



Focus ST
Stage 2
Brake Cooling Installation Guide

Kit Contents

Please review this document before attempting installation.

You will need basic hand tools and about 4-6 hours of installation time.

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

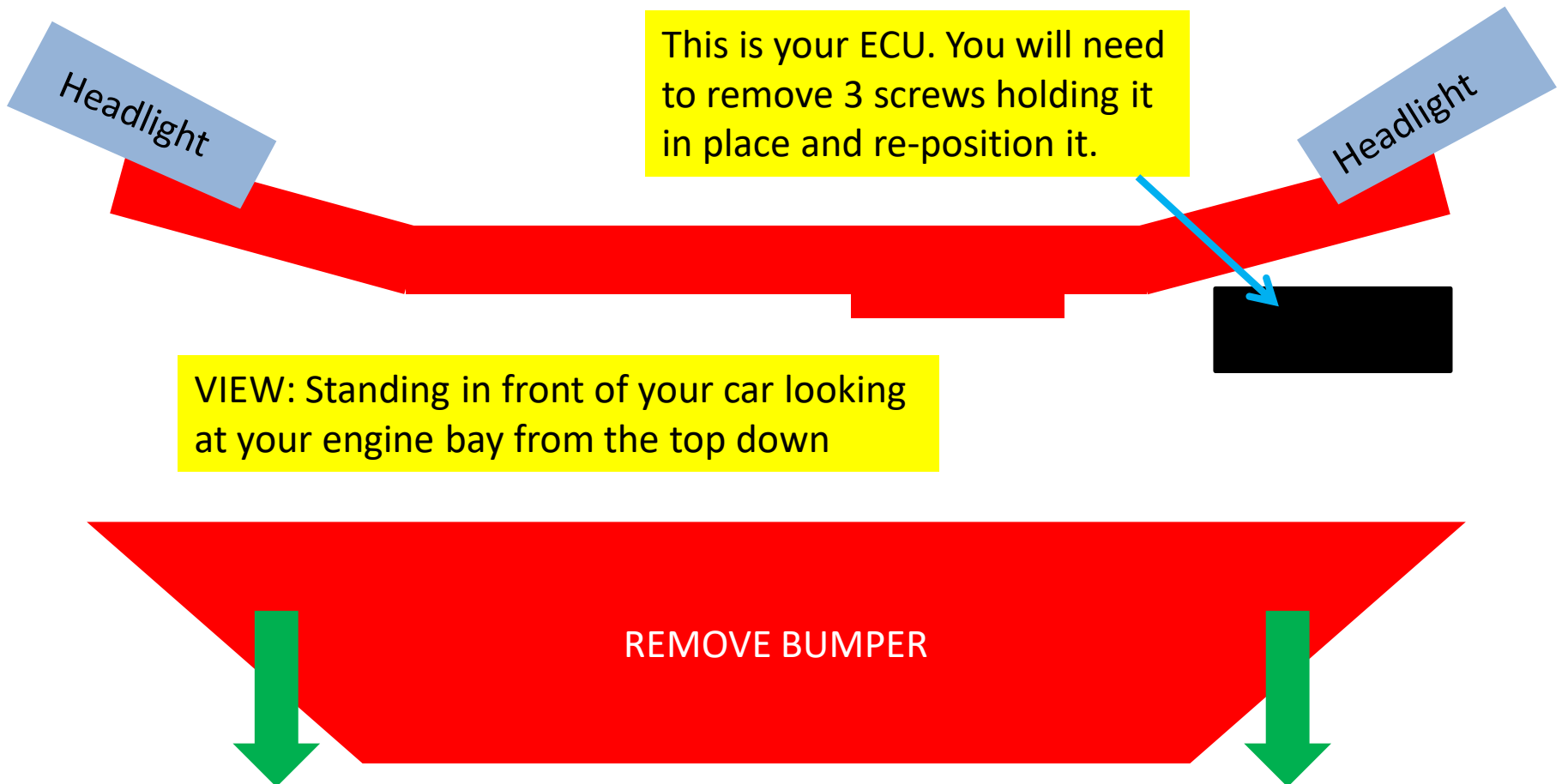
Description	Qty
Diffuser Driver Side	1
Diffuser Passenger Side	1
Inlet Ducts	2
Transition Duct	1
ECU Bracket 1	1
ECU Bracket 2	1
6mm washers	10
6mm locknuts	4
6mm x 25mm bolt	4
6mm x 40mm bolt	4
6mm x 75mm bolt	2
20" Hose	1
10" Hose	1
38" Hose	1
Band clamps	8
Zip ties	4
5mm Allen wrench	1
Diffuser plugs	2





Stock Components Removal

Remove the bumper. For best instruction, use the YouTube videos to guide you on bumper removal, there are dozens.



