



**2017-2020+ Infiniti Q50/Q60 Redsport
GEN 4 BIG MOUTH LIT KIT Intake
Installation Guide**

Kit Contents (Q50 Full Kit)

Please review this 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 30mm SHCP	4
M6 x 40mm SHCP	2
M6 Large Washers	10
M6 Lock Nuts	6
L-Bracket	1
M5 x 12mm SHCP	1
M5 Large Washer	1
M5 Lock Washer	1
M5 Lock Nut	1
Foam strip (1")	1
Pair of Orientation Blocks ("F" and "B")	1
VT Aluminum Bracket	1
Diode Dynamics RGBW Controller	1
Diode Dynamics 1m LED Extension	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Pigtail Connector	1
Cable Clips	1
8" Zip Ties	2
16" Zip Ties	2
Assembled LIT KIT BIG MOUTH's	2



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Kit Contents (Q60 Full Kit)

Please review this 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 30mm SHCP	4
M6 x 40mm SHCP	2
M6 Large Washers	10
M6 Lock Nuts	6
L-Bracket	1
M5 x 12mm SHCP	1
M5 Large Washer	1
M5 Lock Washer	1
M5 Lock Nut	1
Foam strip (1")	1
Pair of Orientation Blocks ("F" and "B")	1
VT Aluminum Bracket	1
Diode Dynamics RGBW Controller	1
Diode Dynamics 1m LED Extension	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Pigtail Connector	1
Cable Clips	1
8" Zip Ties	2
16" Zip Ties	2
Assembled LIT KIT BIG MOUTH's	2



Kit Contents (LIT Flares Only)

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

KIT CONTENTS	Qty
Diode Dynamics RGBW Controller	1
Diode Dynamics 1m LED Extension	1
Positive Cable w/ In-Line Fuse	1
Power Cable w/ Pigtail Connector	1
Switch	1
Switch Ground Cable w/ Pigtail Connector	1
Cable Clips	3
8" Zip Ties	2
16" Zip Ties	2
Assembled LIT Flares	2



If you already own the GEN 4 Kia Stinger BIG MOUTH's, skip ahead to slide 18 for wiring instructions



Bumper Removal

Perform a YouTube Search using the term “How To Remove Your Infiniti Q50's Front Bumper Properly” and follow the steps for bumper removal.

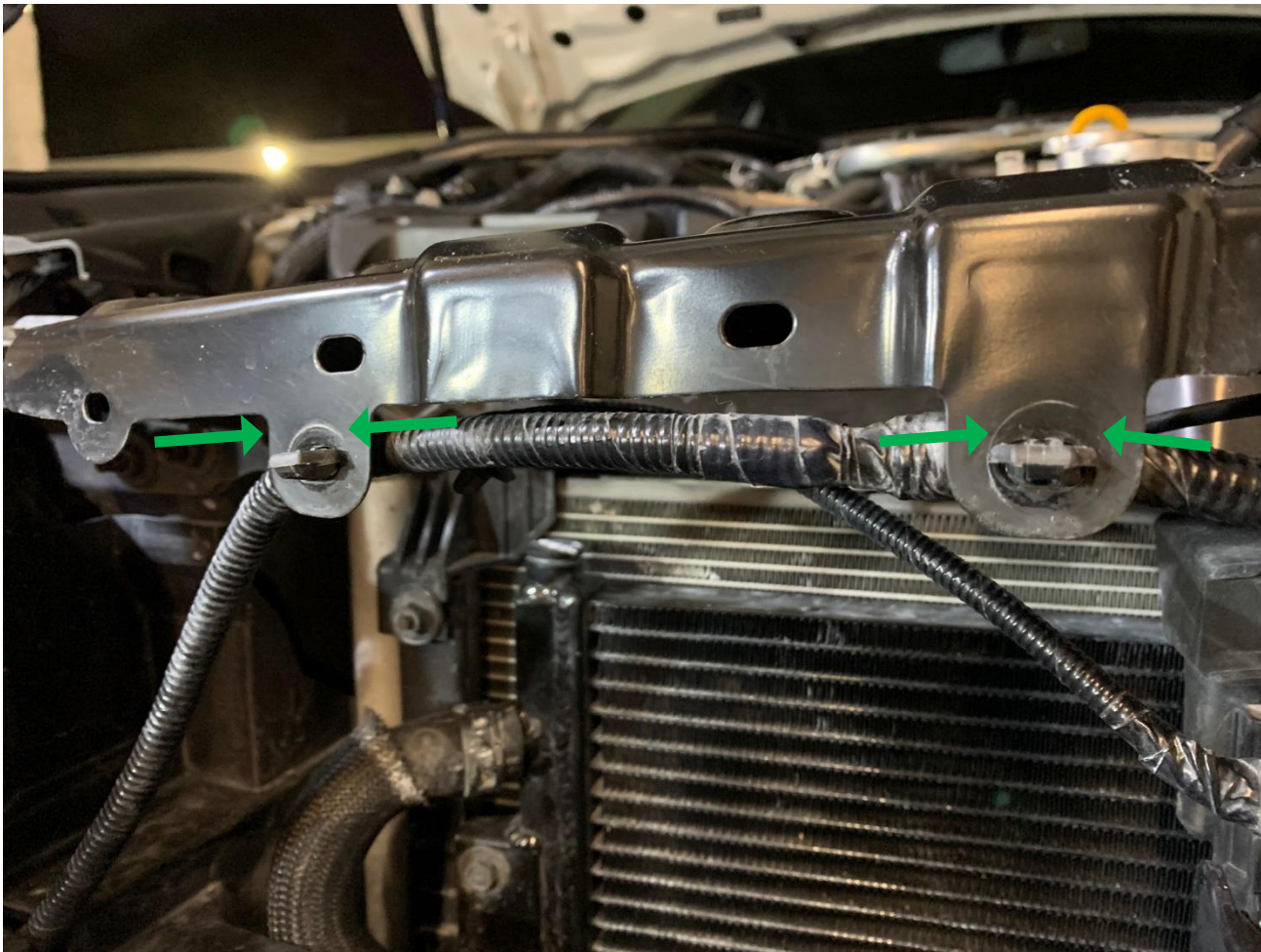
Once you remove the bumper, please continue with this installation guide



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Retainer Clip Removal

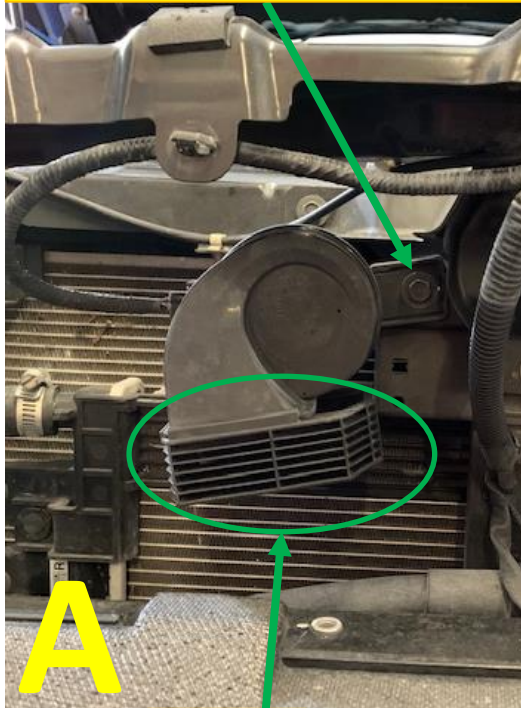
Pinch the wire loom retainer clips as shown and remove the wire looms from the metal frame. Do this to both sides.



Horn Reorientation (Q50 RS Only)

If your OEM horn looks like the one in (A), horn will need to be rotated. Remove bolt, loosen the central nut and rotate it 90° so the shield is pointing opposite the mounting bracket. If your OEM horn looks like the one in (B), simply remove the bolt.

Remove bolt (10mm)



Shield

The final position of the OEM horn mount is shown below.



Loosen nut, rotate to this position, then tighten nut.

Remove bolt, do not rotate horn



Not shielded

Horn Reorientation (Q50 RS Only)

Use the supplied M5 hardware to fasten the L-Bracket as shown below. Tighten the lock nut to a torque spec of 50 in-lb. **Place 2 large M6 washers behind bracket** and reuse OEM bolt.

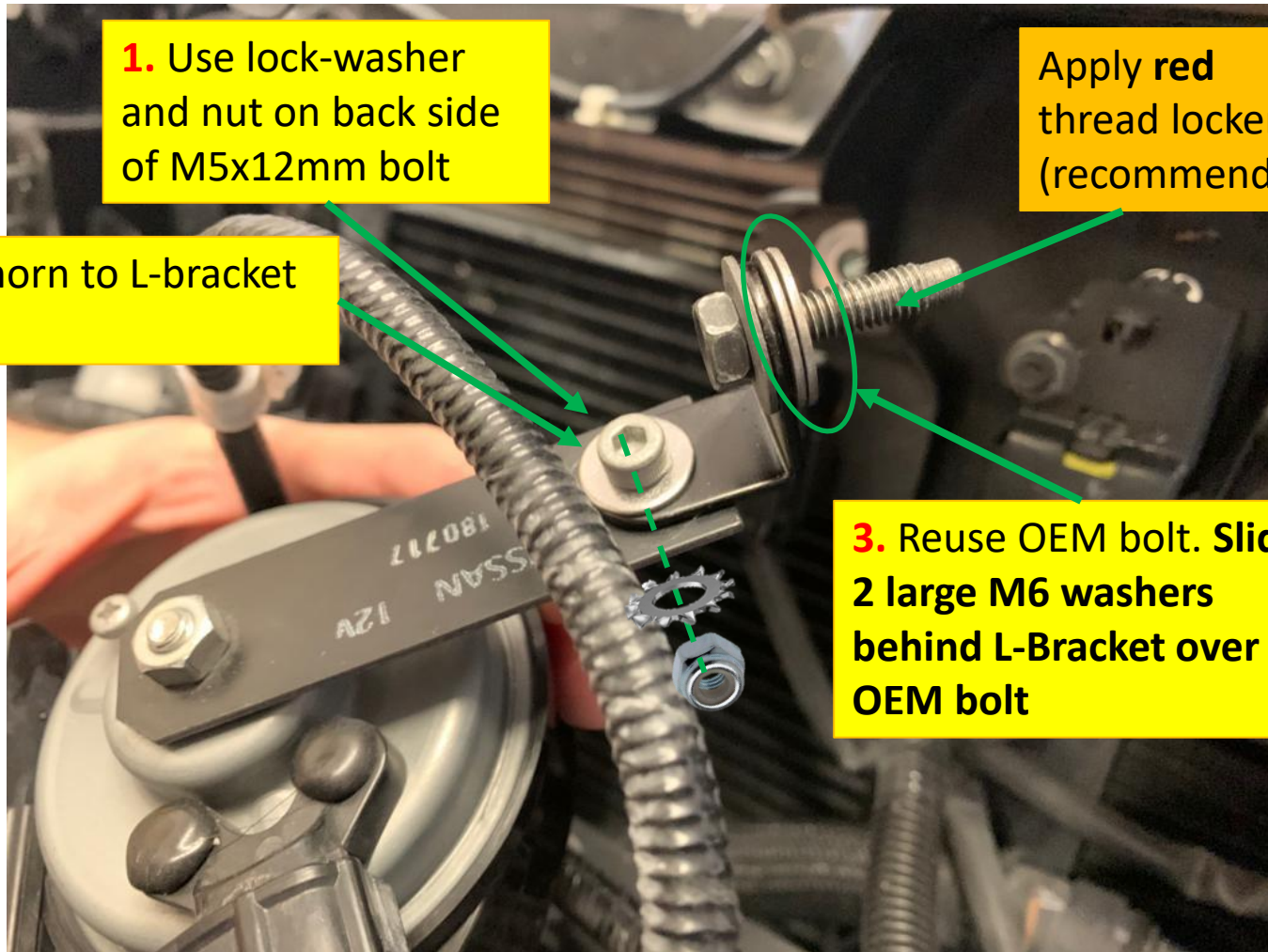
1. Use lock-washer and nut on back side of M5x12mm bolt

