



Flex Fuel Bluetooth Kit 2015+ WRX install instructions



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FFBT parts:

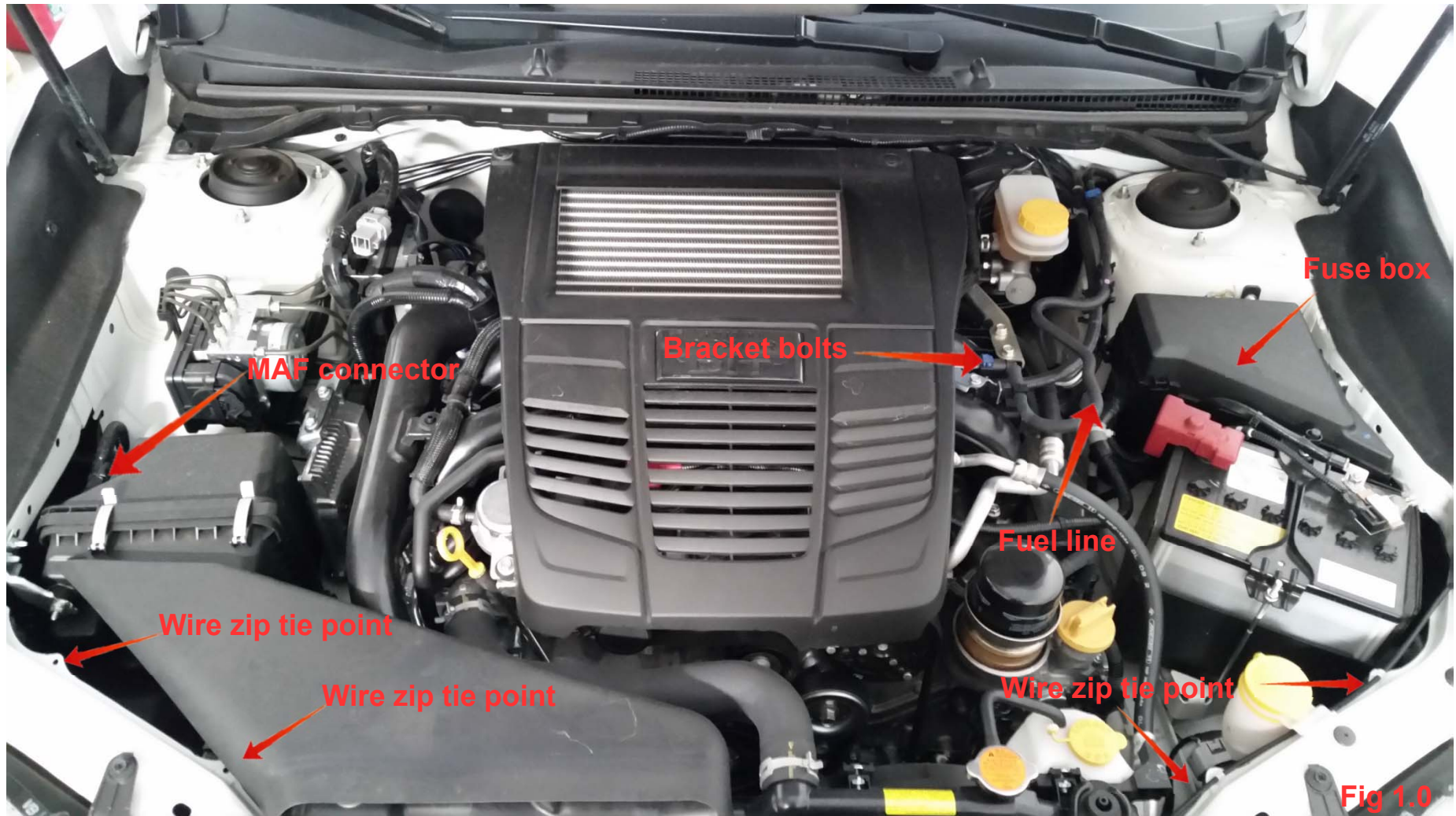
- (1) Ethanol Content Analyzer Module
- (1) Ethanol Content Analyzer Sensor
- (1) Sensor Bracket
- (1) Velcro Strip
- (3) Stainless Steel Bolts
- (3) Stainless Steel Washers
- (3) Stainless Steel Lock Nut
- (2) Fuel Lines

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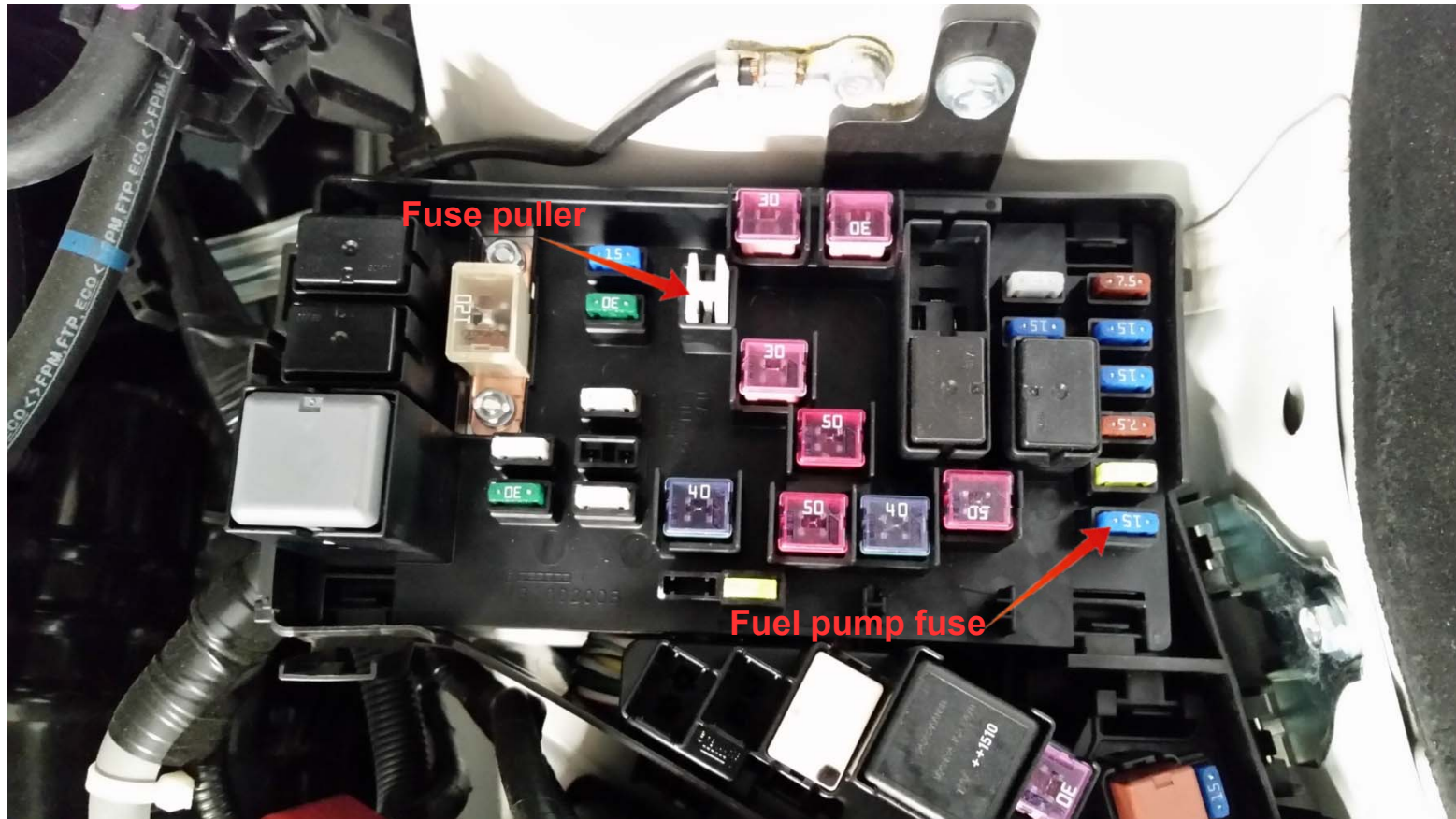
Tools required for installation:

- (1) 12mm wrench
- (1) 10mm wrench
- (1) 5mm allen wrench
- (1) Flat head screw driver
- (2) Shop towels
- (4) Zip ties



Working areas:

Locate the areas you will be working with when installing the FFBT in the engine bay.