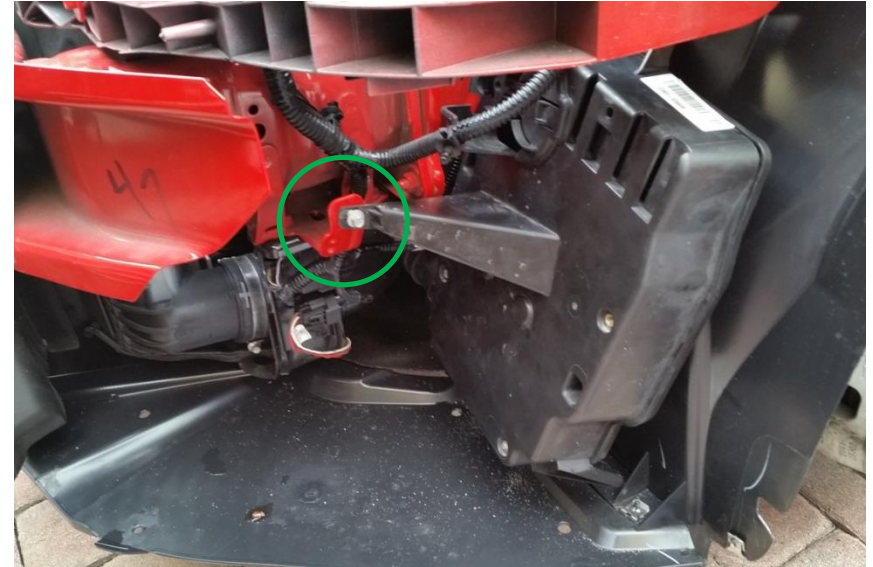
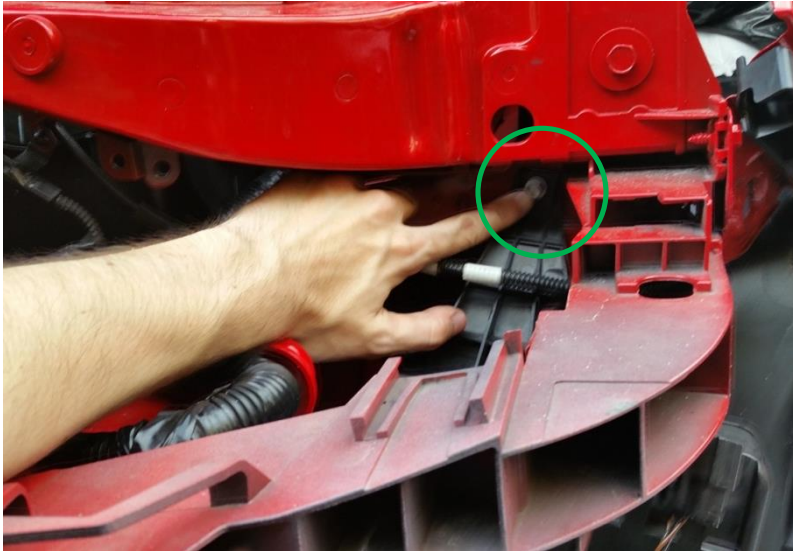
ECU Re-position

Behind the front driver side foglight is the ECU, it is a black rectangular shaped box held to the car by 3 screws. The ECU will need to be repositioned. Pay close attention to the orientation of the factory brackets and the ECU during this process.



ECU Re-position

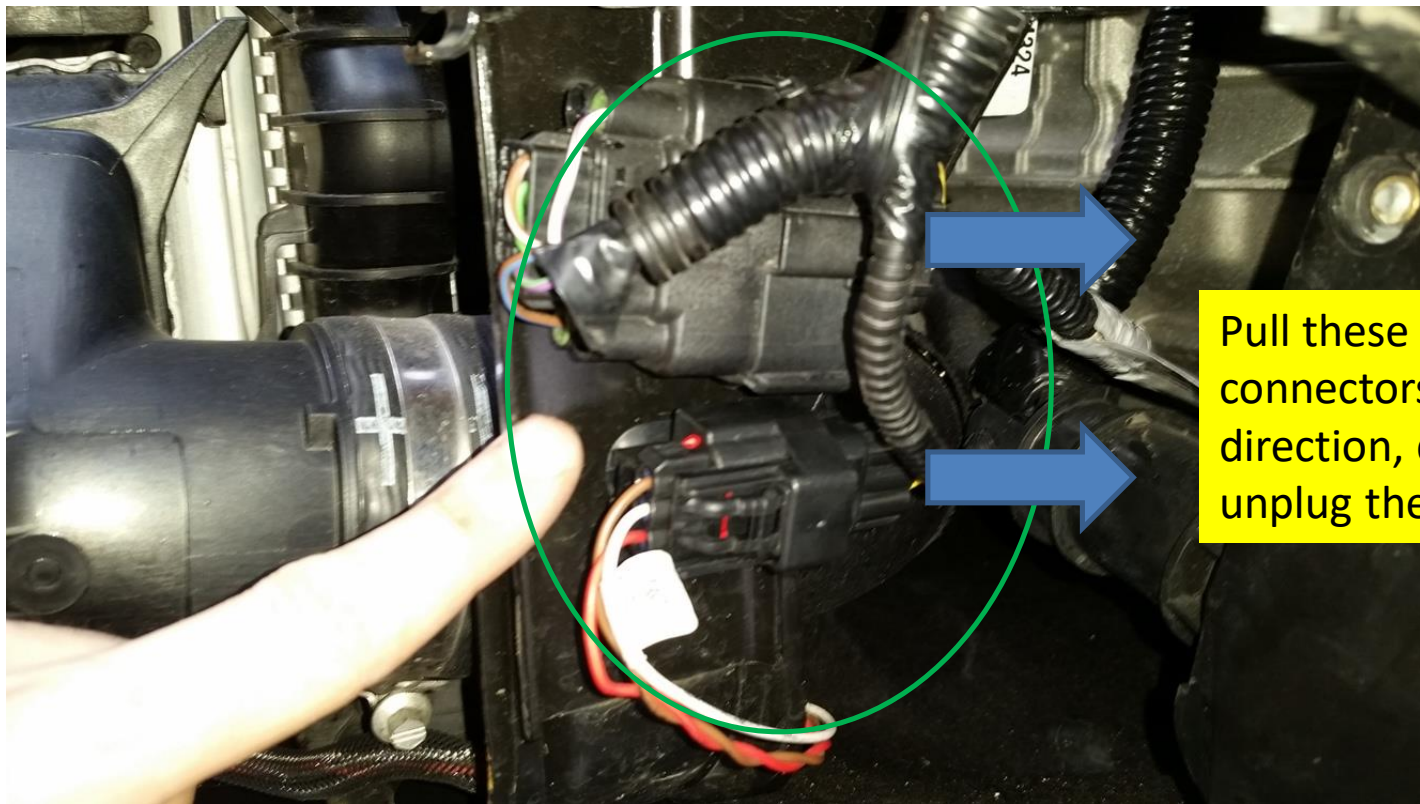
Remove the 3 screws in these locations.



This image is a top down view standing over the driver side fender, the bolt is closest to the engine.

ECU Re-position

Unclip these two wire harnesses and zip tie them in a safe manner, make sure they are not being yanked on once tied down.



Pull these electrical connectors in this direction, do not unplug them though.