2. Secure horn to L-bracket (50 in-lb)

Apply red thread locker (recommended)



3. Reuse OEM bolt. Slide 2 large M6 washers behind L-Bracket over OEM bolt

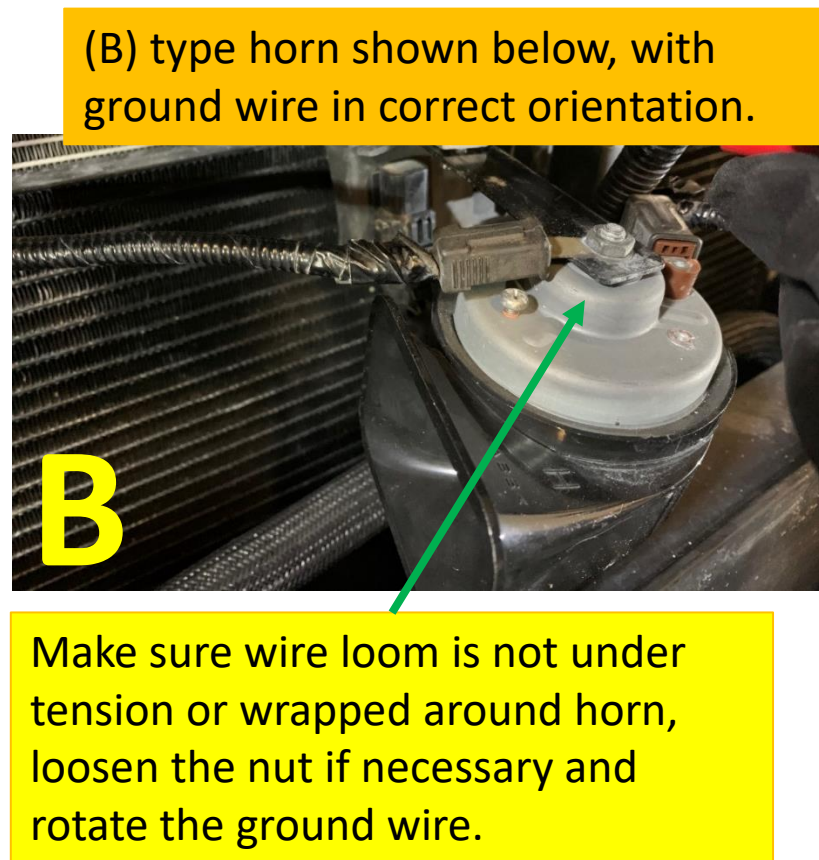




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Horn Reorientation (Q50 RS Only)

Fasten the L-Bracket to the OEM horn mounting hole.

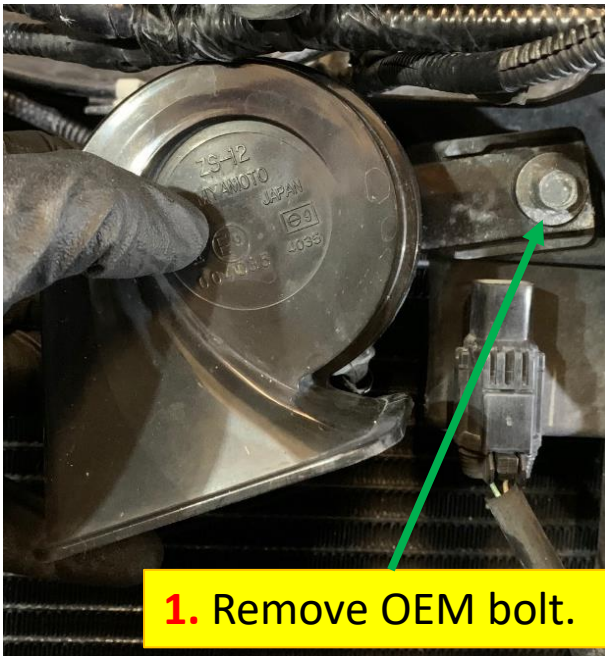


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Horn Relocation (Q60 Only)

If you DO NOT own a Technology package car, follow this slide by unbolting the horn as shown and relocating it to the screw hole on the crash bar as shown. If you own a Tech package, see next slide.

3. Using the same horn bracket, relocate it here and bolt it down using the OEM bolt.



1. Remove OEM bolt.

2. You will need to loosen the nut on the back of the horn, **rotate the ground wire on the horn such that the wire loom is not under tension in step 3**. Re-tighten the wire onto the horn using the nut.

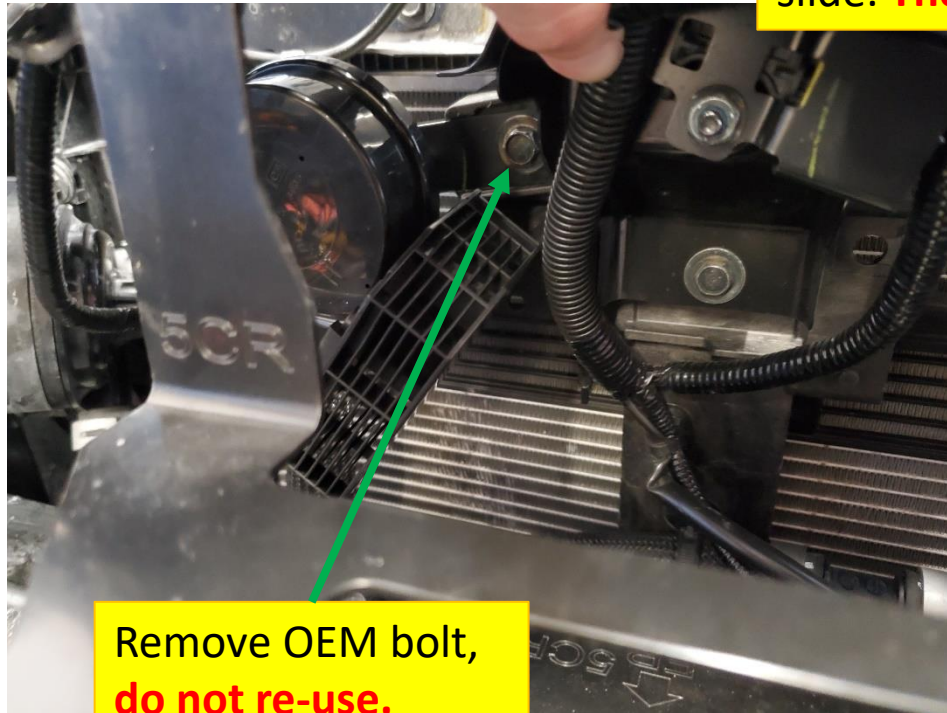


VELOSSA TECH

Horn Relocation (Q60 Only)

If you own a tech package car, follow this slide. Unbolt the horn as shown. **Do not re-use the OEM** bolt to fasten to crash bar. Use the supplied M6 hardware.

Remove the OEM bolt from this hole and see the next slide. **The spacer and small washer will be used here.**



Remove OEM bolt,
do not re-use.

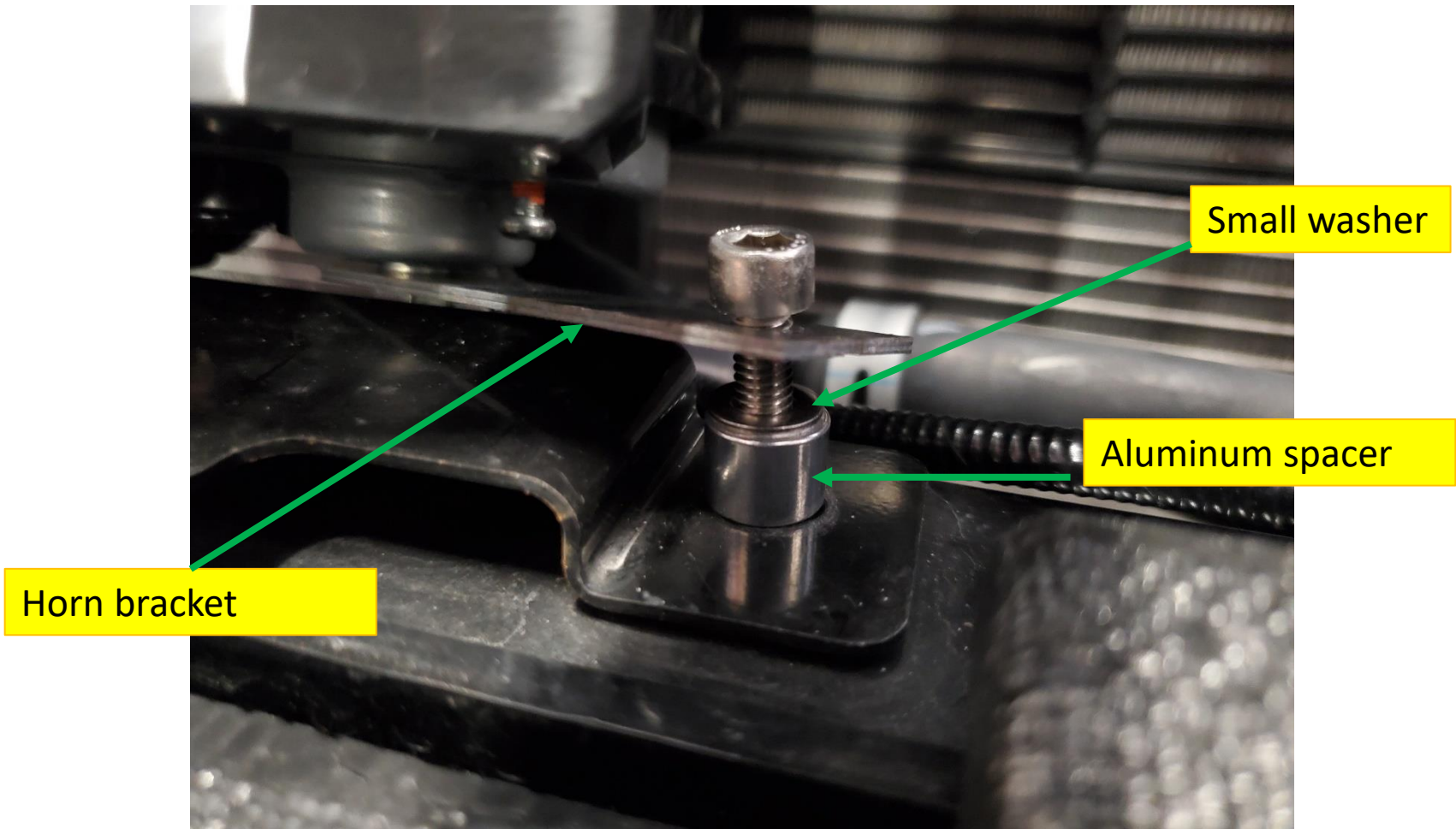


This sensor frame is present on
tech package cars.

See next slide for
more clarity.