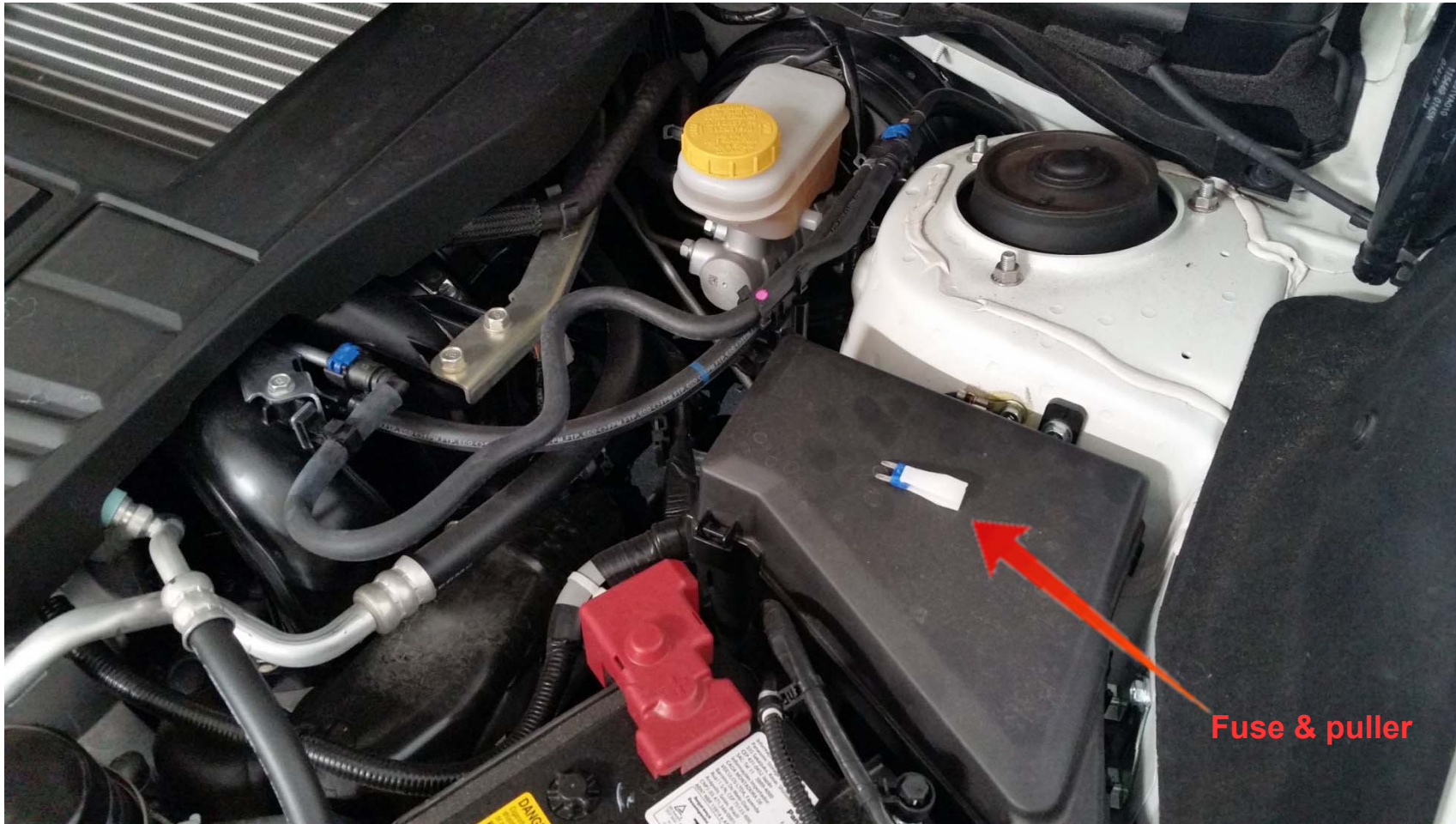


Fuse and fuel pressure:

Ensure the vehicle is off and disconnect the blue 15 amp fuel pump fuse, in the main fuse box. It's labeled F/PMP on back of the box cover.

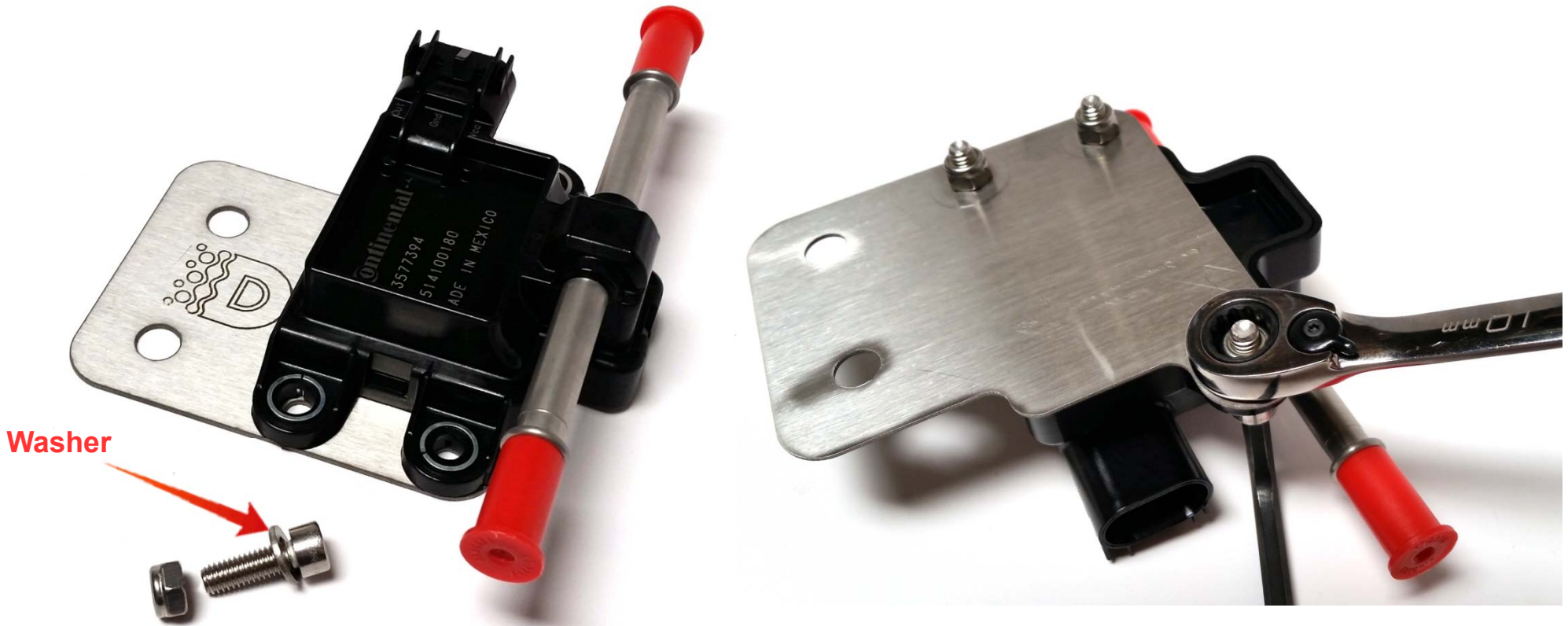
Now try starting the vehicle; it should either refuse to start or start and die once the remaining fuel is used up in the fuel lines.

If the car was running recently, let the vehicle sit for a minimum of 30 minutes to relieve fuel pressure and cool before installation.



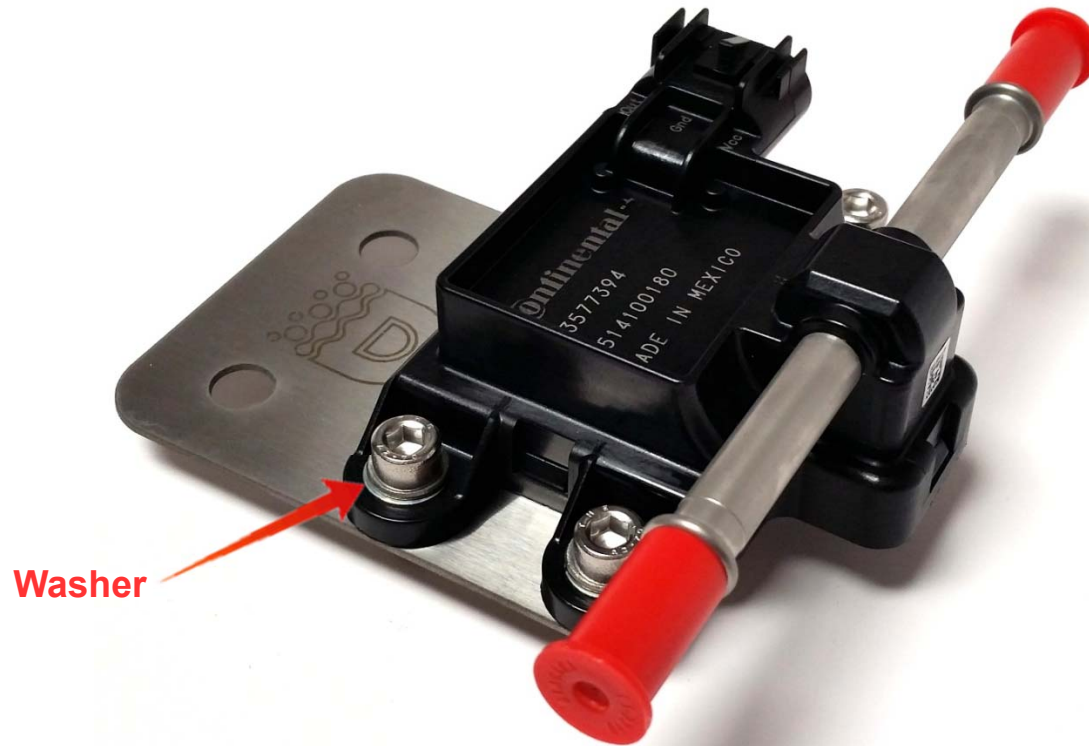
Fuse Box:

Cover the fuse box, as you don't want the chance of fuel or foreign objects getting inside. Put the pulled fuel pump fuse and puller in a safe place.