ECU Re-position

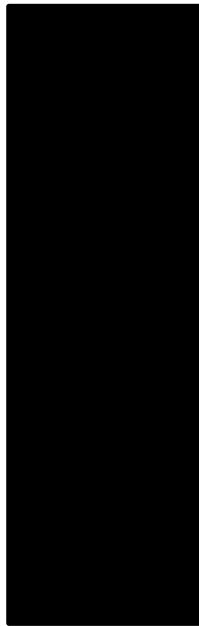
After you remove the fasteners, rotate the ECU as if you were tipping the top of the box forward, sweep a 90 degree angle. Until the box is nearly parallel with the ground.



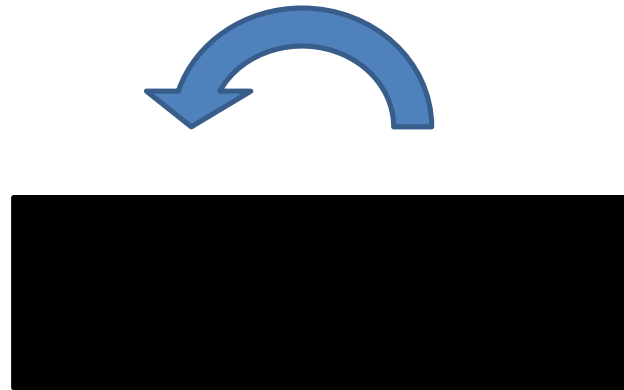
ECU Re-position

Use this schematic for visual aid. Looking at the box from the driver side of the car. Use care when re-positioning, there are electrical cables that run out of the ECU box. Do not damage them.

Original position of box



New position of box



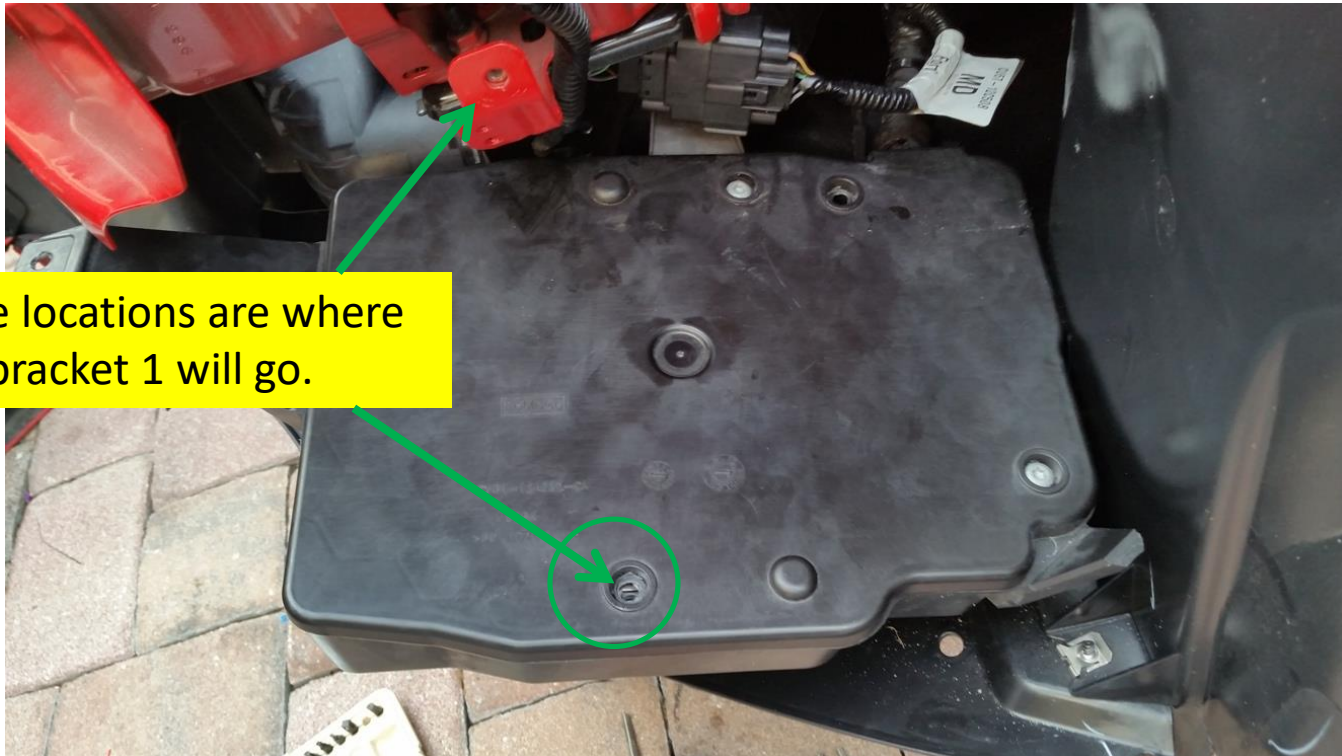
ECU Re-position

Remove these two long screws from the box using a T30 torx drive bit.



ECU Bracket 1

These points will be the fastening location for ECU bracket 1.



These locations are where ECU bracket 1 will go.