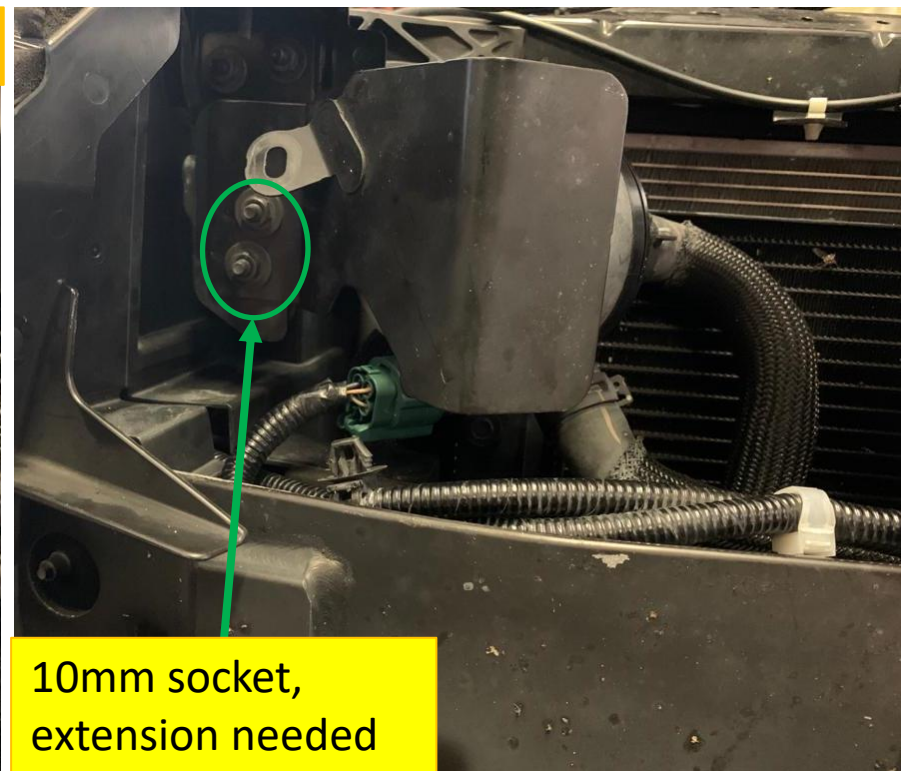
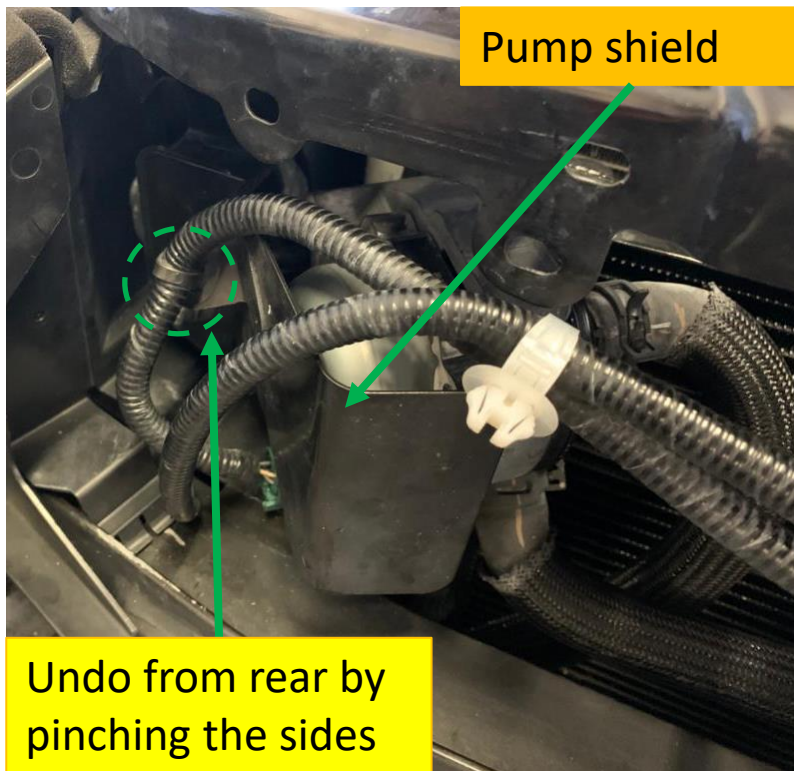
Horn Relocation (Q60 Only)

Fasten the horn to the crash bar using an M6x30 screw, the small M6 washer and the aluminum spacer as shown. Choose an orientation of the horn that does not strain the wire loom.



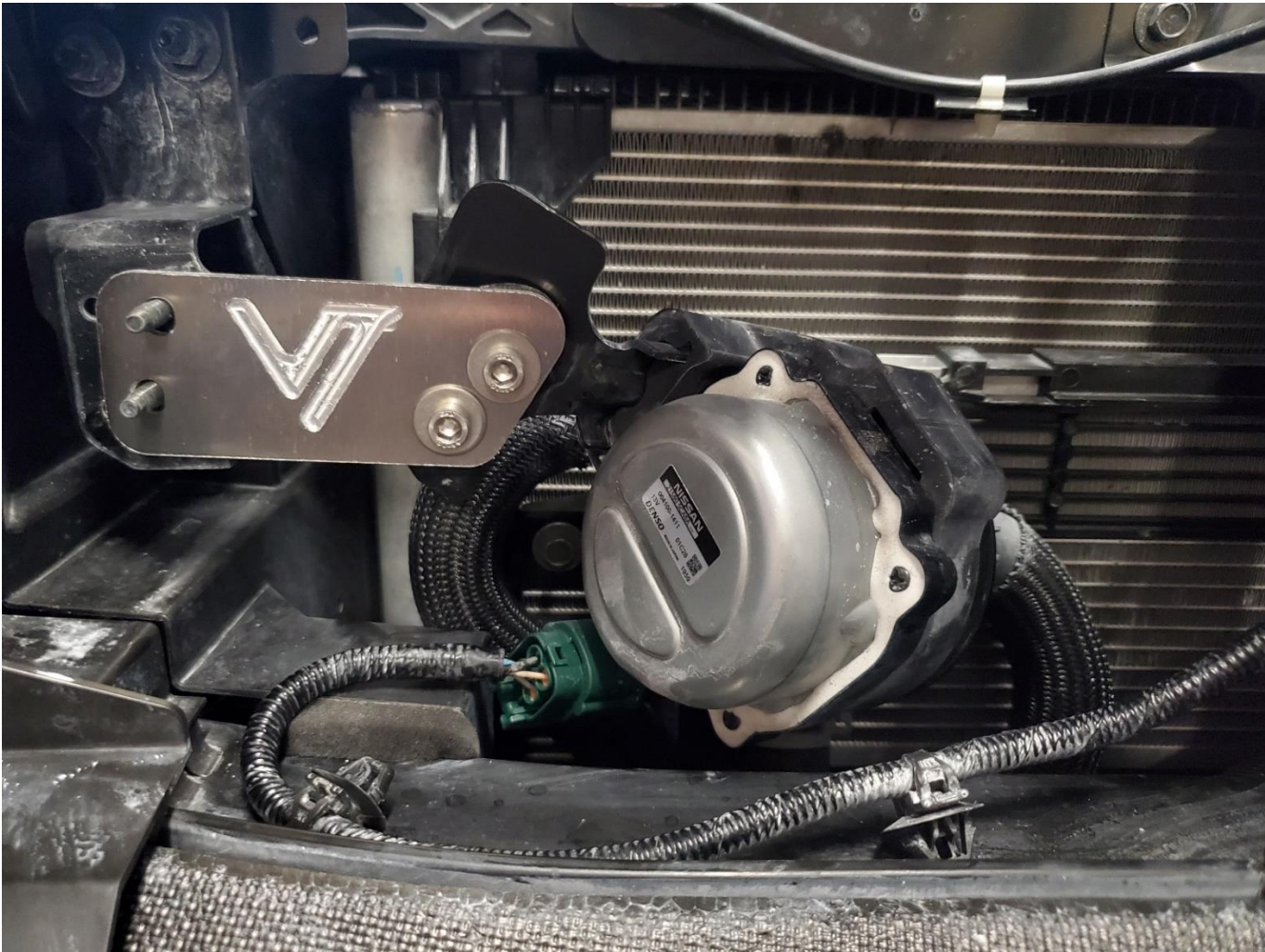
Pump Reorientation

Undo clip that retains the wire loom for the pump shield. Then remove the nuts that retain the shield. The shield will **not** be reused.



Pump Reorientation

Shown below is the water pump after being reoriented, the following slides will outline the process.