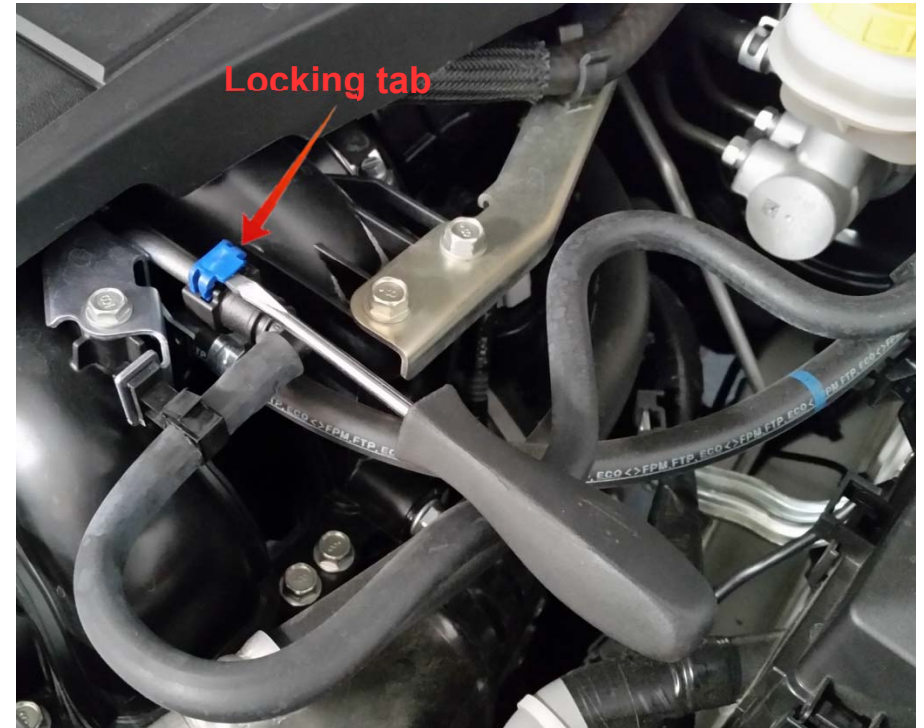
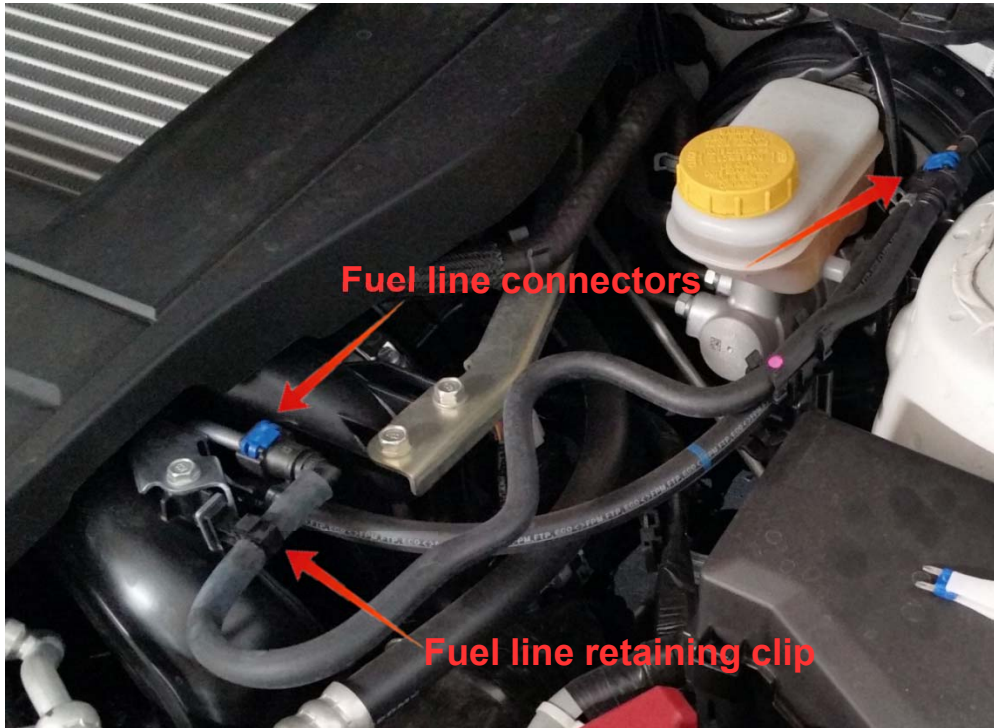
ECA sensor bracket:

Use the supplied three bolts, locknuts and washers to attach the FlexFuel Sensor to the mounting bracket, as shown in the picture above, using a 5mm allen wrench and 10mm wrench or ratchet. Note, washers go in between the head of the bolt and top of ECA sensor holes. Tighten bolts snugly.



ECA sensor bracket assembly :

The completed ECA sensor bracket assembly should look the same as the picture shown above. Set aside for now, as the next steps involve fuel line removal.



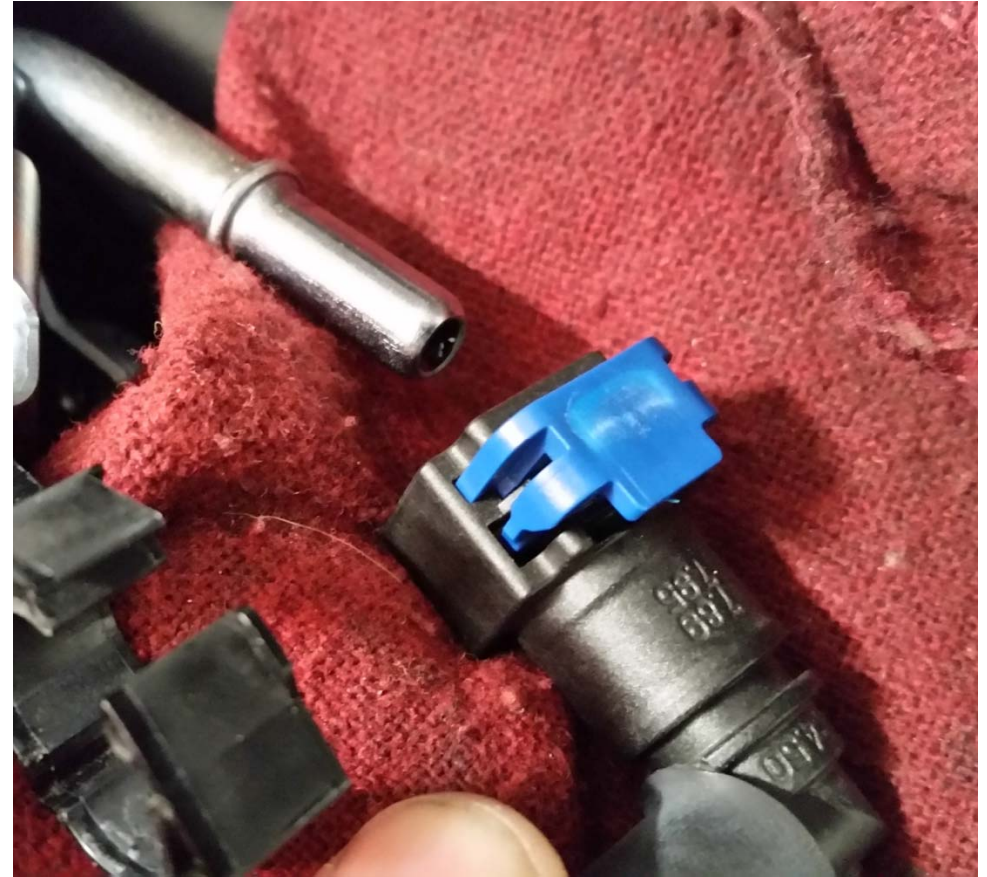
Fuel line locking tabs:

Locate the blue locking tabs on the fuel line connectors and pop them up with a flat head screw driver. At this time, leave the fuel lines connected.



Fuel line retaining clip:

Using a screw driver or fingers, gently remove the retaining clip. At this time, leave the fuel lines connected.



Fuel line disconnection:

Pull away the line to release it from the hard line. Use a shop towel to cover the line and another under the line to catch any lost fuel. *****Caution***** Take great care when removing the line, as there still may be high pressure fuel in the line. If you pull slowly the pressure will release slowly and should not spray fuel.



Fuel line propping:

Prop up the fuel connector that you just disconnected, on top of the hard line nipple to keep fuel from spilling out.