ECU Bracket 1

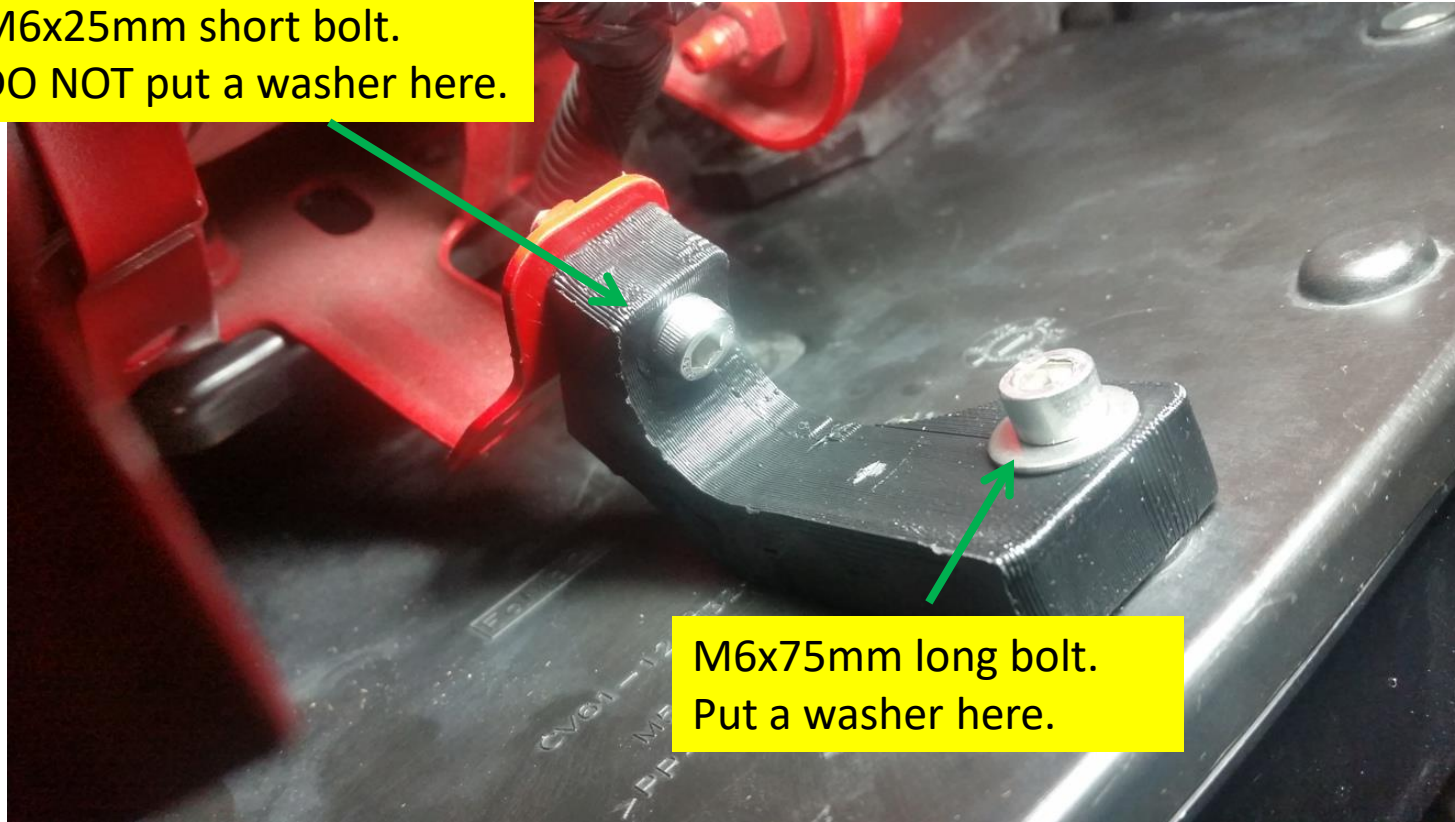
Tilt the ECU towards the tab shown, get the two holes close to each other to prepare for ECU bracket 1.



ECU Bracket 1

Note the orientation of ECU bracket 1. Position the box to align the holes. **Do not tighten bolts yet.** You need to be able to wiggle the box so you can fasten ECU bracket 2.

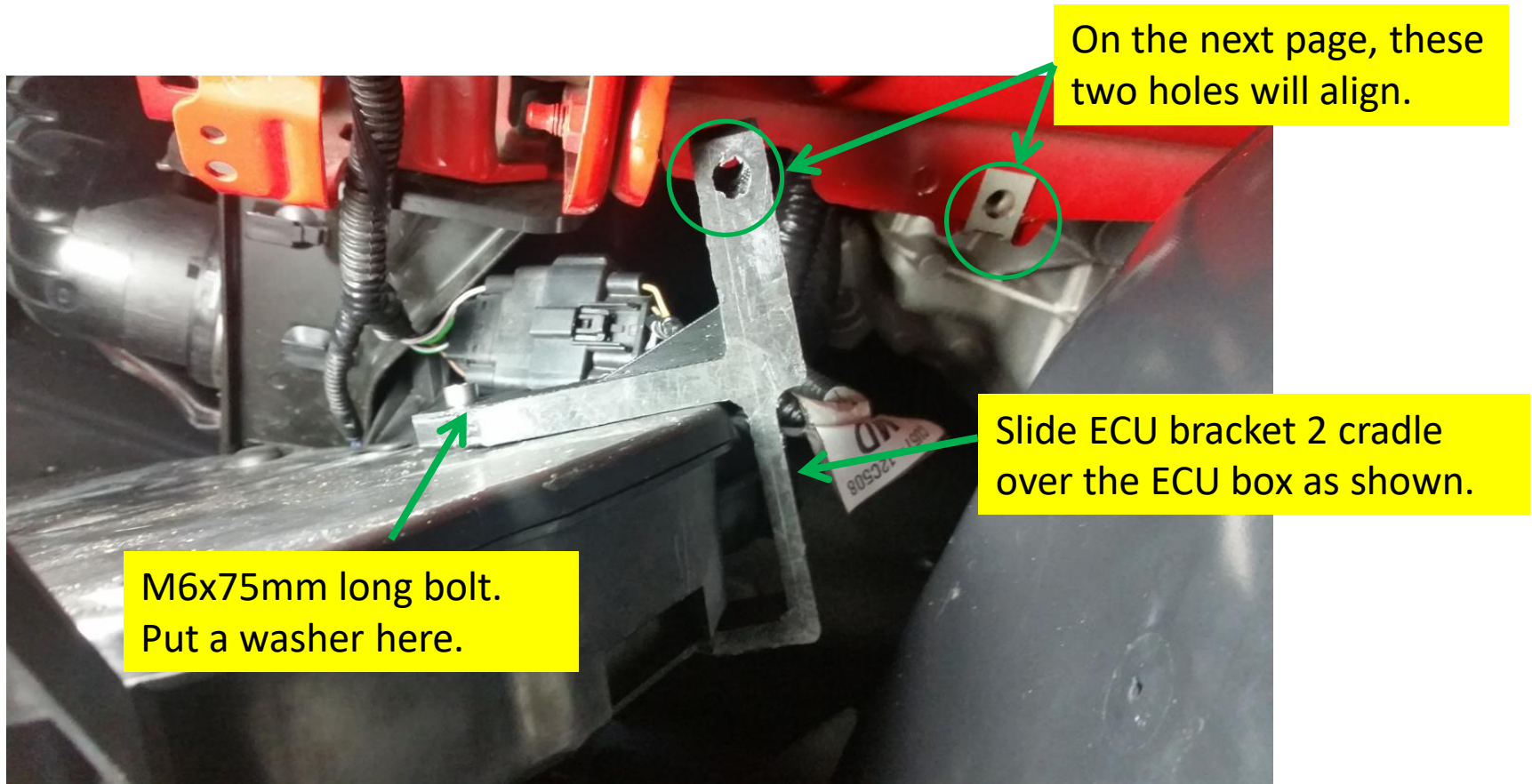
M6x25mm short bolt.
DO NOT put a washer here.