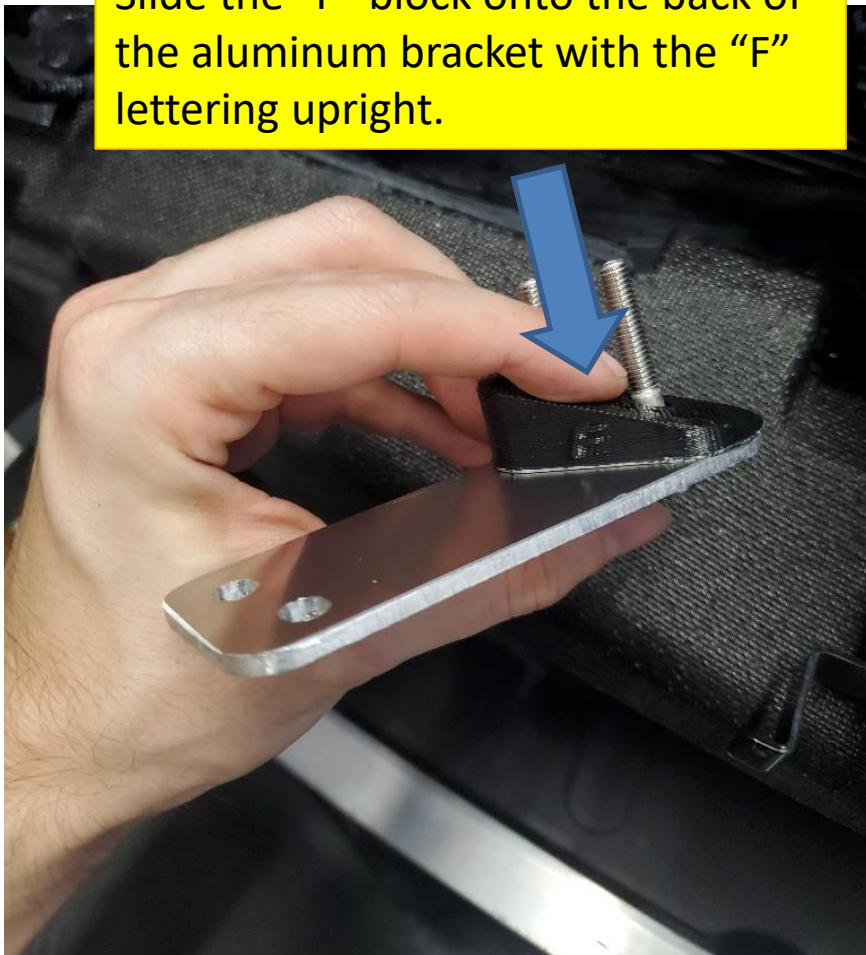


VELOSSA TECH

Pump Reorientation

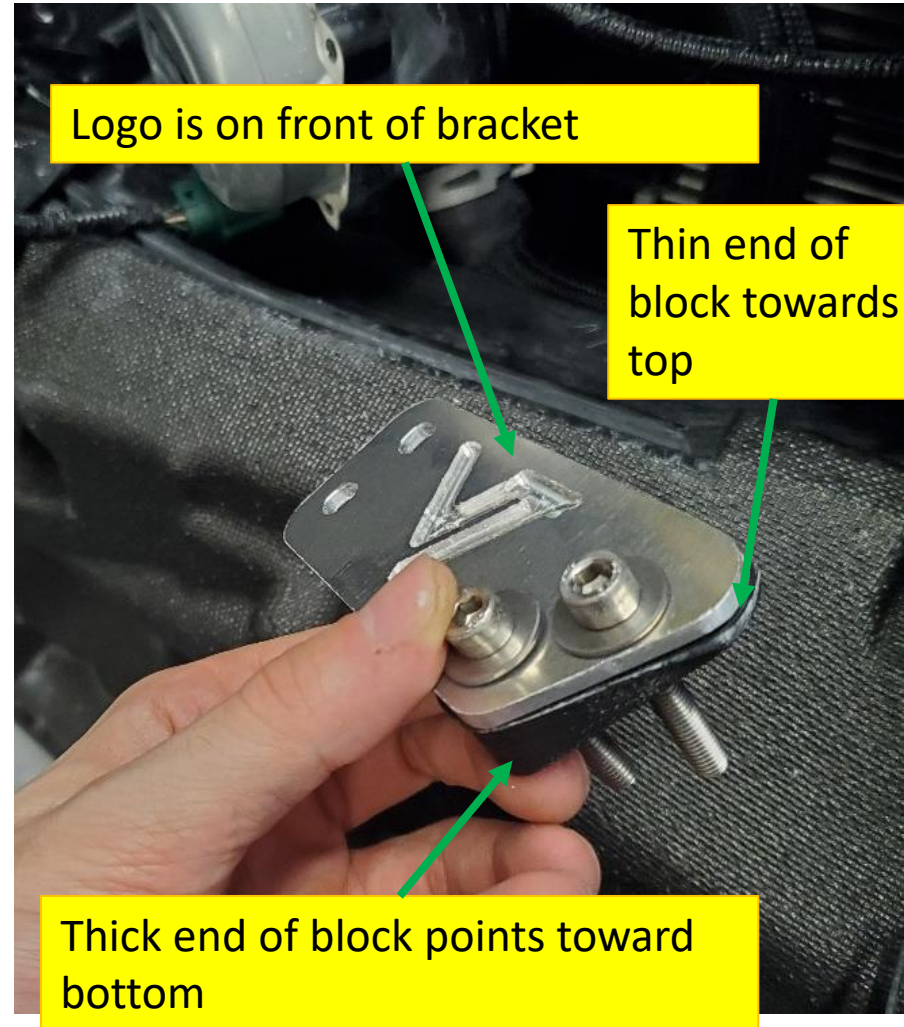
The first step is to group the aluminum bracket with the “F” (Front) block as shown below. Use the supplied M6x40 screws and 2 large washers to keep the assembly in place, do not fasten yet.

Slide the “F” block onto the back of the aluminum bracket with the “F” lettering upright.



Logo is on front of bracket

Thin end of block towards top

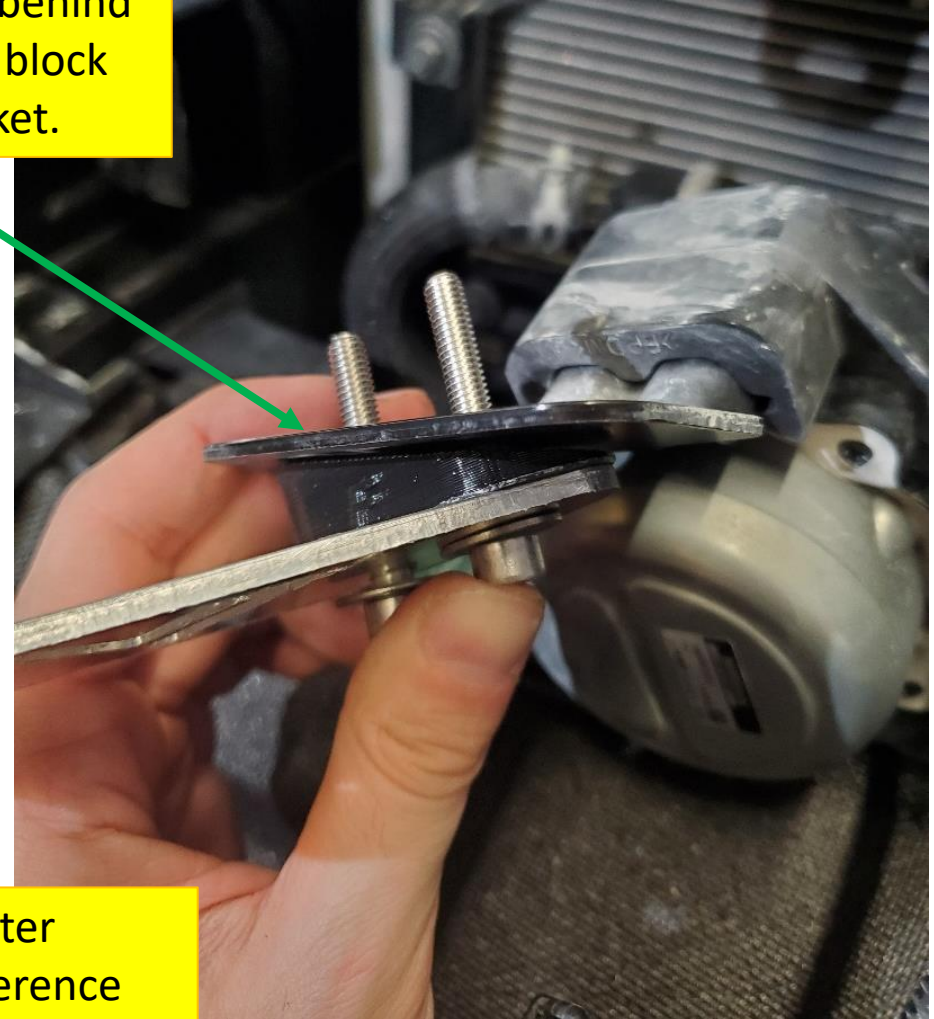
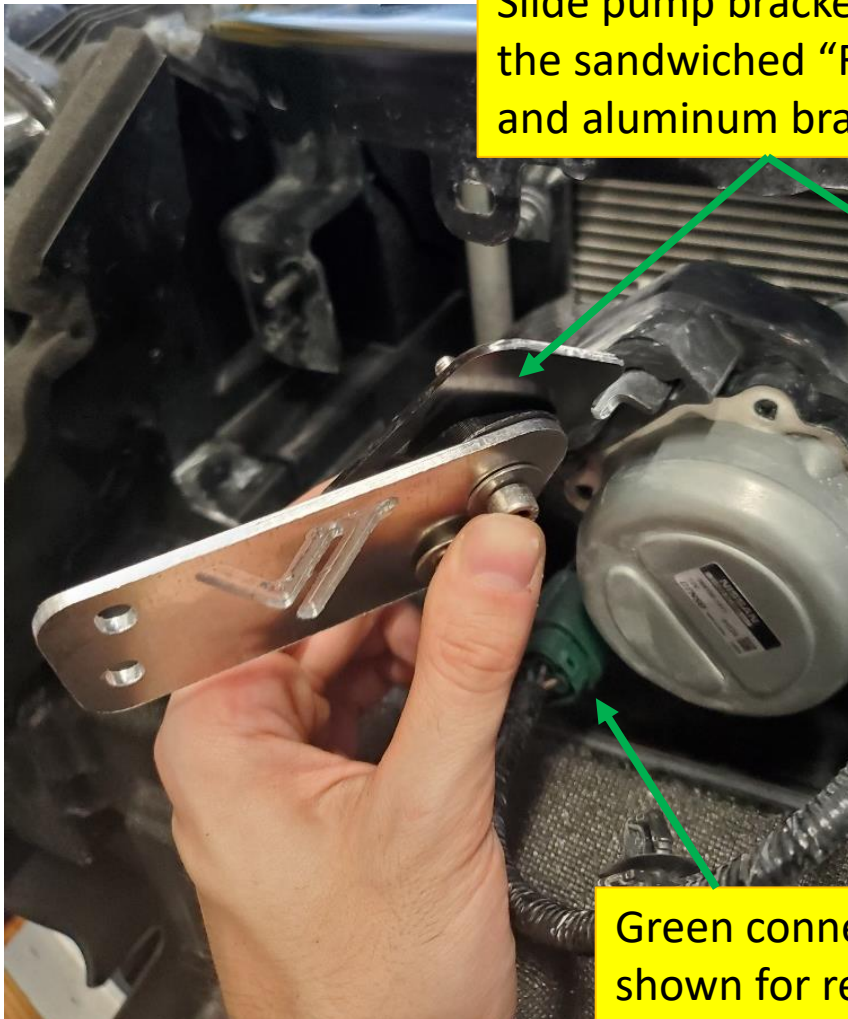


Thick end of block points toward bottom

Pump Reorientation

The next step is to position the pump mounting bracket behind the “F” block. Do not fasten yet.

Slide pump bracket behind the sandwiched “F” block and aluminum bracket.

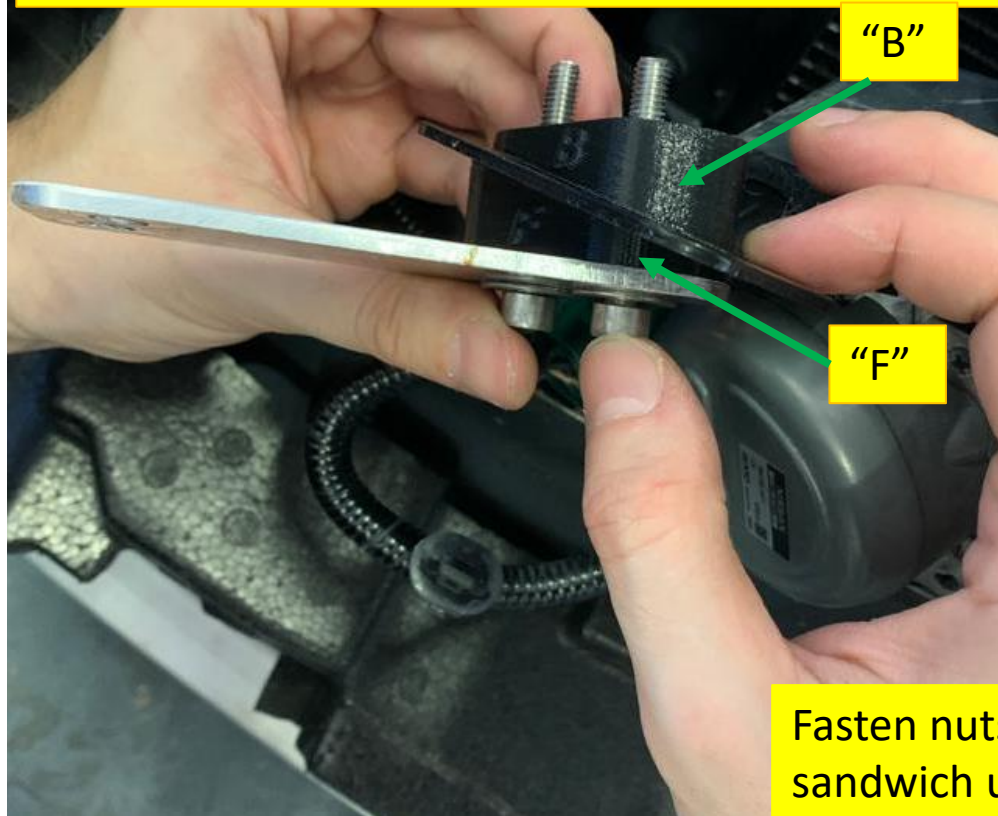


Green connector shown for reference

Pump Reorientation

Lastly, slide the “B” (Back) block onto the assembly and fasten using a large M6 washer and M6 lock nut on each screw. **DO NOT OVERTIGHTEN.**

