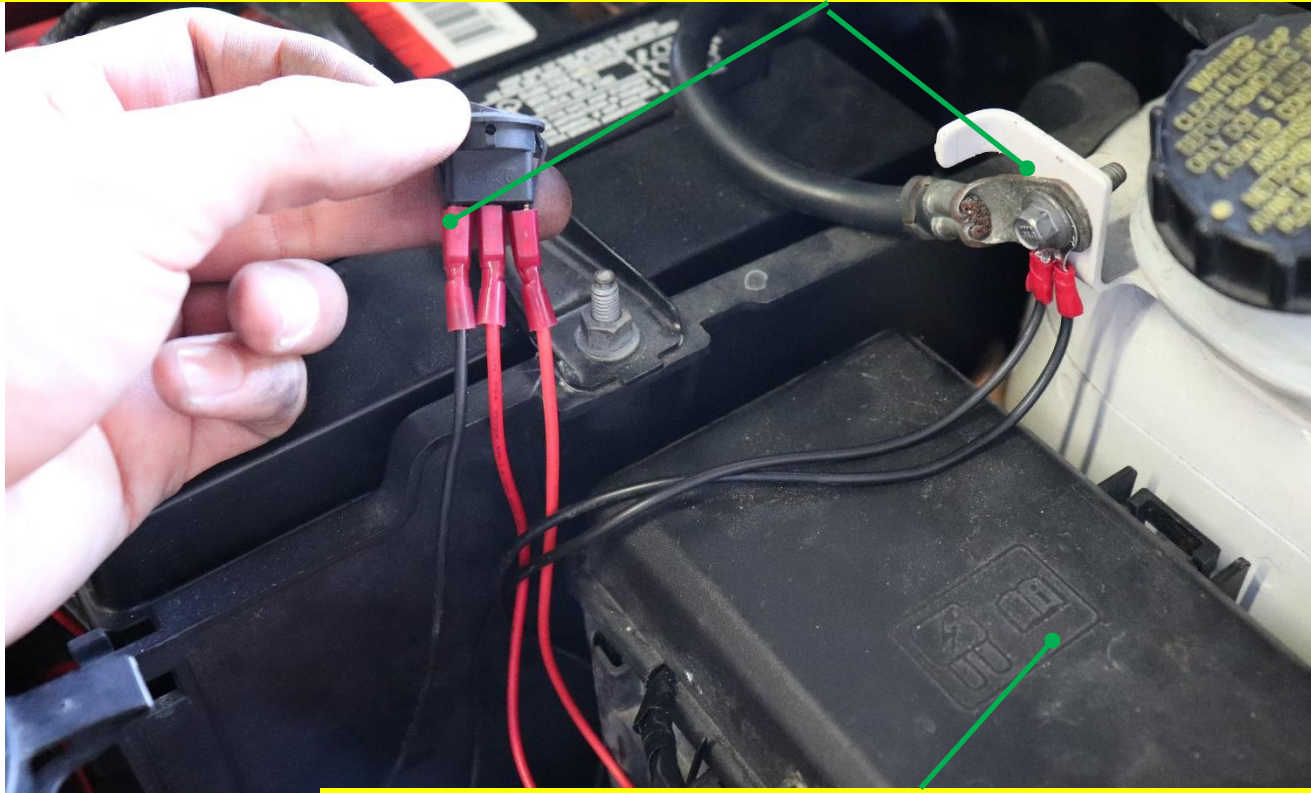
Wire Management

Use the wire schematic on slide 13 to assemble the switch.

Wire Management

You may ground everything to this OEM bolt. You may optionally ground the switch with the small black wire included in the kit, although not mandatory (grounding the switch allows the small LED to light up on the switch when it is on).