M6x75mm long bolt.
Put a washer here.

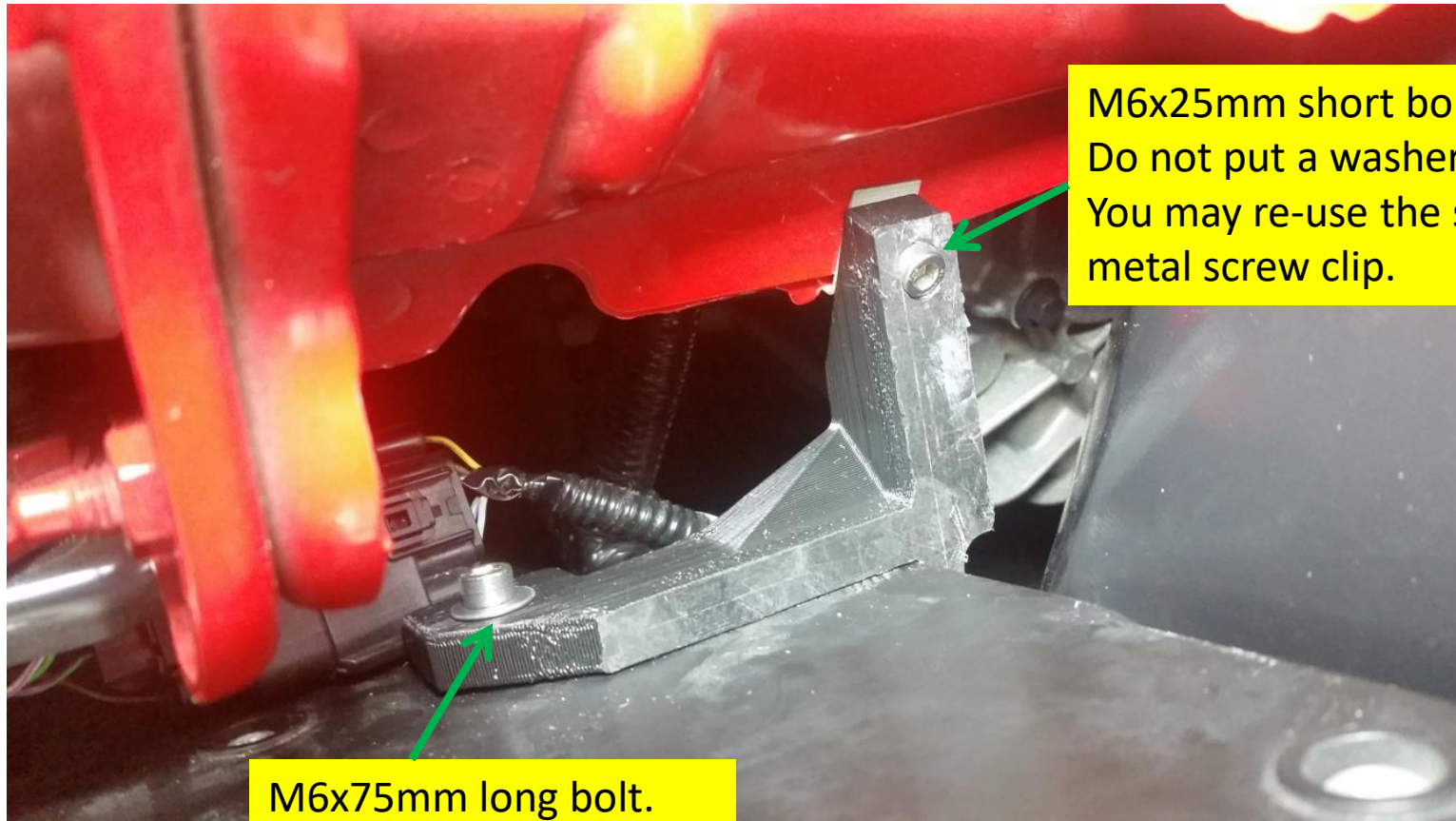
ECU Bracket 2

Note the orientation of ECU bracket 2. Bracket 2 is unique in that it has a supporting feature that cradles the ECU. Ensure that the bracket is positioned like this.



ECU Bracket 2

Once all bolts have been inserted and threaded BY HAND. You may go back and tighten. Do not overtighten, hand tight is acceptable.



M6x25mm short bolt.
Do not put a washer here.
You may re-use the stock metal screw clip.

M6x75mm long bolt.
Put a washer here.

ECU New Position

Once all bolts have been inserted and threaded BY HAND. You may go back and tighten. Do not overtighten, hand tight is acceptable.



Foglight Removal

It is highly suggested to use a heat gun on the backside of the bezel to loosen the plastic clips so they don't break.