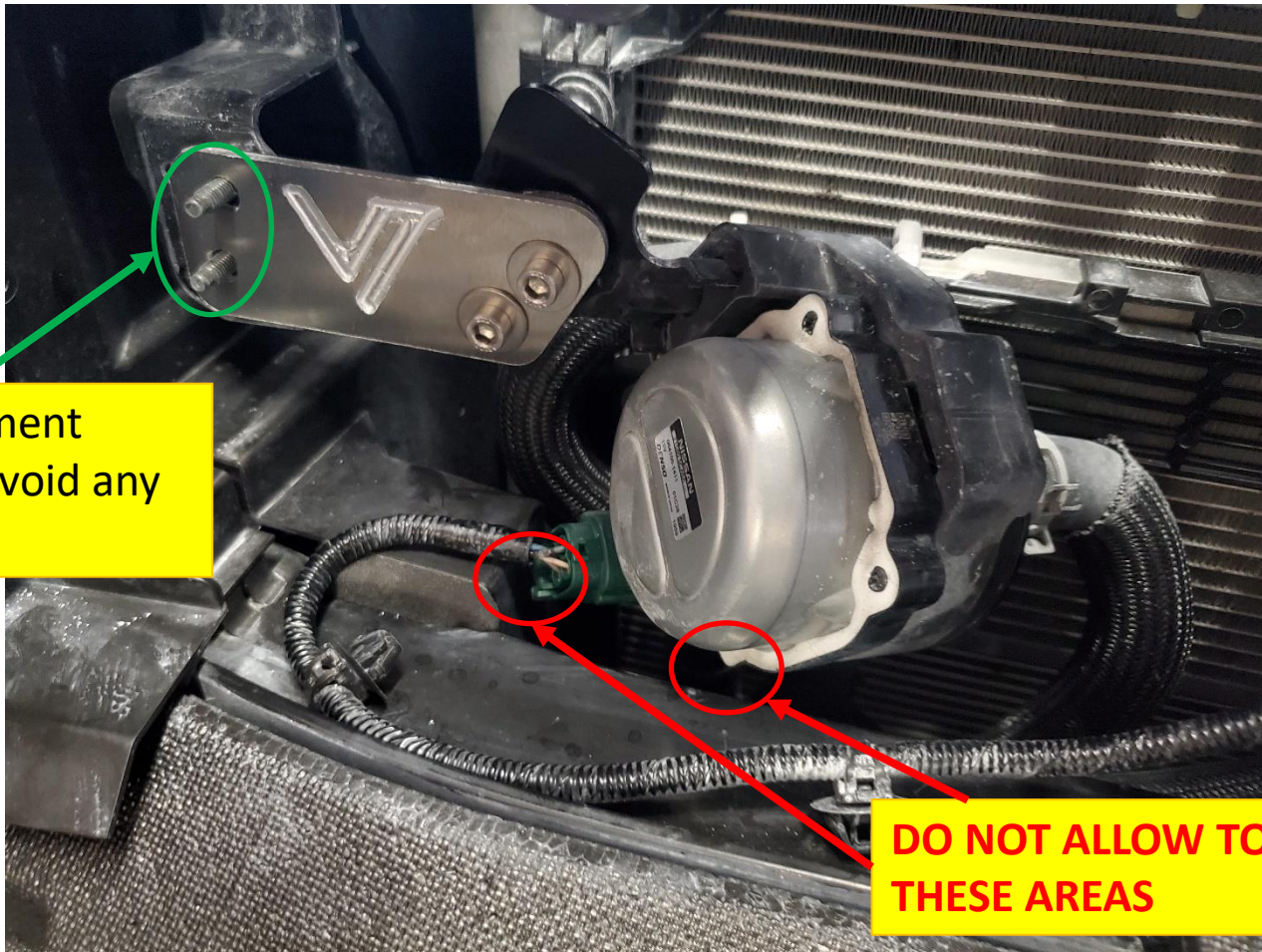
“B” block slides over the back of the pump bracket to complete the sandwich. “F” and “B” blocks cause the pump to tilt forward, but; their outer faces should be parallel. You should be able to read the letters from a top view when the sandwich is complete.



Fasten nuts with large washers on the back of the sandwich using a 10mm wrench and 5mm hex key.

Pump Reorientation

IT IS CRITICAL THAT THE PUMP NOT TOUCH THE CRASH BAR. The aluminum bracket holes are slightly oversized to allow for small adjustment; use as needed.

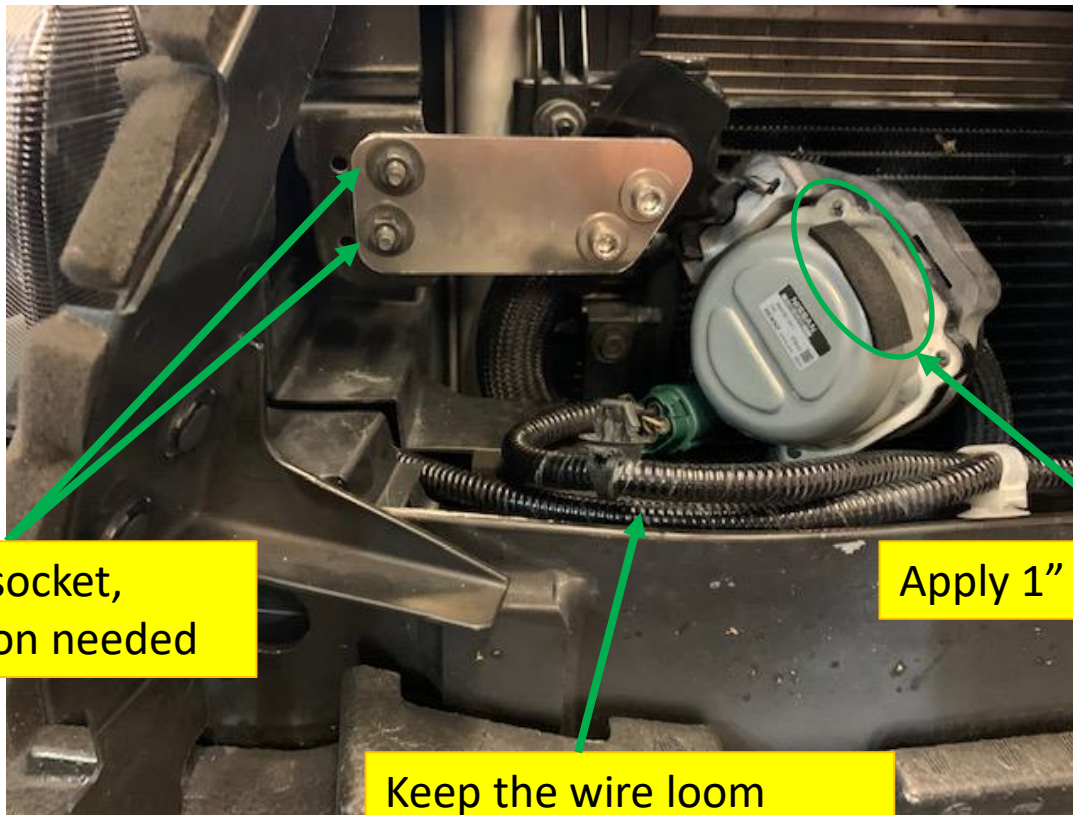


Slight adjustment available to avoid any touching.

DO NOT ALLOW TOUCHING IN THESE AREAS

Pump Reorientation

Once the correct position for the pump has been chosen, fasten the pump assembly to the car using the OEM nuts. Apply the supplied foam strip onto the pump on the area indicated below.



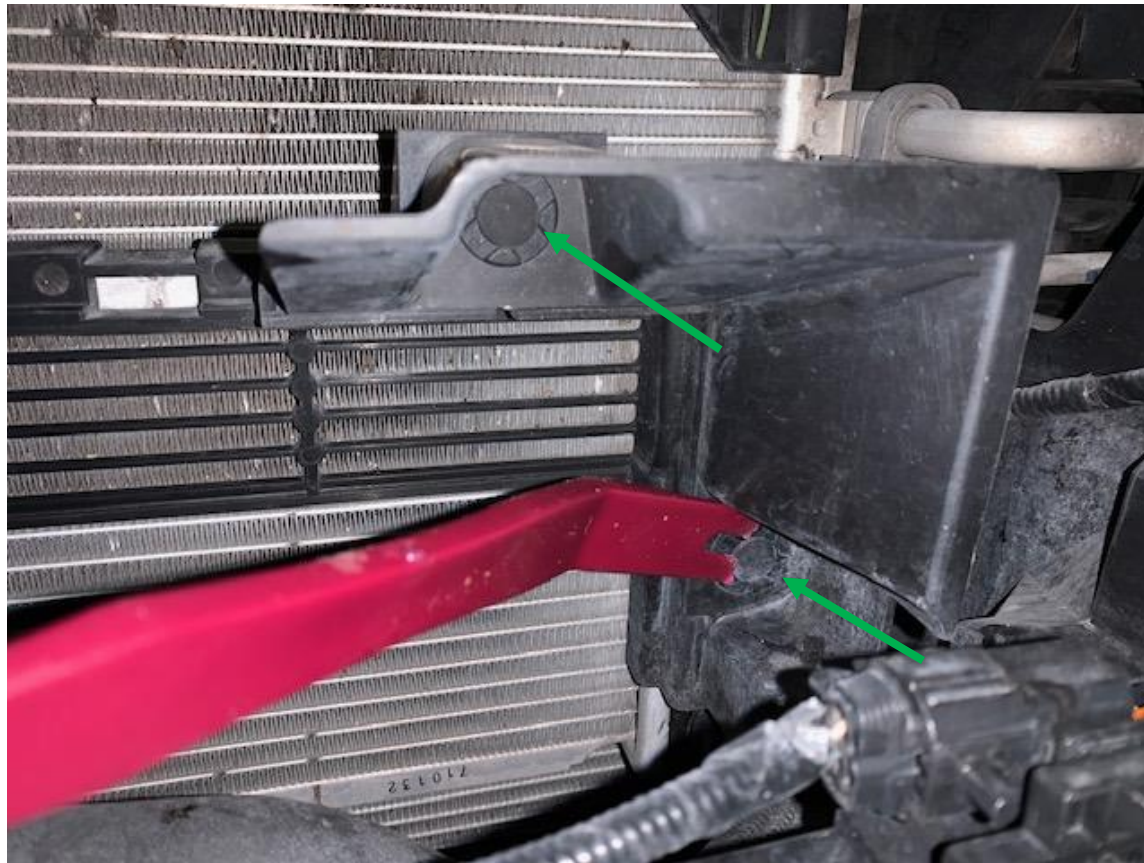
10mm socket,
extension needed

Apply 1" foam strip here

Keep the wire loom
routed along the crash
bar

BIG MOUTH Installation

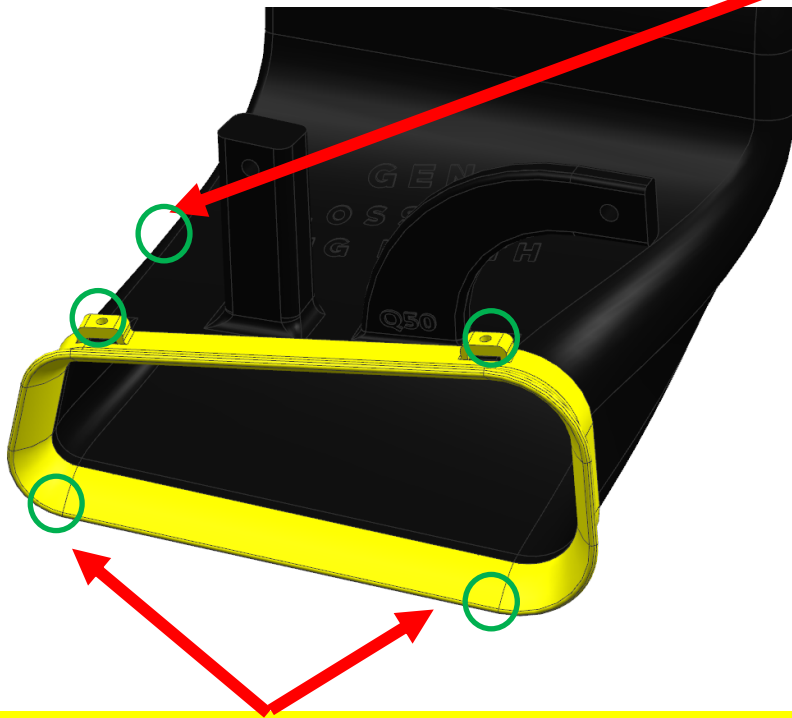
If your stock heat exchanger has this small shroud located on the driver side, remove it by extracting the indicated pop clips.