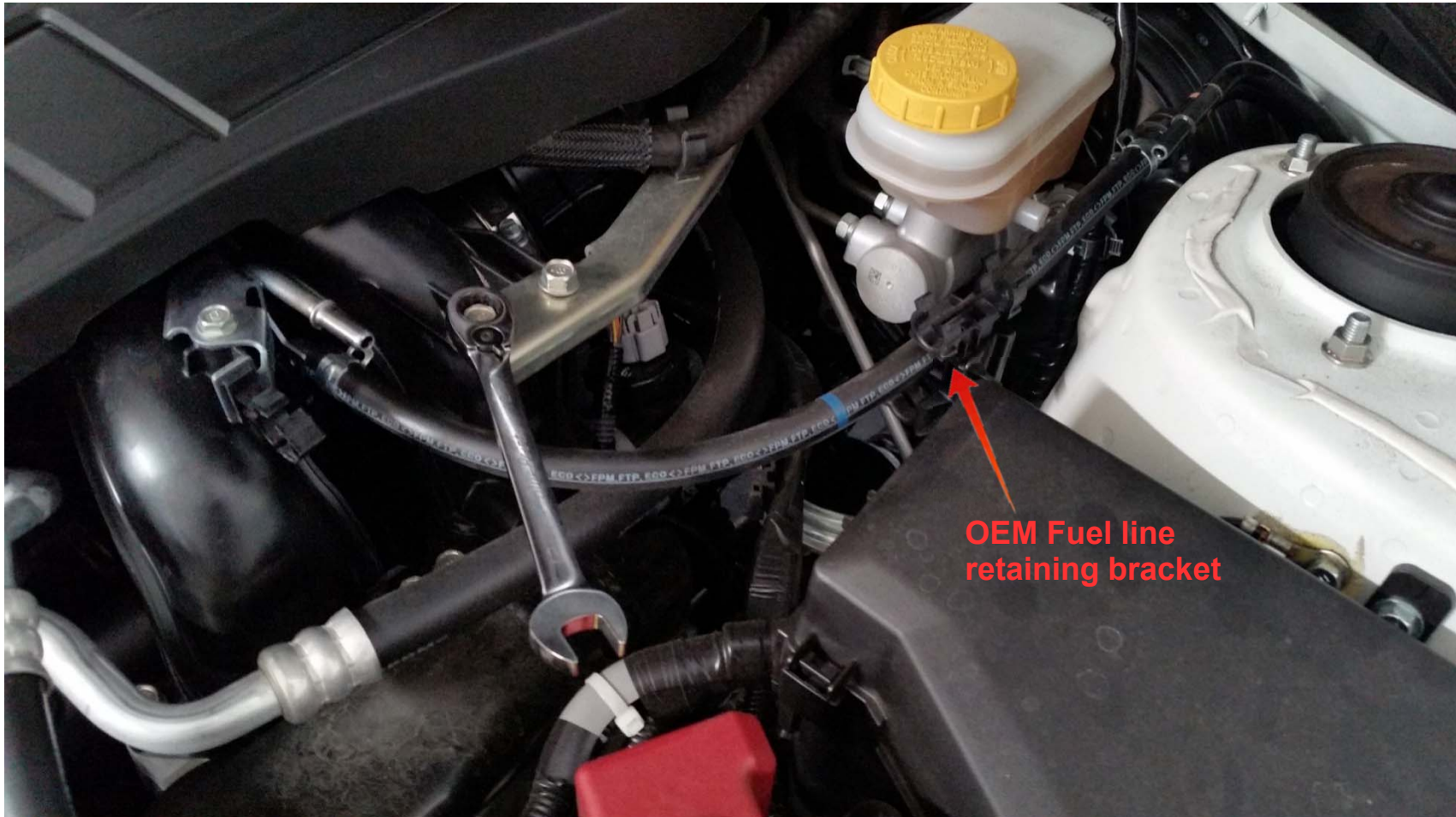
Fuel line disconnection:

Pull away the other end of the fuel line to release it from the hard line. Use a shop towel to cover the line and another under the line to catch any lost fuel. *****Caution***** Take care when removing the line, as some fuel may spill out of the line. Also, make sure to manage the other end of the line that is disconnected, so fuel does not spill.



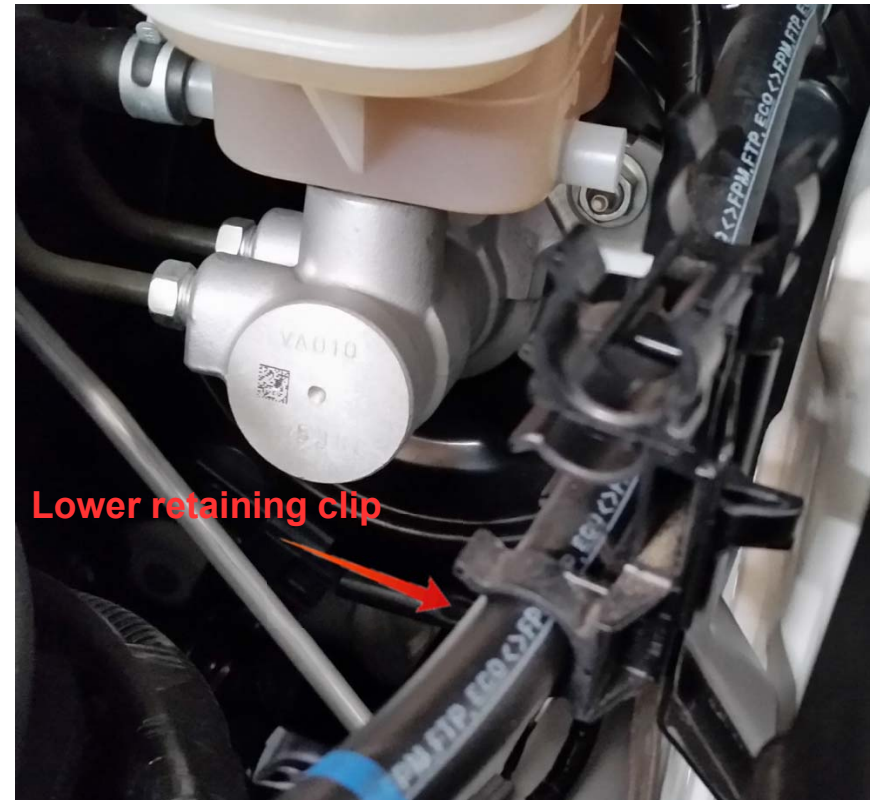
Fuel line removal:

Carefully remove the fuel line without spilling any fuel and drain the remaining fuel into an approved fuel storage container. Set stock fuel line aside.



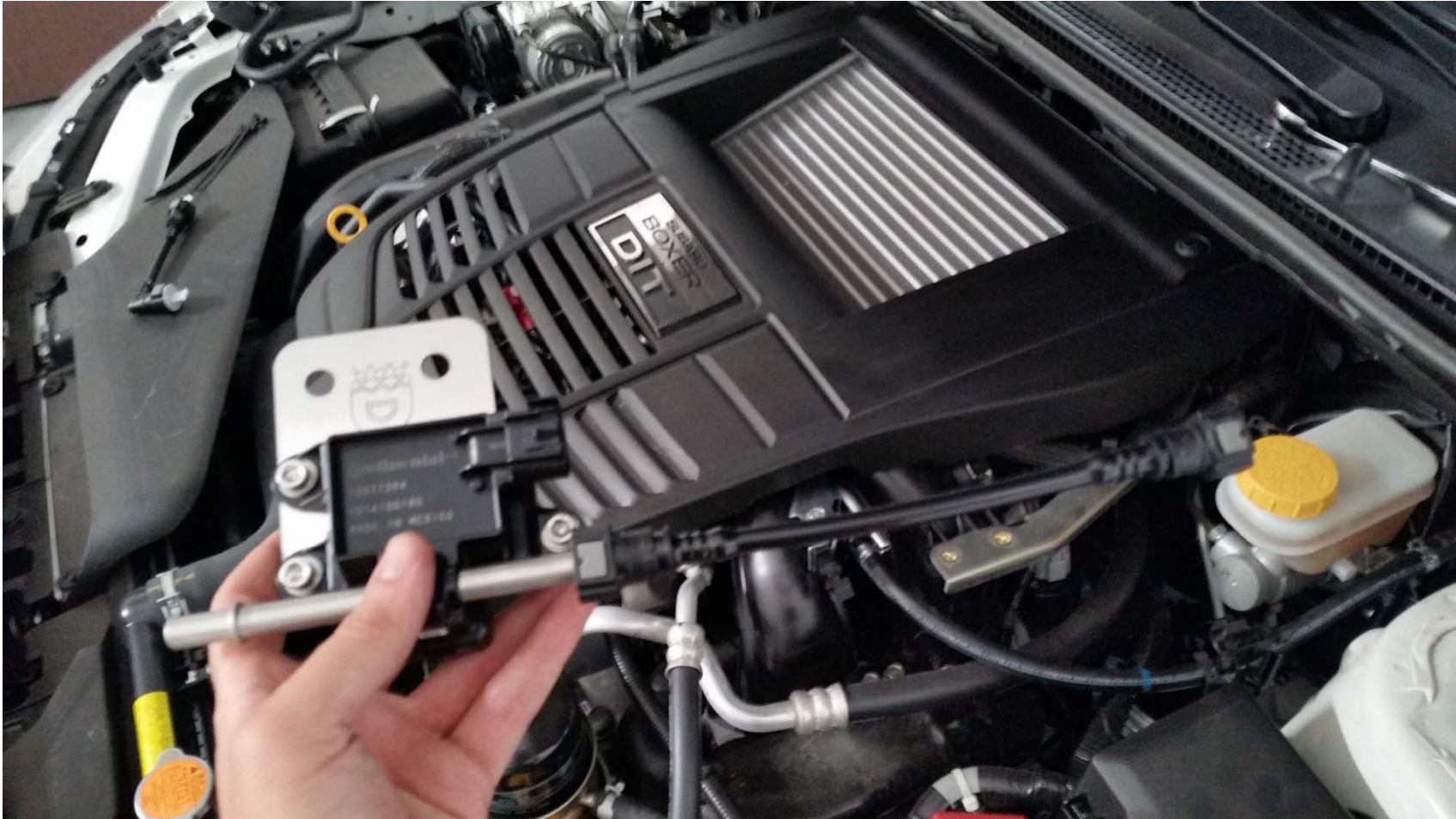
Bracket bolt removal:

Remove the two bolts holding on the intercooler bracket with a 12mm wrench or ratchet. Set aside the bolts for use later. Locate the OEM fuel line retainer bracket.



Fuel line rerouting:

The remaining OEM fuel line must be moved to accommodate the new quick disconnect line. Remove the fuel line from the upper retaining clip and reinsert the line into the lower two retaining clips on the OEM fuel line bracket as shown in the pictures above.

**Line installation:**

Remove red and white protective caps from ECA sensor and fuel line and set aside. Insert the ECA sensor nipple into the straight supplied quick disconnect fuel line. Push the line connector until you hear an audible click. Note, one end is larger and will only fit onto the sensor nipple. Leave the other end disconnected at this time.

**Bracket bolt removal:**

Insert the fuel hard line near the firewall into the quick disconnect fuel line. Push the line connector until you hear an audible click, then rest the ECA bracket assembly on top of the intercooler bracket as shown in the picture.