1. Front plastic bezel



2. Use plastic prying tool, start here



3. Remove two screws and re-use them for step 4.



4. Install the inlet duct in stock location with stock hardware.

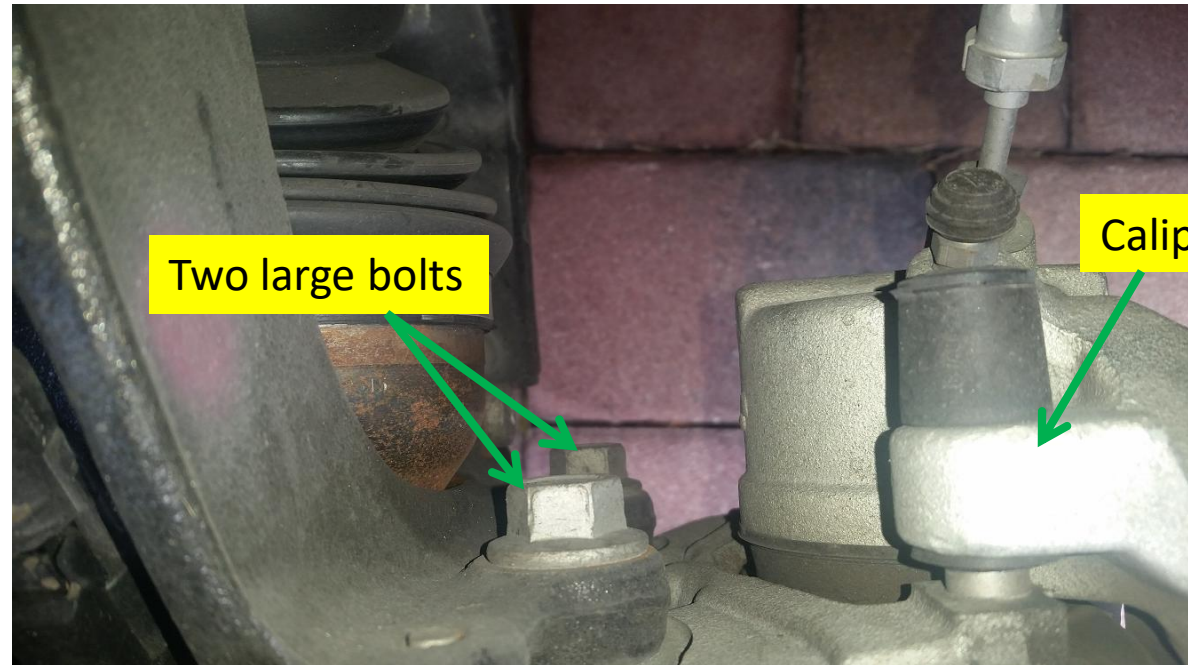


Remove Dust Shields

The following instruction applies to both sides of the car.

Use an 18mm socket to remove the bolts holding the caliper to the hub assembly, you will need a long wrench to remove them carefully. Do not suspend the caliper from the brake line, use a piece of wood or cardboard box and support the weight of the caliper when working to remove the dust shield.

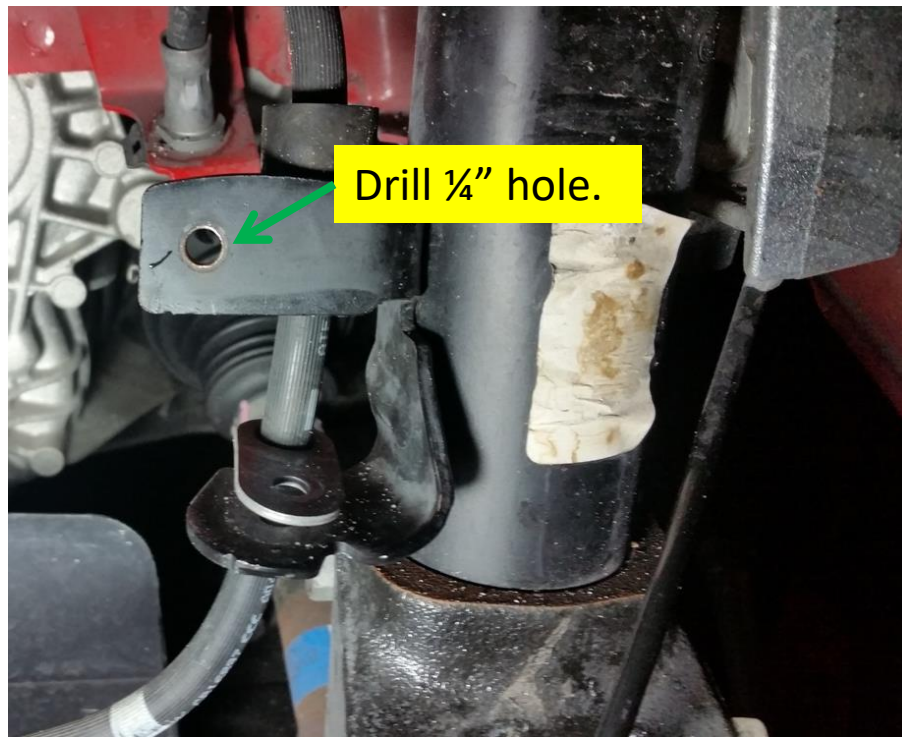
At this point during installation, it is necessary to jack up the front of the car and secure with jackstands in a safe manner.



Diffusers

The following instruction applies to both sides of the car.

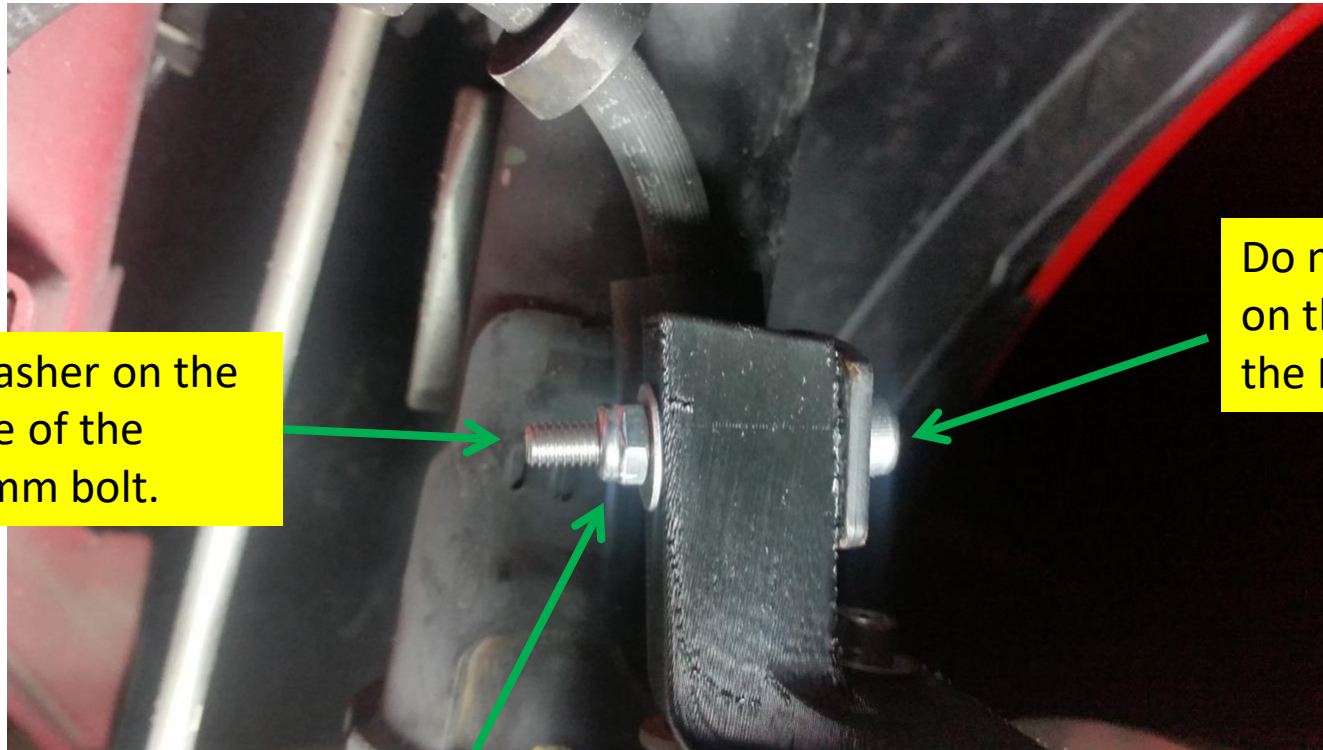
Remove 6mm bolt from factory location and move the brake line out of the way.
Drill a ¼" hole in the location shown and fasten the passenger side diffuser assembly as shown.