Install the BIG MOUTH LIT Flares

SKIP THIS SLIDE IF YOU PURCHASED A FULL KIT

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



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

BIG MOUTH Installation

Insert the BIG MOUTH in an upward sweeping motion as indicated. Align the holes and use the supplied M6 x 30mm bolts + 6mm large washers (front) and M6 locknuts (rear) to fasten. Turn by hand at first in order to avoid cross threading, use a 5mm hex key and 10mm wrench for tightening. Install both BIG MOUTH intakes this way.



BIG MOUTH Installation

Plug the supplied Diode Dynamics LED extension cable into the driver side LED power cable as shown, route the LED power cable underneath as shown.



Take notice of the notch within the M8 female connector. The connectors must be properly oriented to connect. Improper alignment can damage the pins within the male connector.

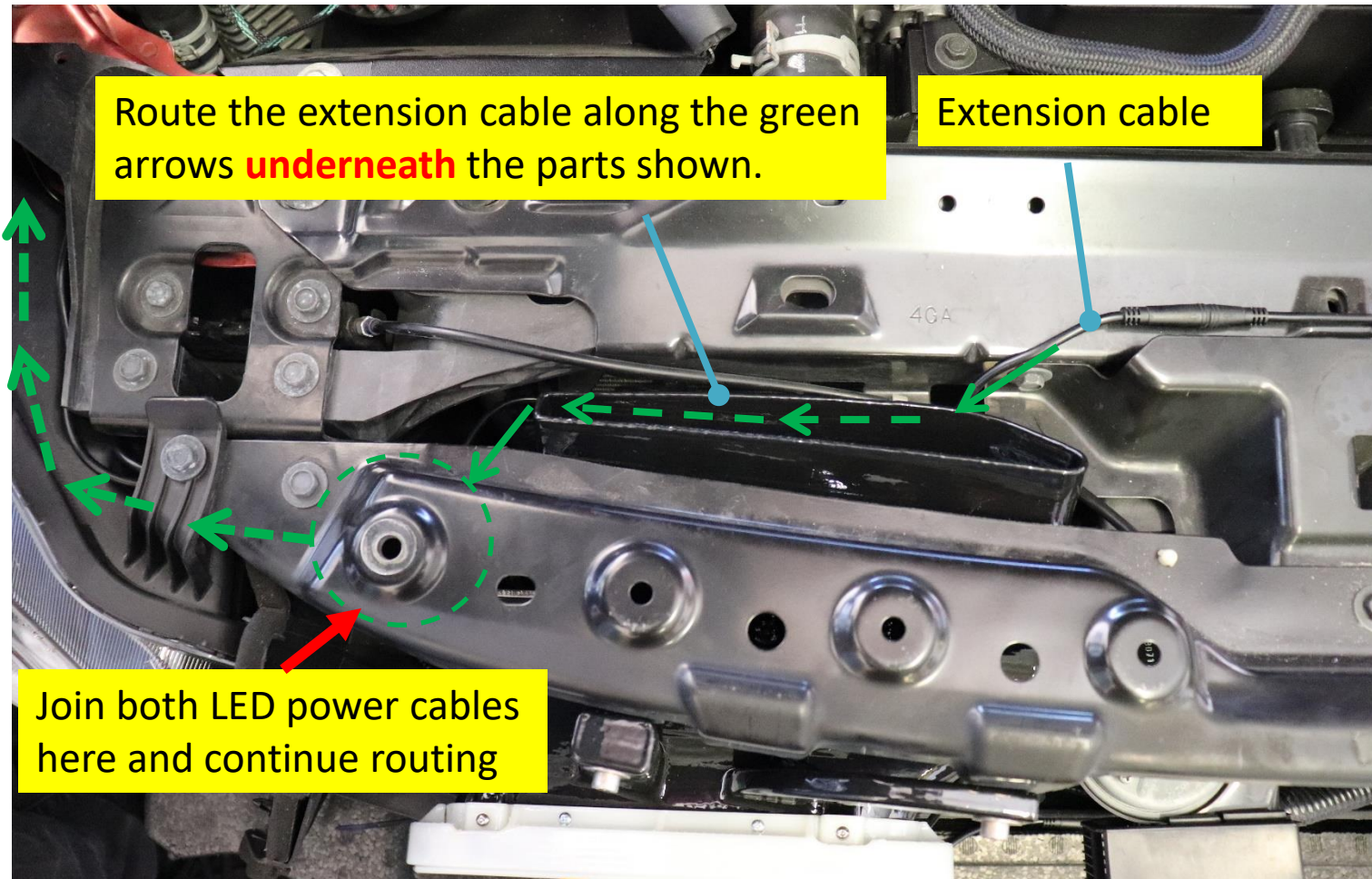
BIG MOUTH Installation

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



BIG MOUTH Lit Kit Prep

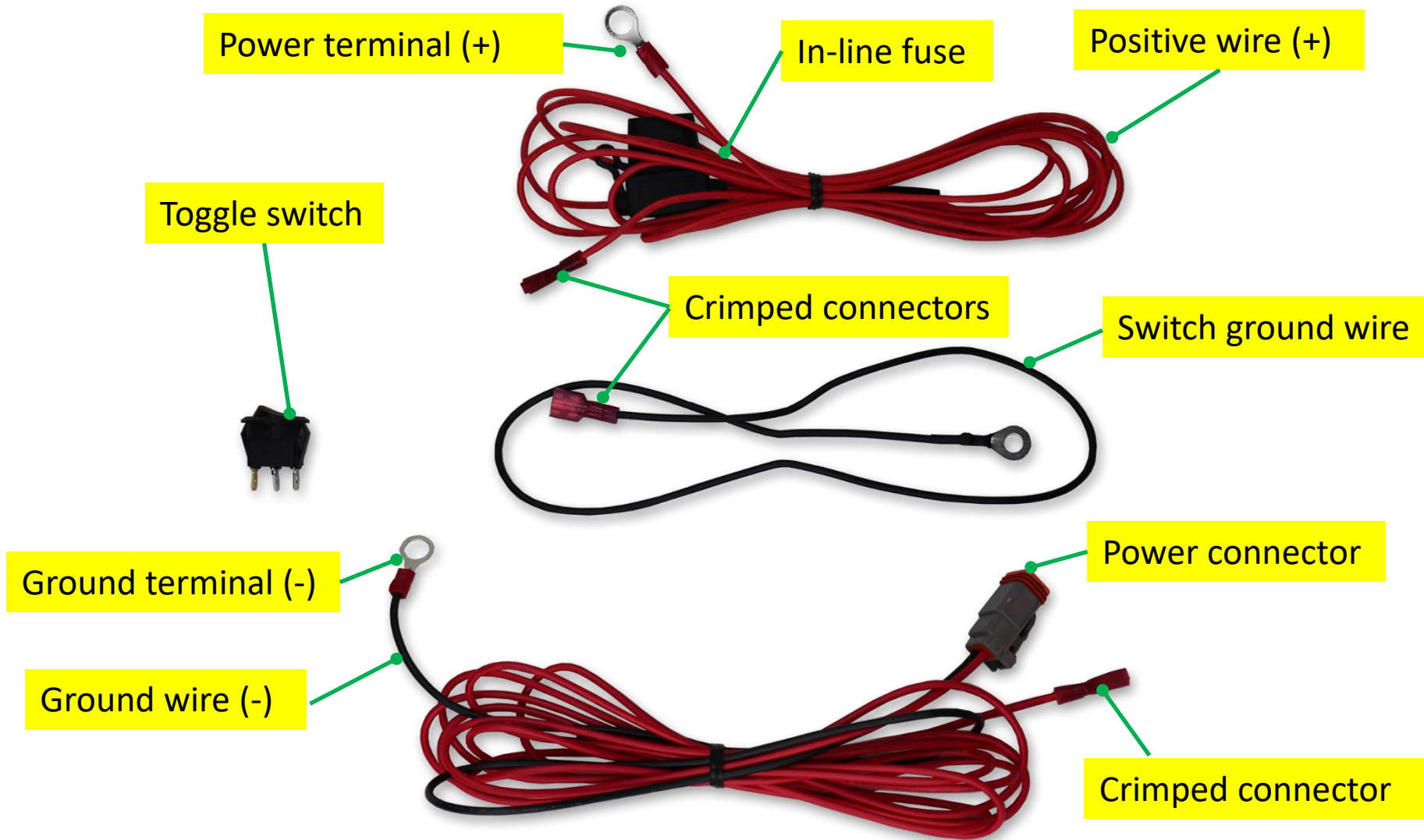
Route the extension cable underneath the intake as shown, join the extension cable from the driver side LED with the passenger LED and continue routing.