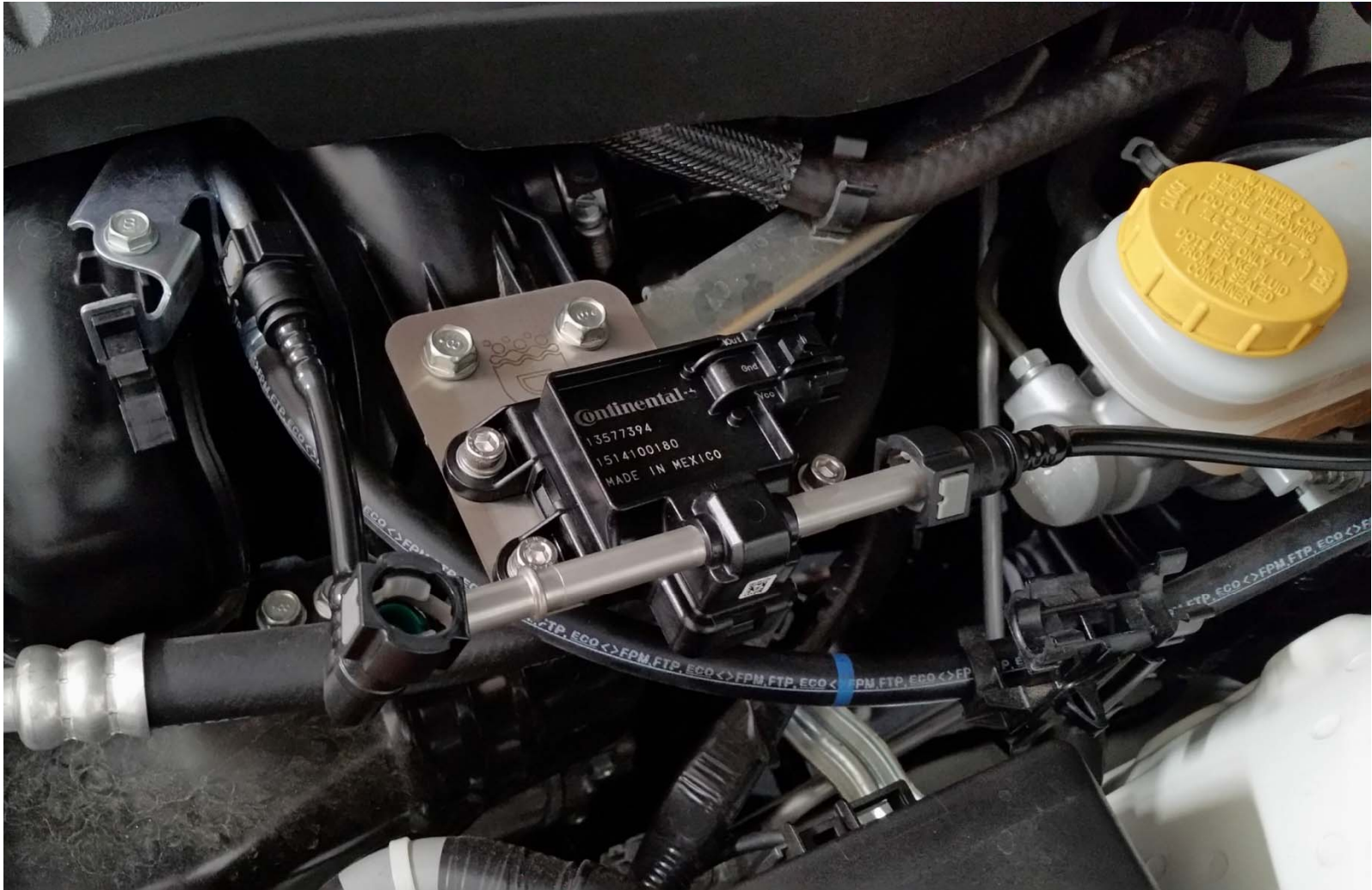


Bracket alignment:

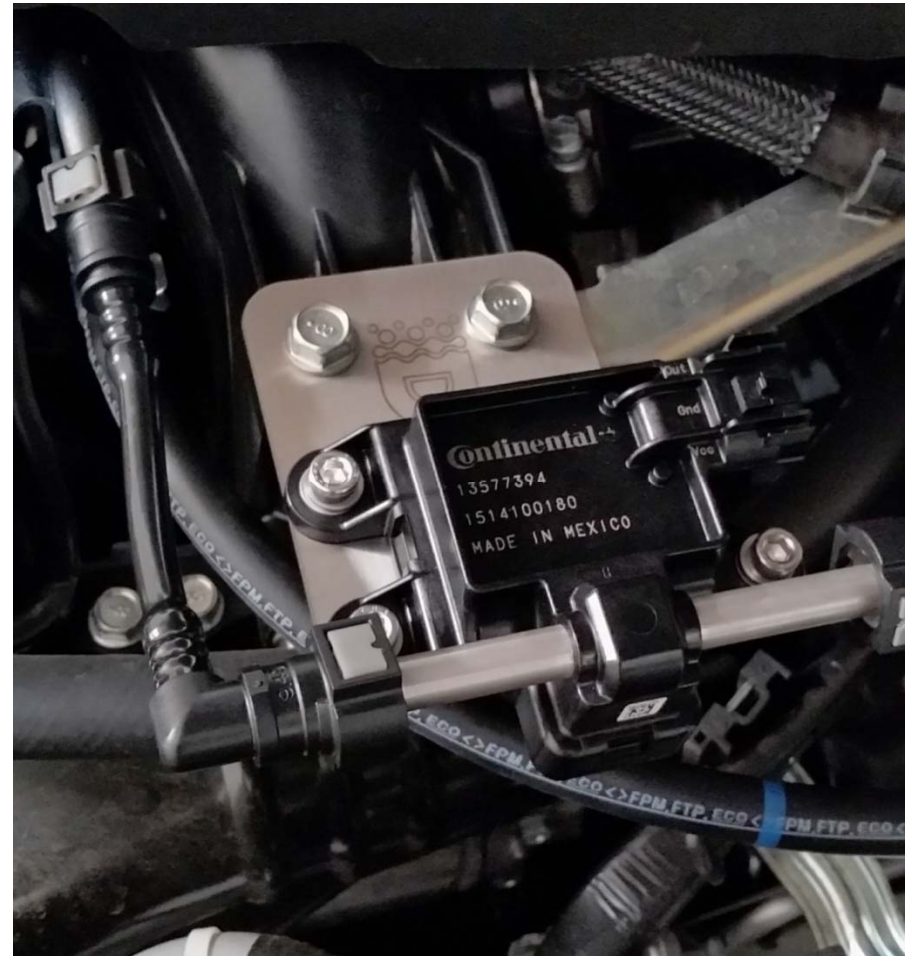
Carefully align the bracket holes to the intercooler bracket holes, creating a subtle “S” bend in the quick disconnect line. Insert the two bracket bolts that were previously removed and hand tighten while still maintaining alignment.

**Bracket installation:**

Tighten the bracket bolts with a 12mm wrench or ratchet. The bracket may move around, make sure that the quick disconnect fuel line has some clearance from the brake master cylinder reservoir.

**Fuel line installation:**

Remove the white protective caps and push the remaining fuel line onto the OEM hard fuel line, push the connector until you hear an audible click. Note, the 90 degree connector it rotated upwards at this time.



Fuel line bend & connection:

Carefully rotate and bend the line, as shown. *****Caution***** Do not bend too far and kink the line. Insert the ECA nipple into the 90 degree connector, push until you hear an audible click.



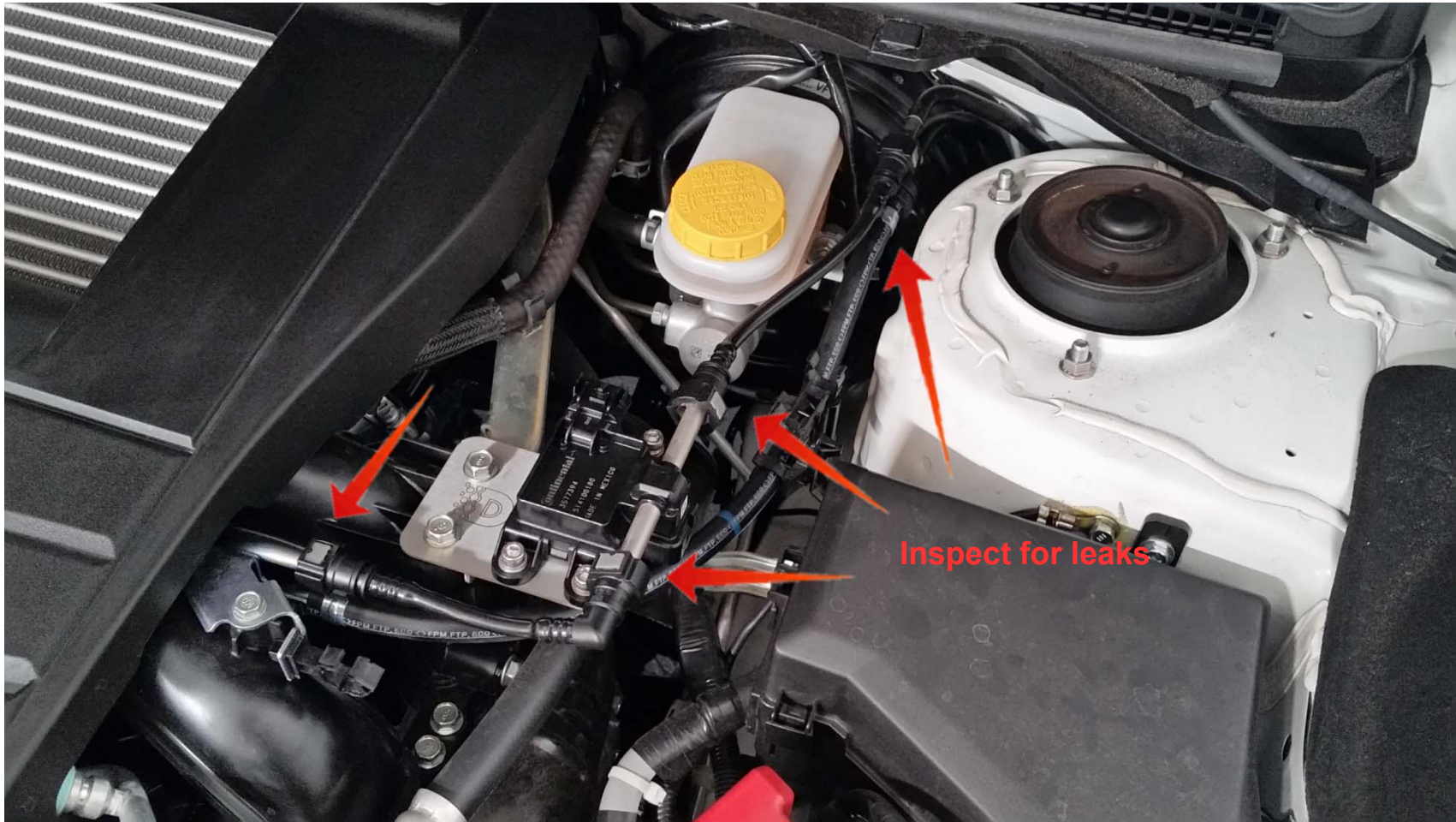
OEM Fuel line:

Using the small white protective caps, insert them into the fully drained OEM fuel line for storage. It is important to keep this fuel line for going back to an OEM configuration.



Priming & fuel line check:

Prime the vehicle 10 times before starting to completely prime the fuel lines. When doing so, it is very important to check all the fuel line connections for any small leaks. To prime, turn ignition key to the ON position.



Fuel line check after starting:

When starting the car for the first time, once again, please inspect all fuel lines for any small leaks (for a recommended 5-10 minutes) Start the vehicle.

If a leak is found please shut off the vehicle immediately and contact the distributor of the product for replacement. (At this time it is NOT recommended to drive the vehicle)



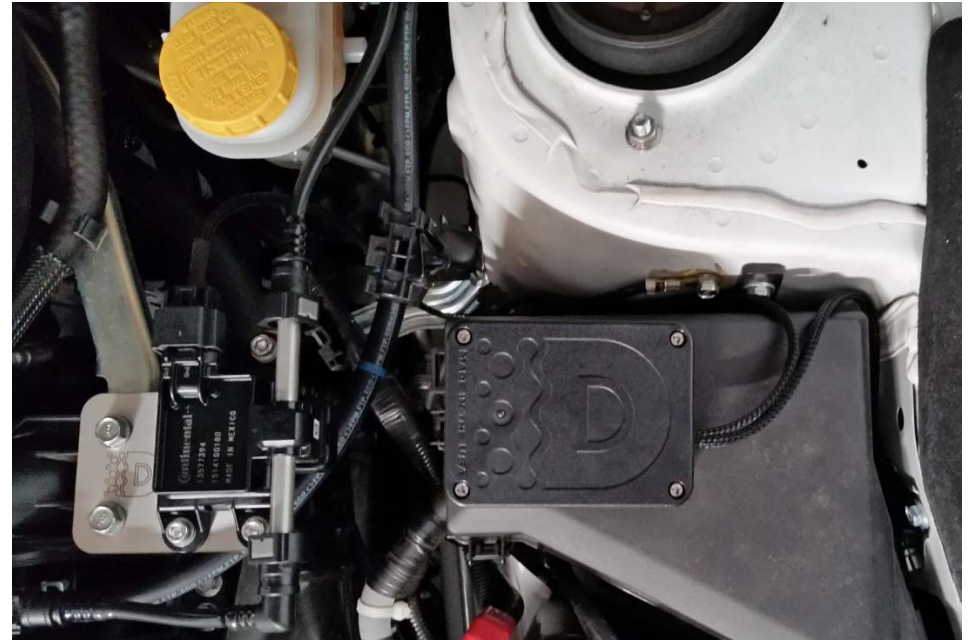
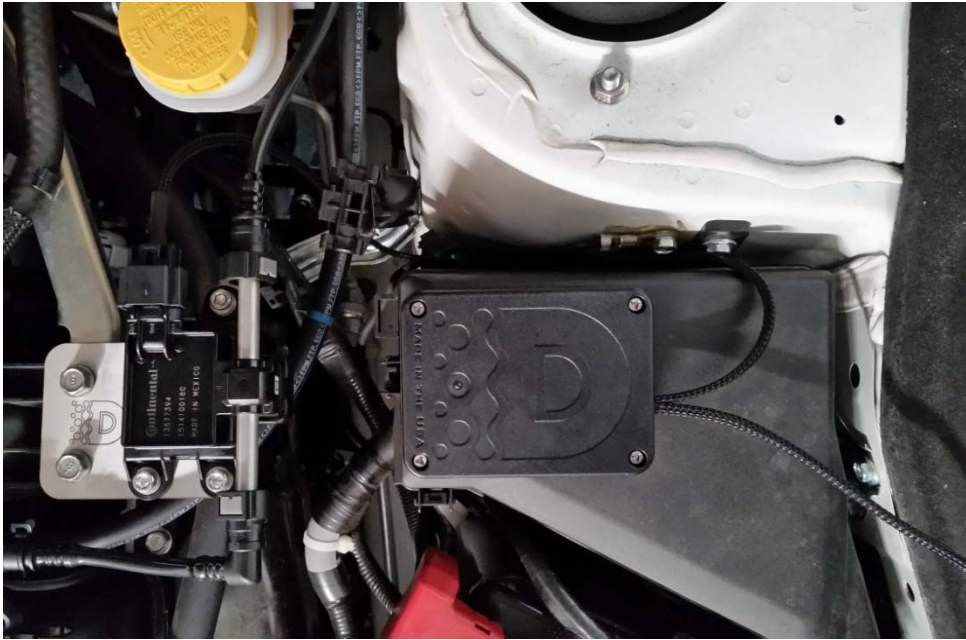
Attaching ECA module:

Remove Velcro's clear film to expose adhesive, ensure the fuse box is clean of dirt and oil. Firmly press the module down to adhere Velcro.



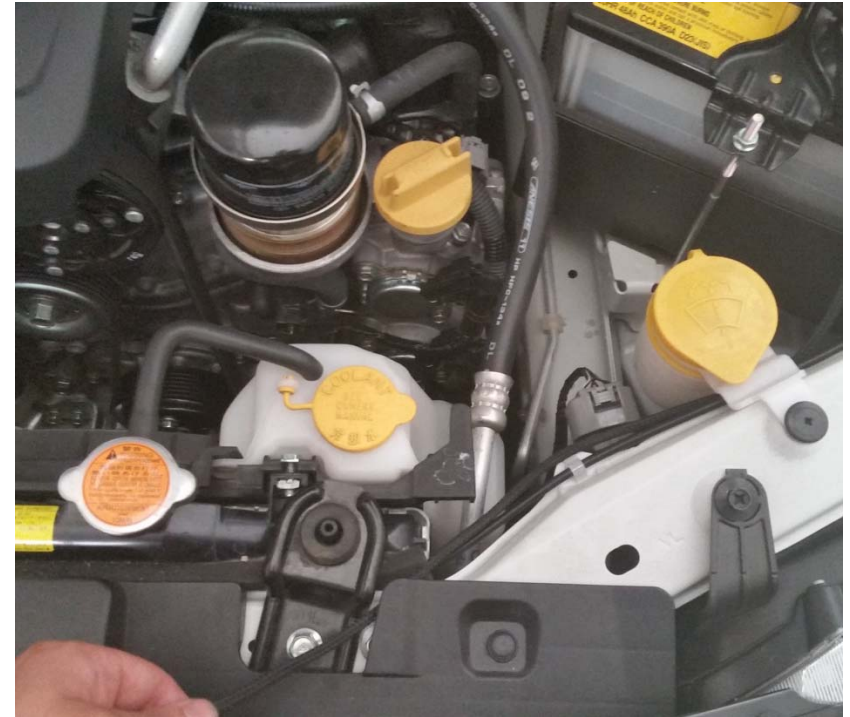
Wire routing:

Route the short wire harness underneath the OEM fuel line and between the fuse box and strut tower. Connect the connector onto the ECA sensor until it clips on.