IMPORTANT: Use a washer on the side with the nut and do not overtighten. This is important so you do not accidentally put too much pressure on the support tab, hand tight only.

Diffusers

The following instruction applies to both sides of the car.



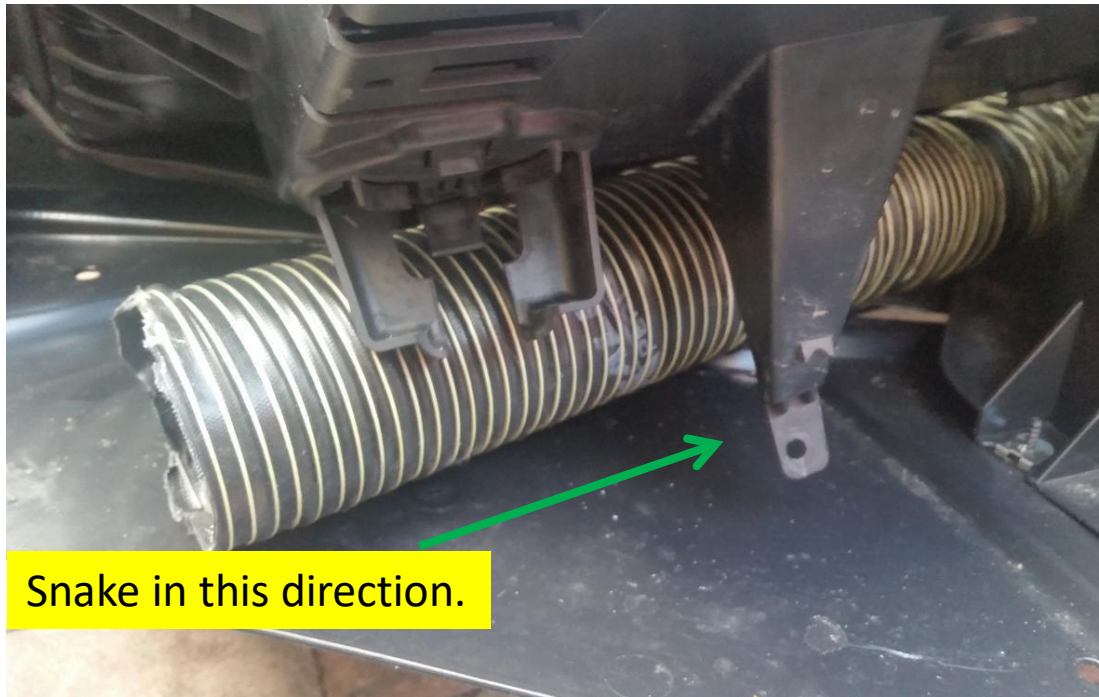
Put a washer on the backside of the M6x40mm bolt.

Do not use a washer on the front side of the M6x40mm bolt.

IMPORTANT: Use a washer on the side with the nut and do not overtighten. This is important so you do not accidentally put too much pressure on the support tab, hand tight only.

Driver Side Hose Assembly

Snake the hose through the gap between the engine casing and inner fender liner. You can use both hands to do this if you insert your hand through the wheel well and reach in to grab the other end of the hose as you snake it through the front.

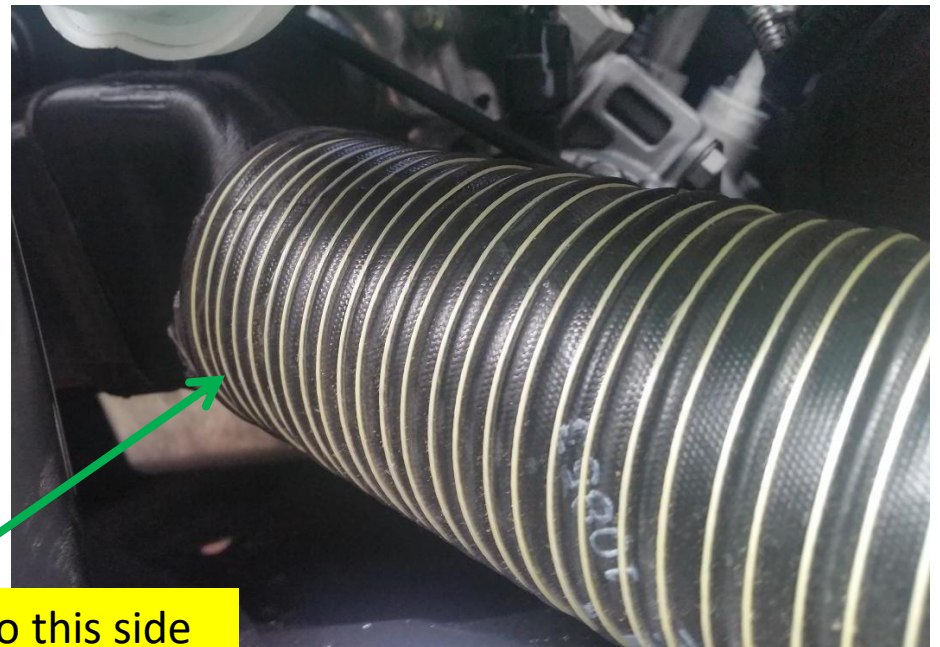


Ensure all hose ends are wrapped completely around the duct adapters, use the supplied stainless steel band clamps to secure.