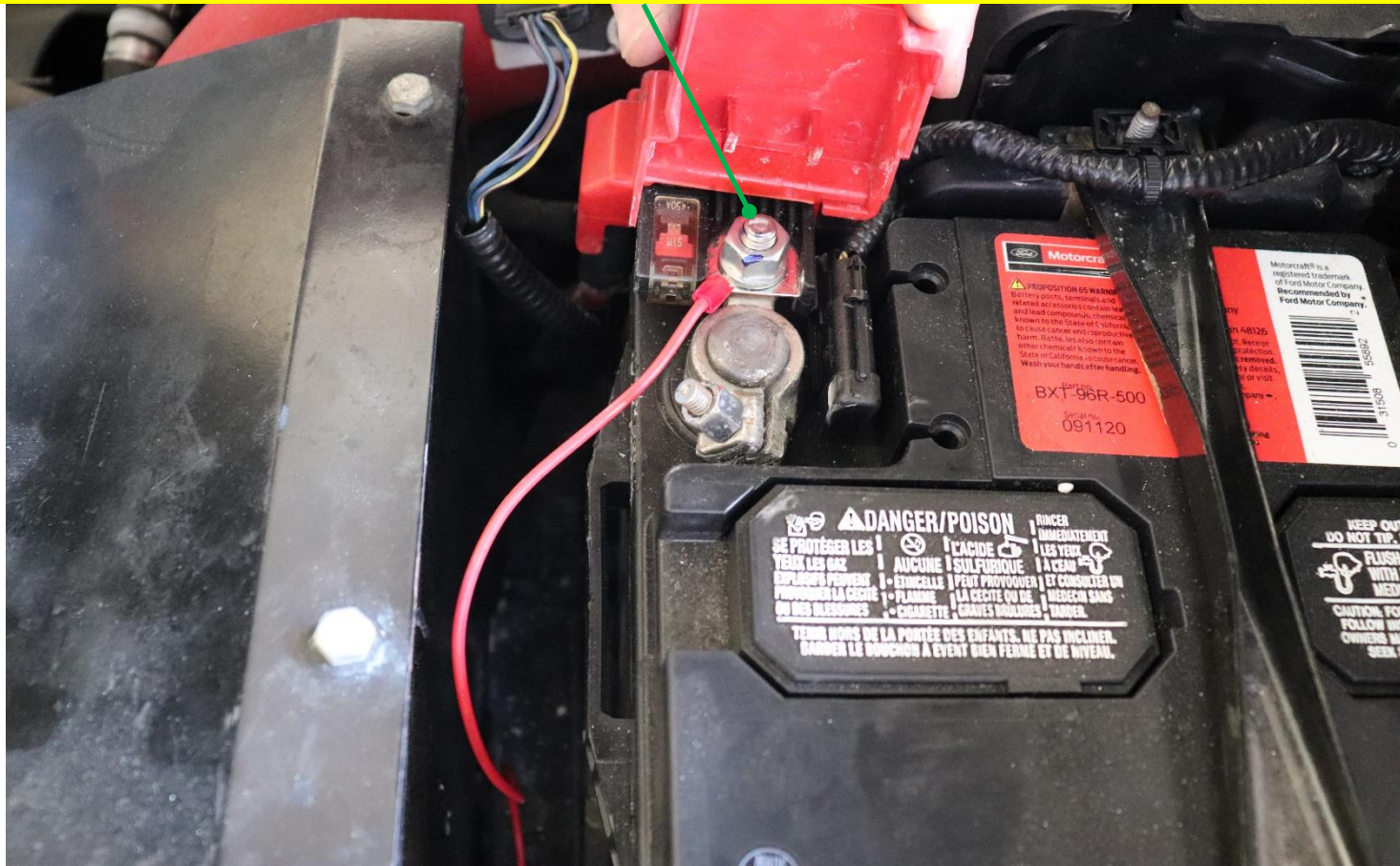Use the wire schematic on slide 13 to assemble the switch.

Wire Management

Plug in the LED power cable into one of the four ports on the controller, the other three ports can be used for other Diode Dynamics products.

Zip tie here.

Wire Management

Wire Management

You can tuck the switch into this gap as shown; or mount it elsewhere.

VELOSSA TECH

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.

VELOSSA TECH

Finalize

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