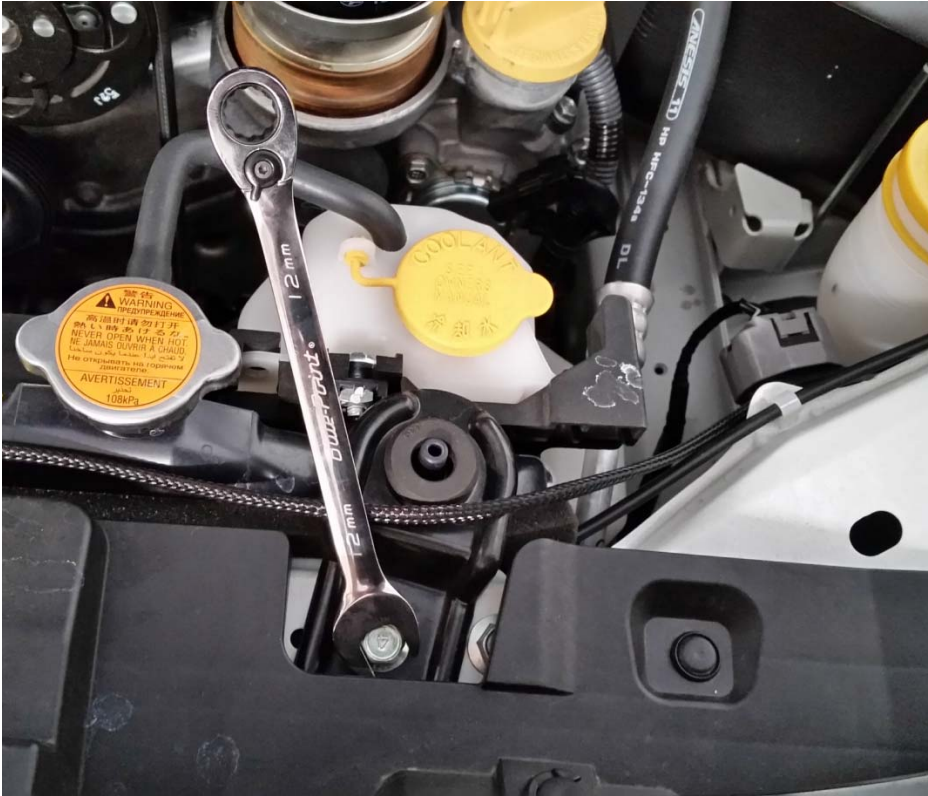
Wire routing:

Hook the long wire harness around the fuse box and route along side the right side, as shown in the pictures above.



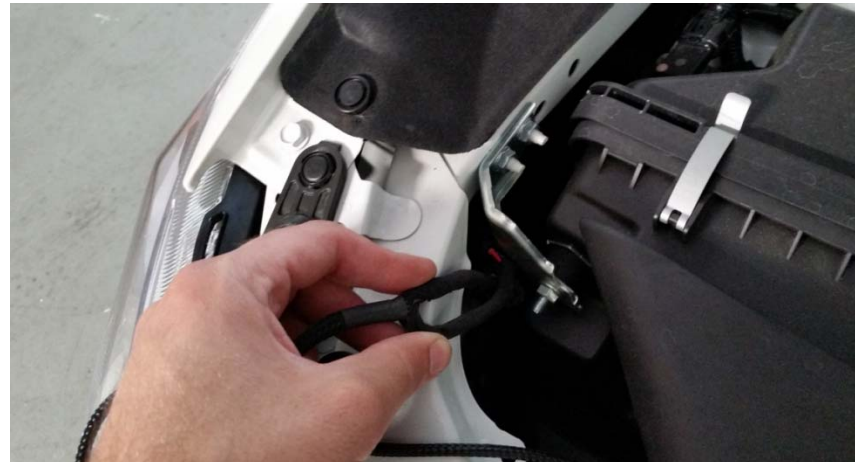
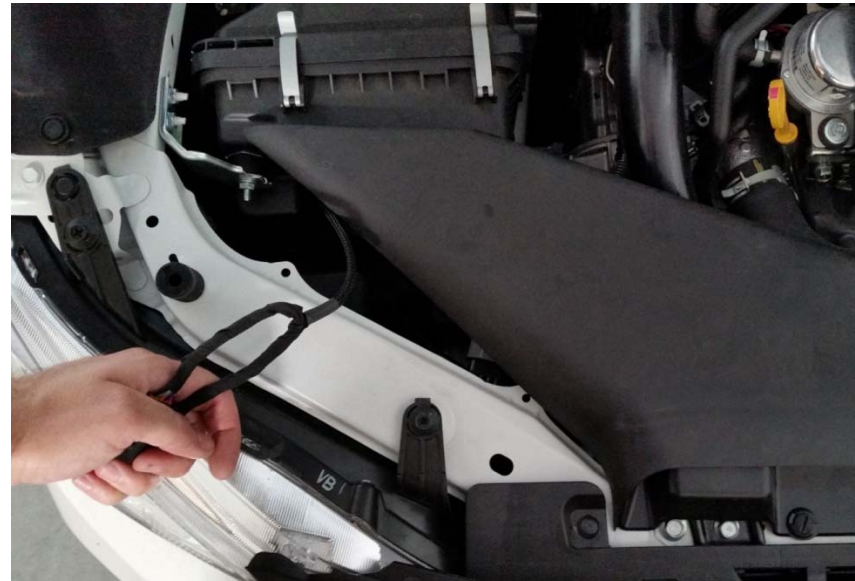
Wire routing:

Route wire harness down and between the windshield washer fluid reservoir neck, then pull through to the radiator mount, as shown in the pictures above.



Radiator mount:

Remove the radiator mount, with a 12mm wrench or ratchet. Run the wire harness along the foam across the radiator and reinstall the radiator mount, as shown in the pictures above. Note, make sure the anti-rotation tabs of the mount are inserted into the holes in the frame.



Wire routing:

Route the wiring harness under the intake scoop and pull the excess through and towards the front of the vehicle. Once pulled, route the harness under the intake bracket and along the left side of the intake box. Note, make sure the harness does not get caught on anything when pulling so it does not get damaged.

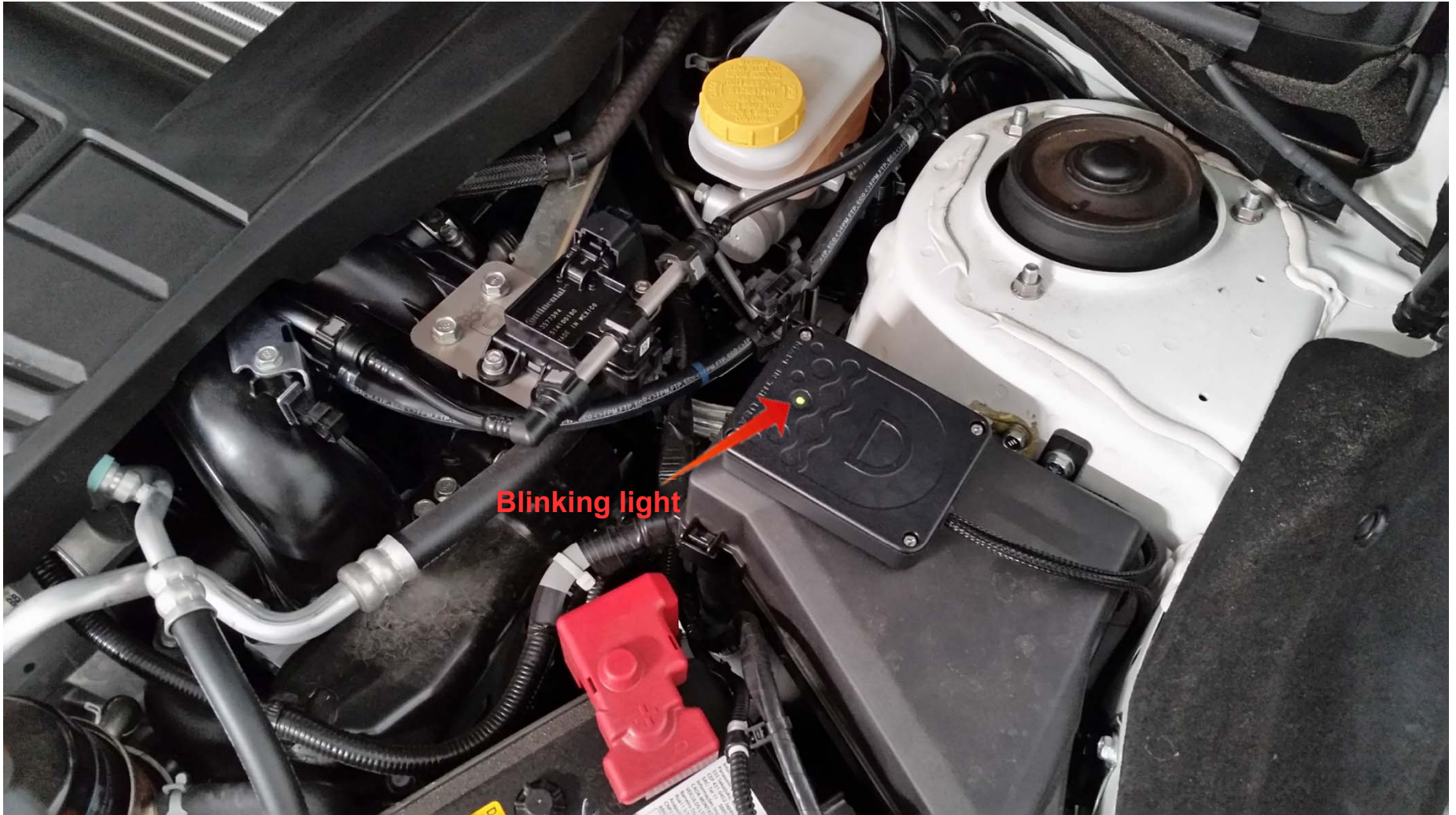
**Wire routing:**

Route the wiring harness under the intake scoop and pull the excess through and towards the front of the vehicle. Make sure the harness does not catch anything or will not get damaged.