NOTE: Make sure the band clamp IS BEHIND the ridge on the duct adapter end.

Passenger Side Transition Duct

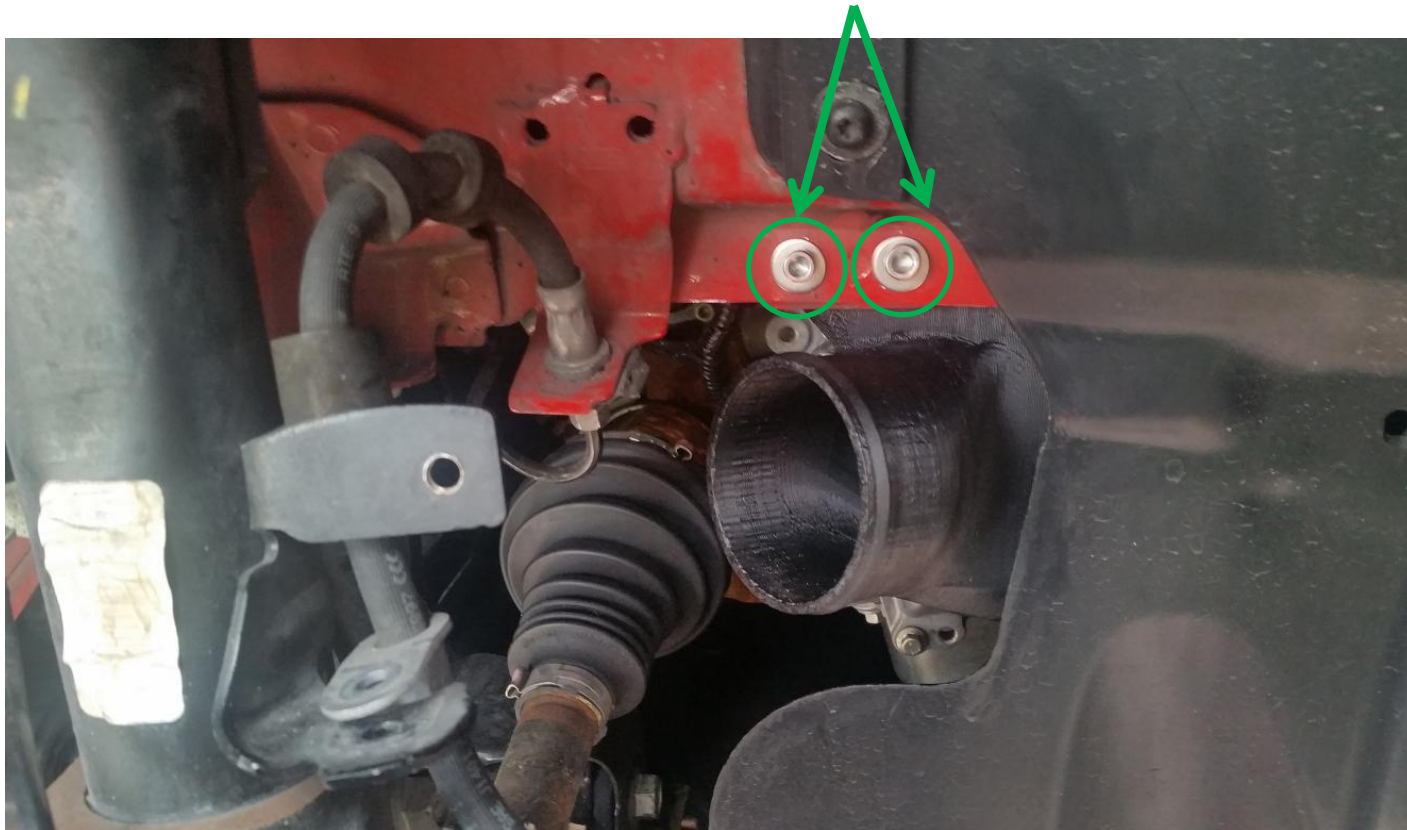
Attach the 20" hose to the front side of the duct first and secure with hose clamp. Snake the 20" from the inside of the wheel well, towards the front of the car, use both hands to snake through.



20" hose attaches to this side first with band clamp, then slide in through wheel well.

Passenger Side Transition Duct

Secure with supplied M6x40mm bolts, **do not overtighten**, **USE WASHERS ON BOTH SIDES** of the duct. This is important so you do not accidentally put too much pressure on the plastic flange, **hand tight only**. This will spread the load evenly, it is very important.



Passenger Side Hose Assembly

Use 10" short section of hose and secure to rear of transition duct and diffuser .



Ensure all hose ends are wrapped completely around the duct adapters, use the supplied stainless steel band clamps to secure.

NOTE: Make sure the band clamp IS BEHIND the ridge on the duct adapter end.

Inlet Hoses

As you bring the bumper into close proximity to the car, you can begin to secure the hose ends to the inlet ducts. You may need to remove the front splash shield from under the car.



Ensure all hose ends are wrapped completely around the duct adapters, use the supplied stainless steel band clamps to secure.

NOTE: Make sure the band clamp IS BEHIND the ridge on the duct adapter end.



Finalize

- Before installing bumper, turn the car on and turn the wheel, there should be enough slack to allow the ducting to flex freely.
- Once you have visually inspected that the system moves freely, you may install the bumper in the reverse order that you removed it.
- Go back and check all bolts and **LOOSEN IF ANY ARE TOO TIGHT, JUST SNUG IS FINE.**