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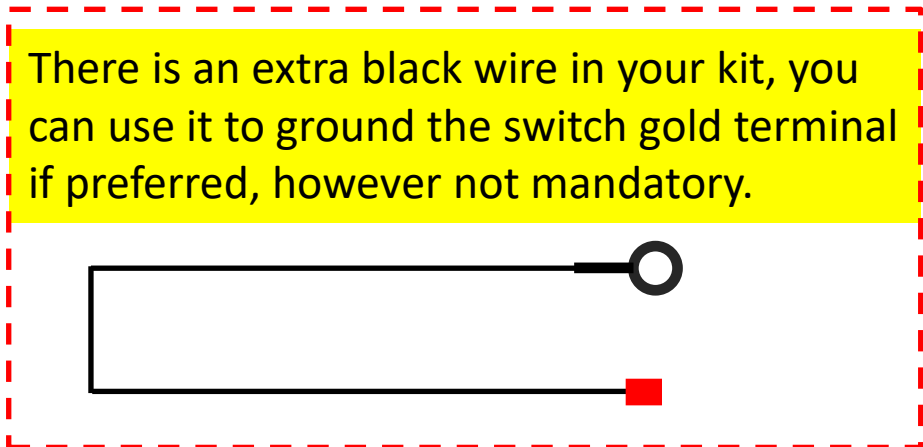
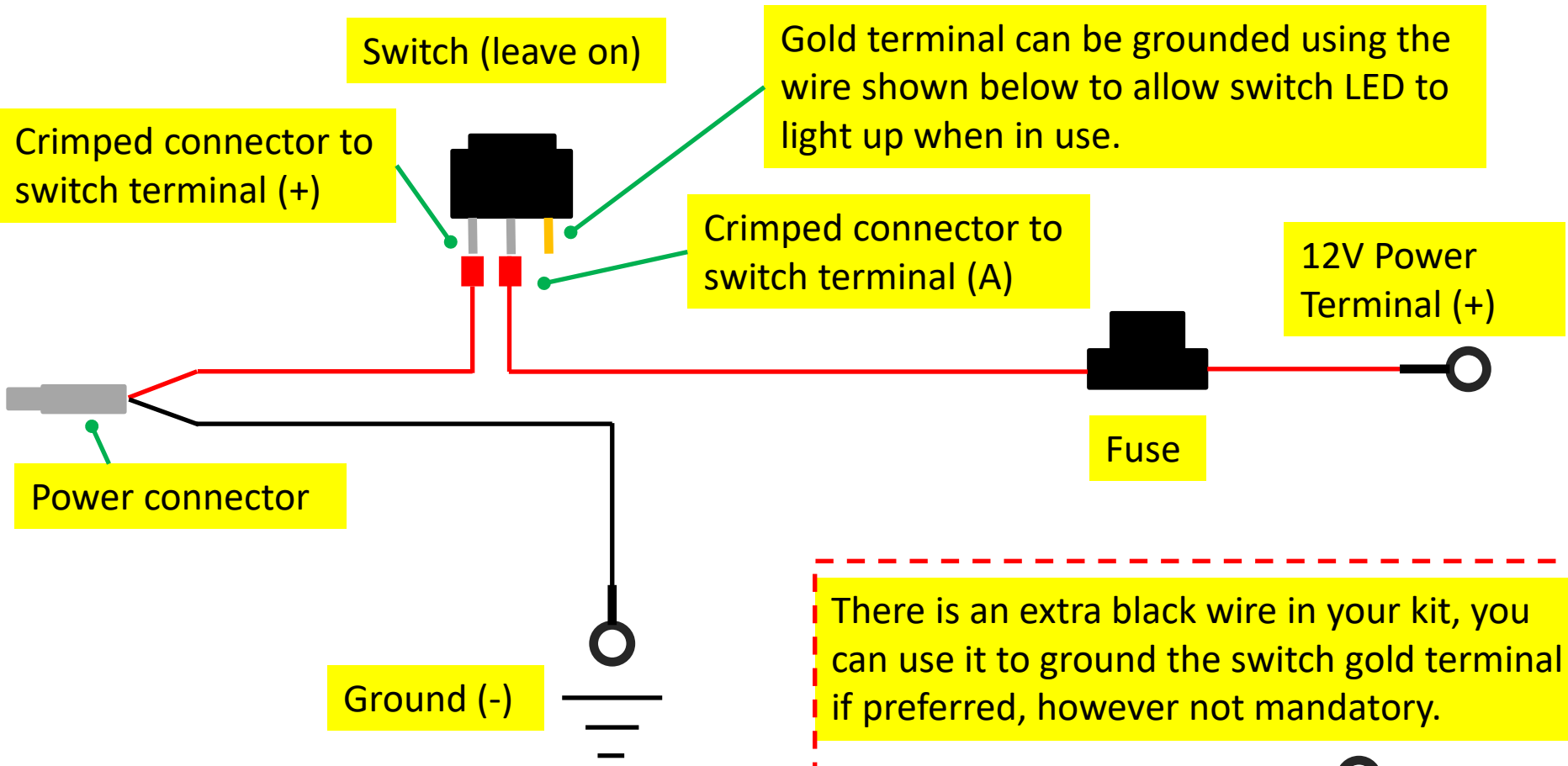
Wiring Harness





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Wiring Harness Schematic

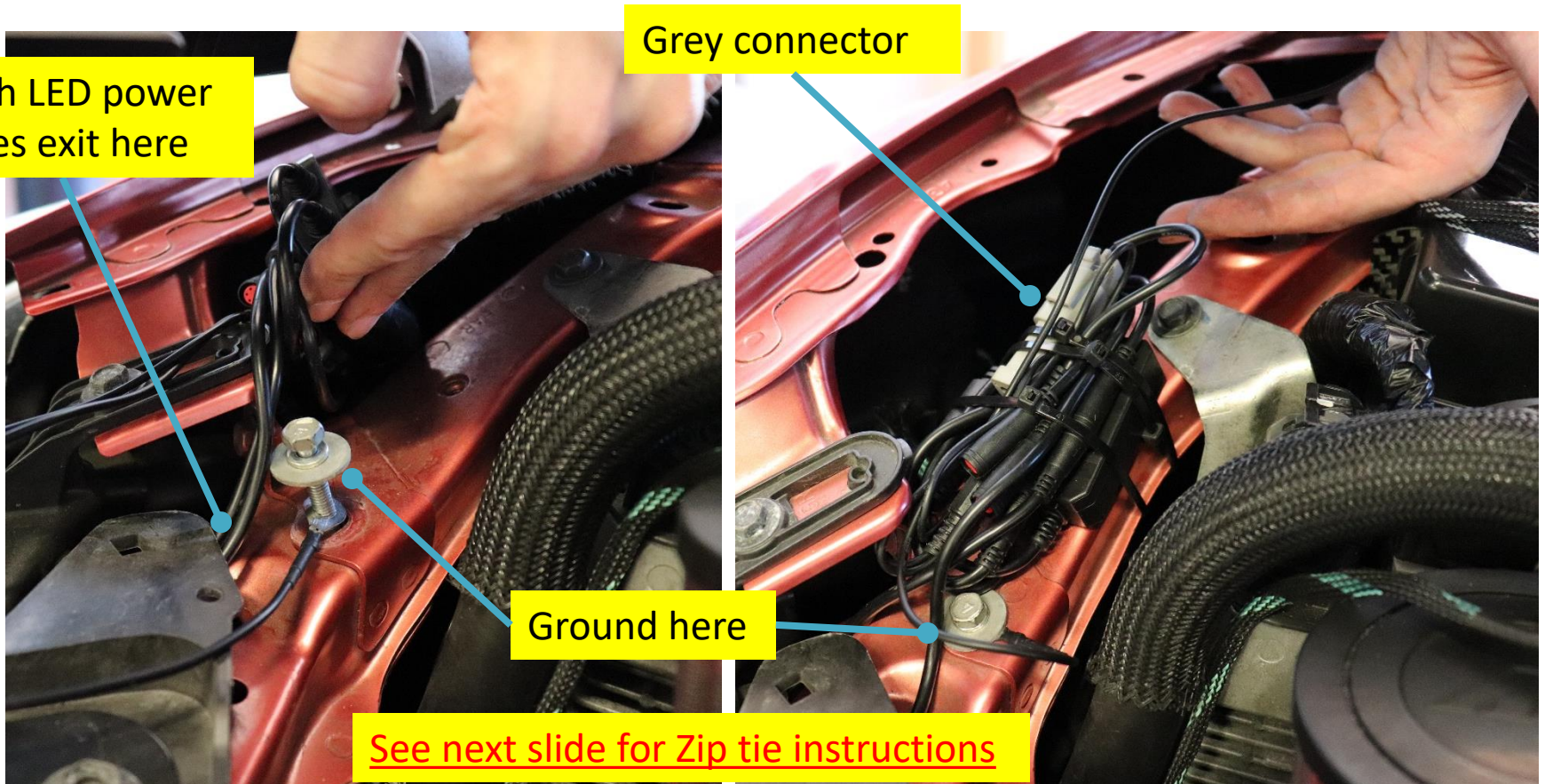


BIG MOUTH Lit Kit Prep

Fasten the ground lug to the frame using the indicated OEM bolt.

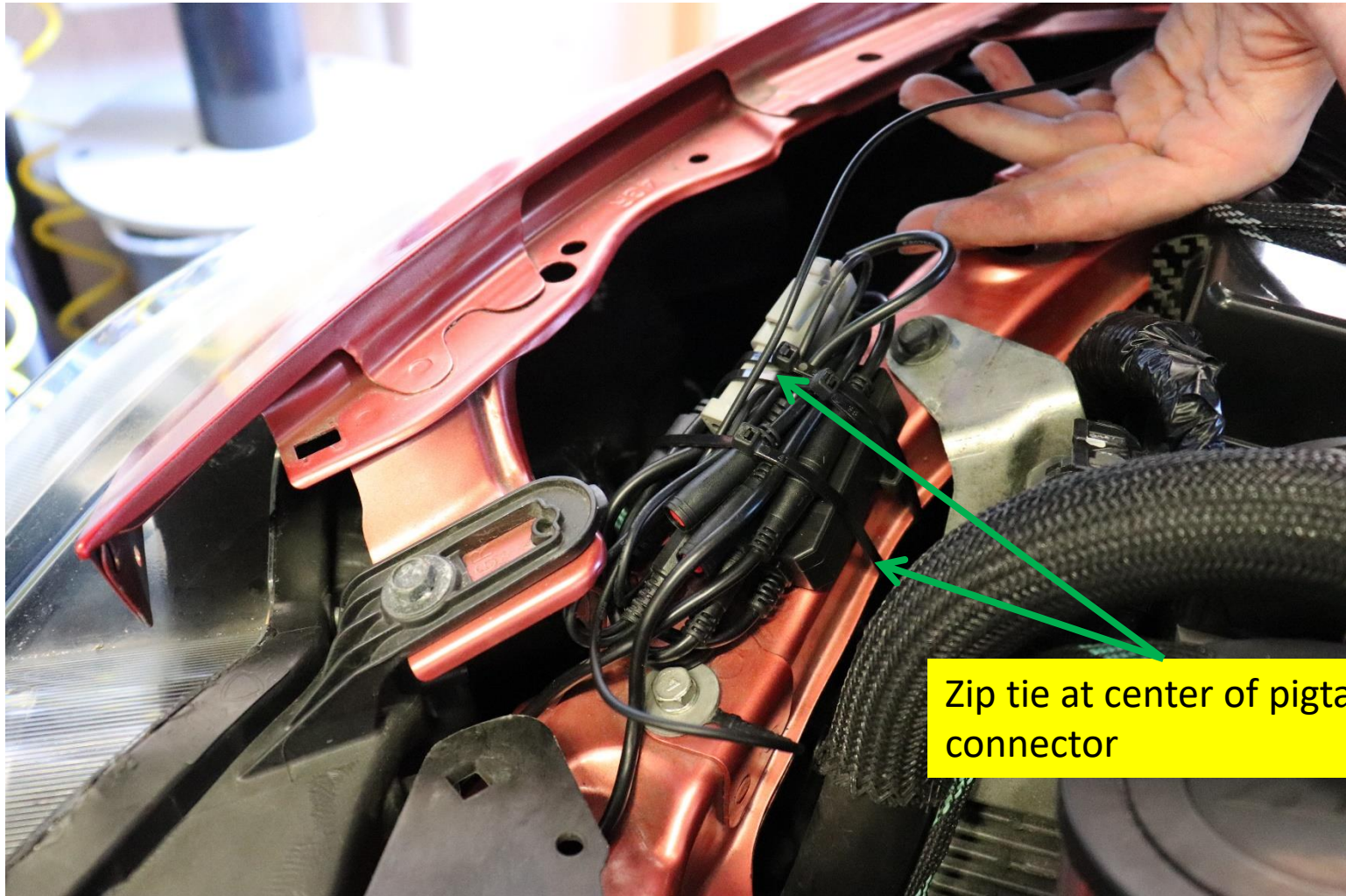
Connect the following:

1. The LED power cables to the Diode Dynamics RGBW Bluetooth controller.
2. The grey power connector to the Bluetooth controller.