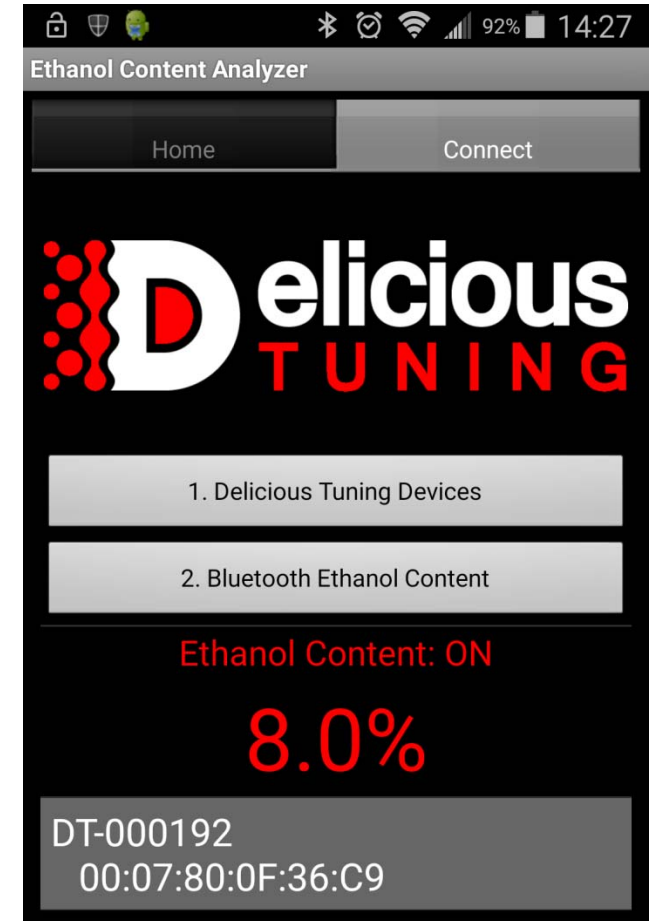
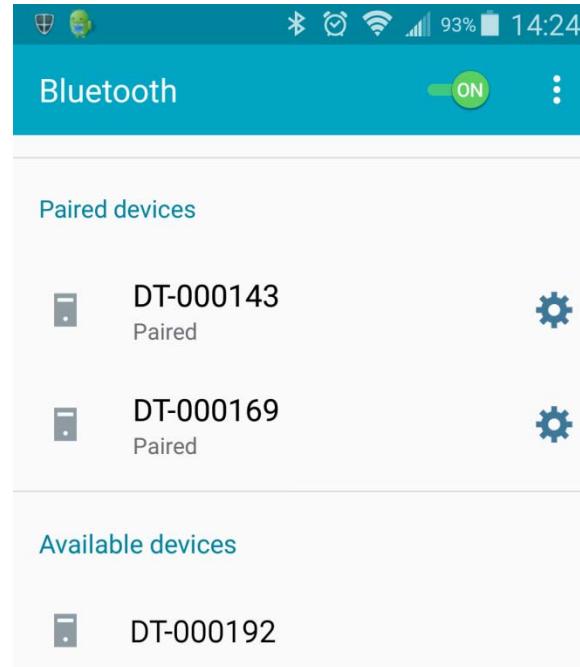
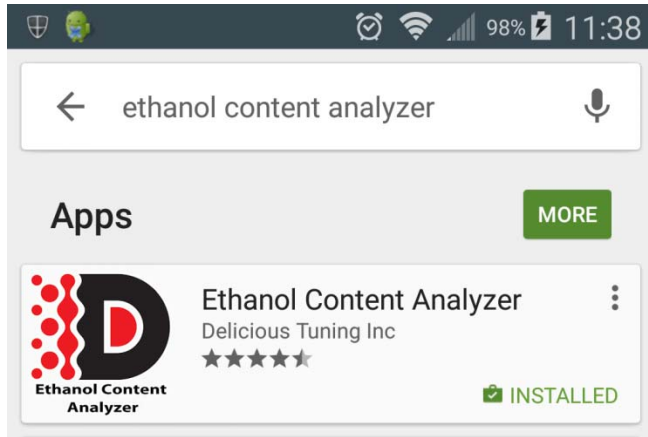
Installation check:

Make sure nothing is loose or at risk of being snagged, caught, or rubbed around the engine bay.



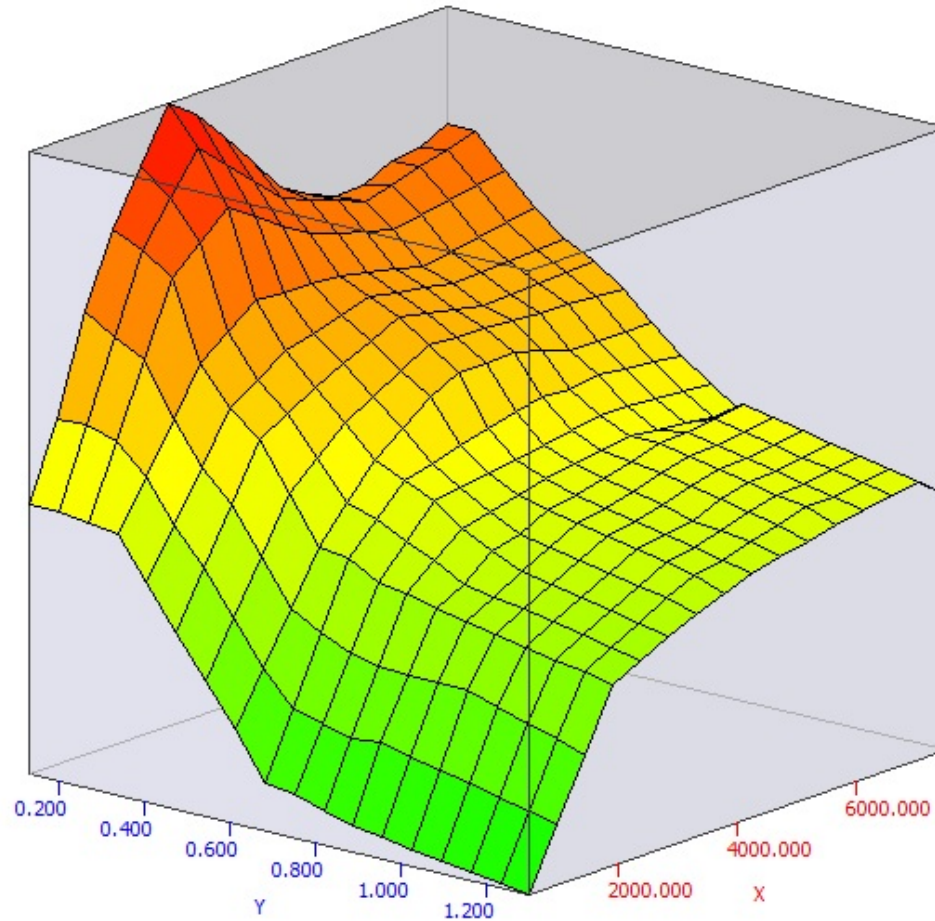
ECA module power:

With the vehicle in the ON position verify that the green light on the ECA module has a green blinking light.



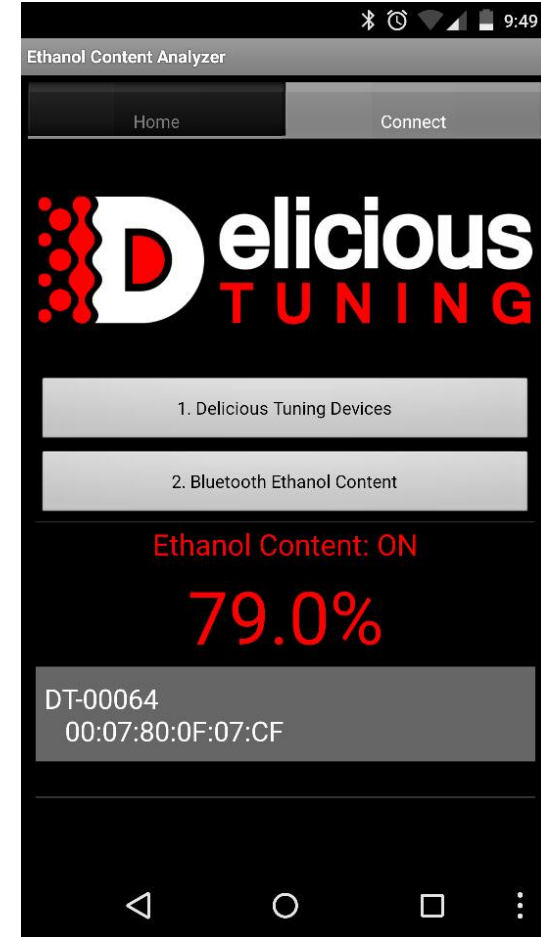
Bluetooth app:

Download the Ethanol Content Analyzer app in the Google Play store. Install the app and turn on your device's Bluetooth function. With your vehicle in the ON position and modules light blinking, scan and pair your device with the module (Pass code is 0000). Now open the app and select "Connect" tab then press "Delicious Tuning Devices" Select the device that you previously paired DT-XXXX, now press "Bluetooth Ethanol Content" The percentage of ethanol should now be displayed, around 8-15% for U.S. pump gas blends.



ECU tuning:

Before adding ethanol (E85) to the gas tank, reflash the ECU with new flex fuel mapping or have a Delicious Tuning approved dealer tune the vehicle for flex fuel mapping. Note, not tuning the vehicle and running ethanol can cause the engine to run poorly or lead to possible engine damage.



E85 / Ethanol:

Add ethanol to your gas tank, then start the vehicle. With the Ethanol Content Analyzer app open, you should see the percentage of ethanol increase after a few minutes or after driving, with returnless fuel systems. The percentage may vary for the first several minutes of driving, as the ethanol mixes with the gasoline that was already present in the fuel system.



Conclusion:

This concludes our flex fuel Bluetooth kit installation. You are now free to enjoy your new found horsepower and torque!

Any questions or issues, please contact the distributor of the kit.