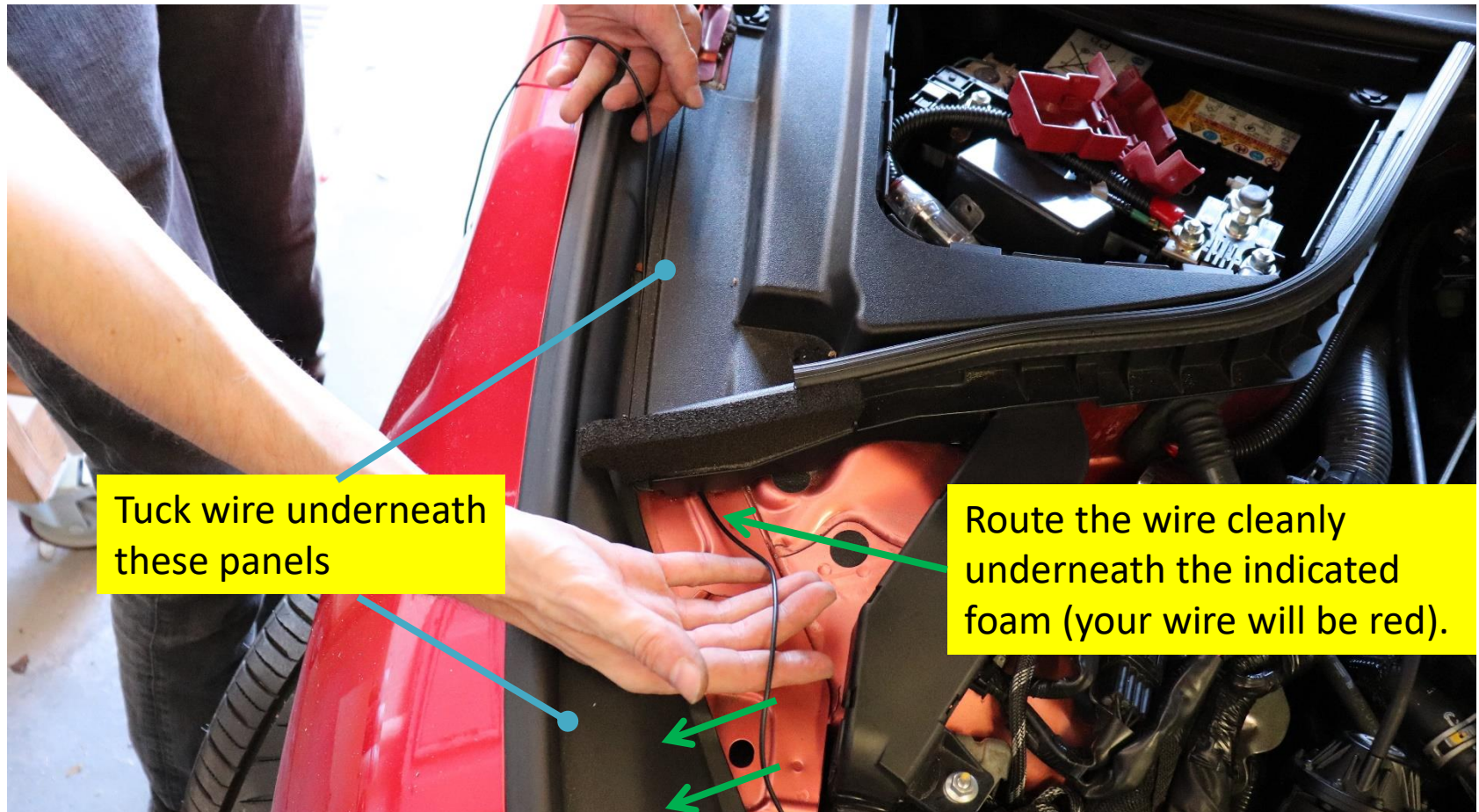
BIG MOUTH Lit Kit Prep

Bundle all the cables together neatly. Do not strain the cables with tight radius bends or tugging in any place. Use the 16" zip ties to fasten to the frame here.



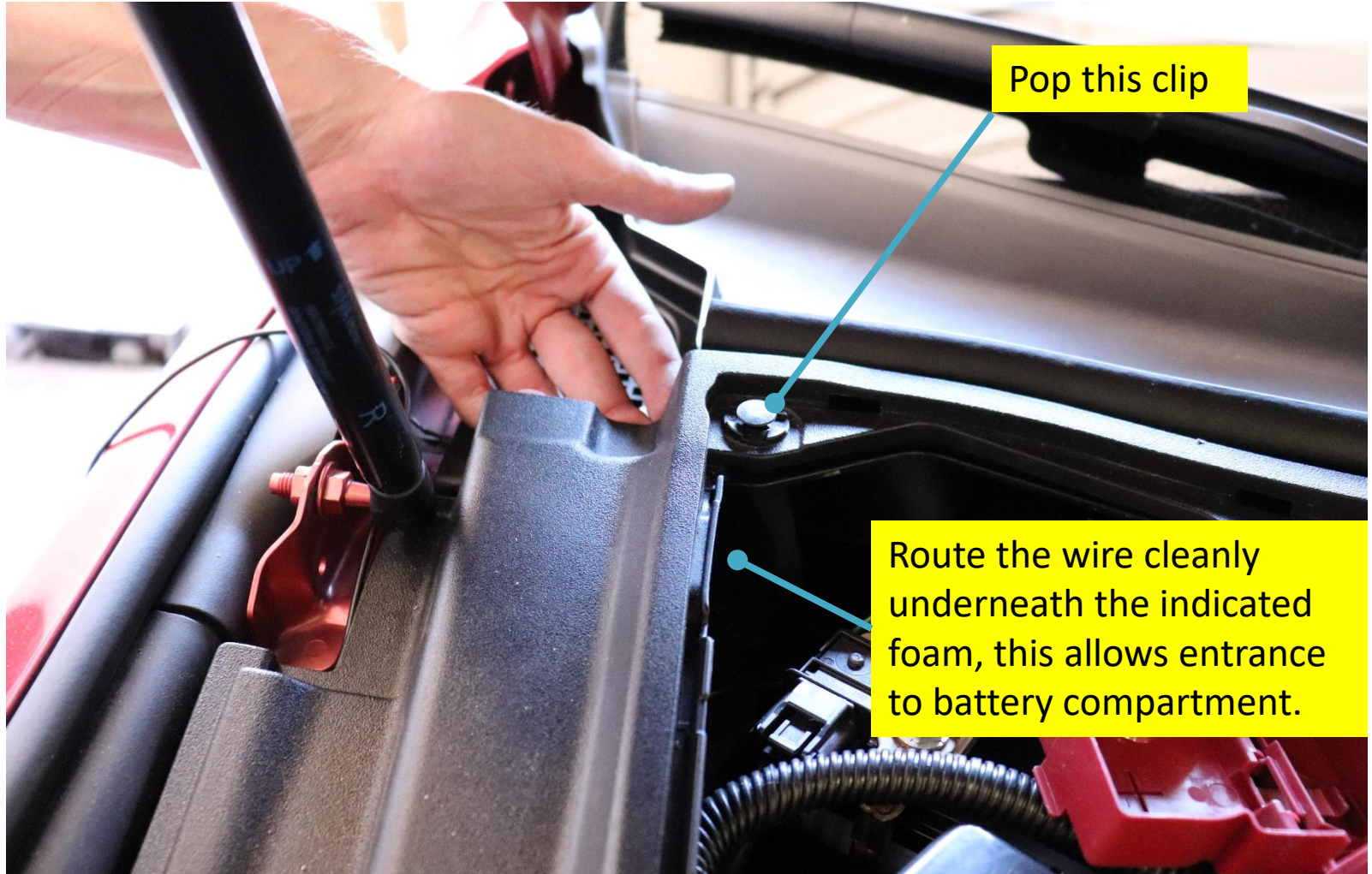
Wire Routing

Route the power wire as such towards the fuse box where it will be connected to the supplied switch.



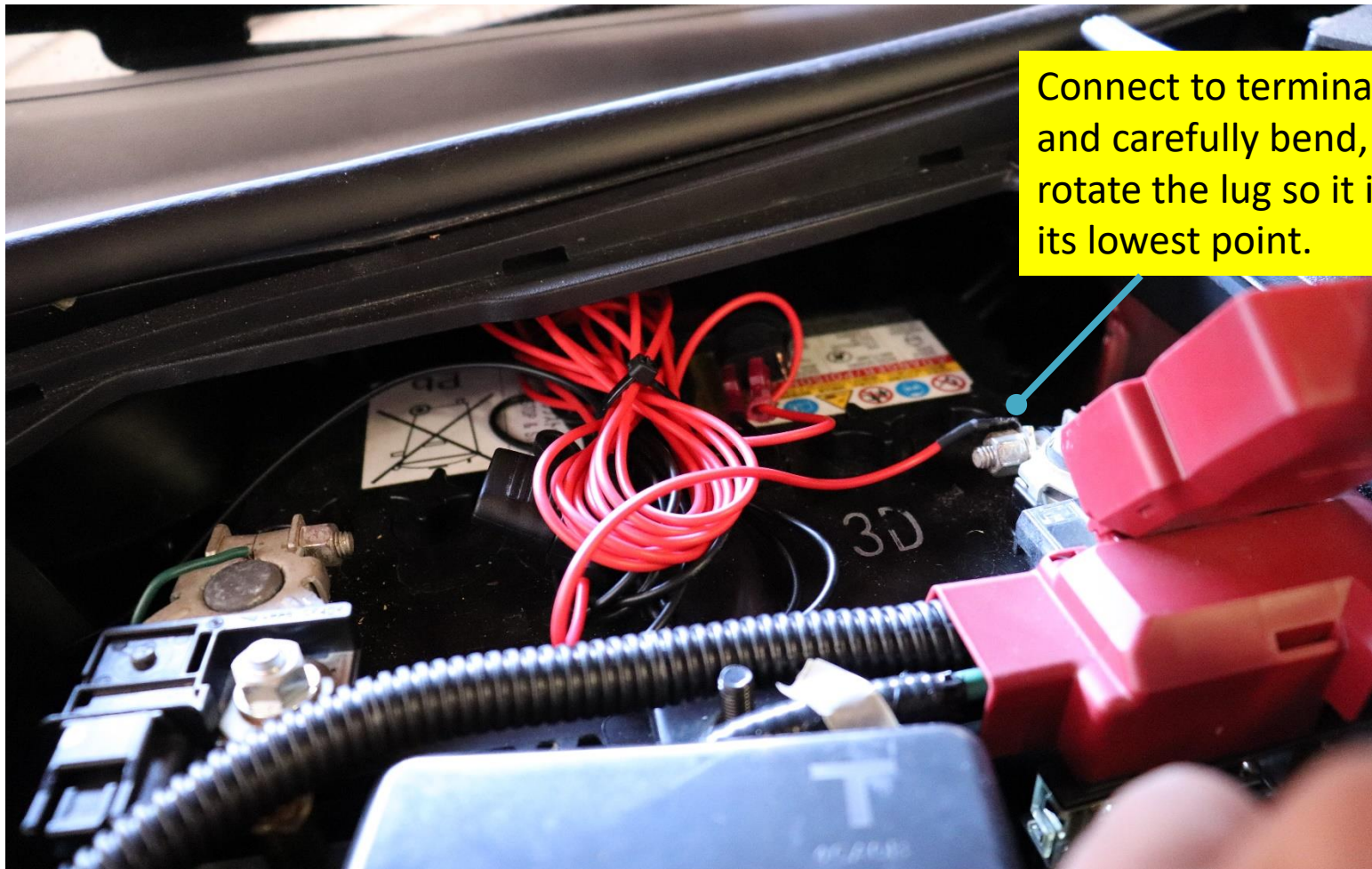
Wire Routing

Route the power wire through the indicated fuse box opening



Connecting LIT KIT Power

Connect the red power wires to the switch as shown on slide 24. Bundle excess wire with an 8" zip tie to top of battery bracket as shown. Connect the power ring terminal, rotate it and bend it carefully so the terminal cover can close.



Final Configuration



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.





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Finalize

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

