



Flex Fuel Bluetooth Kit 08-16 STI install instructions For Cobb Tuning Access Port



Delicious Tuning
1948 Don Lee Place Suite #7
Escondido, CA 92029
408-480-0995
<http://www.delicioustuning.com>

BJP Rev: 1.0 Date: 10/1/15



FFBT parts:

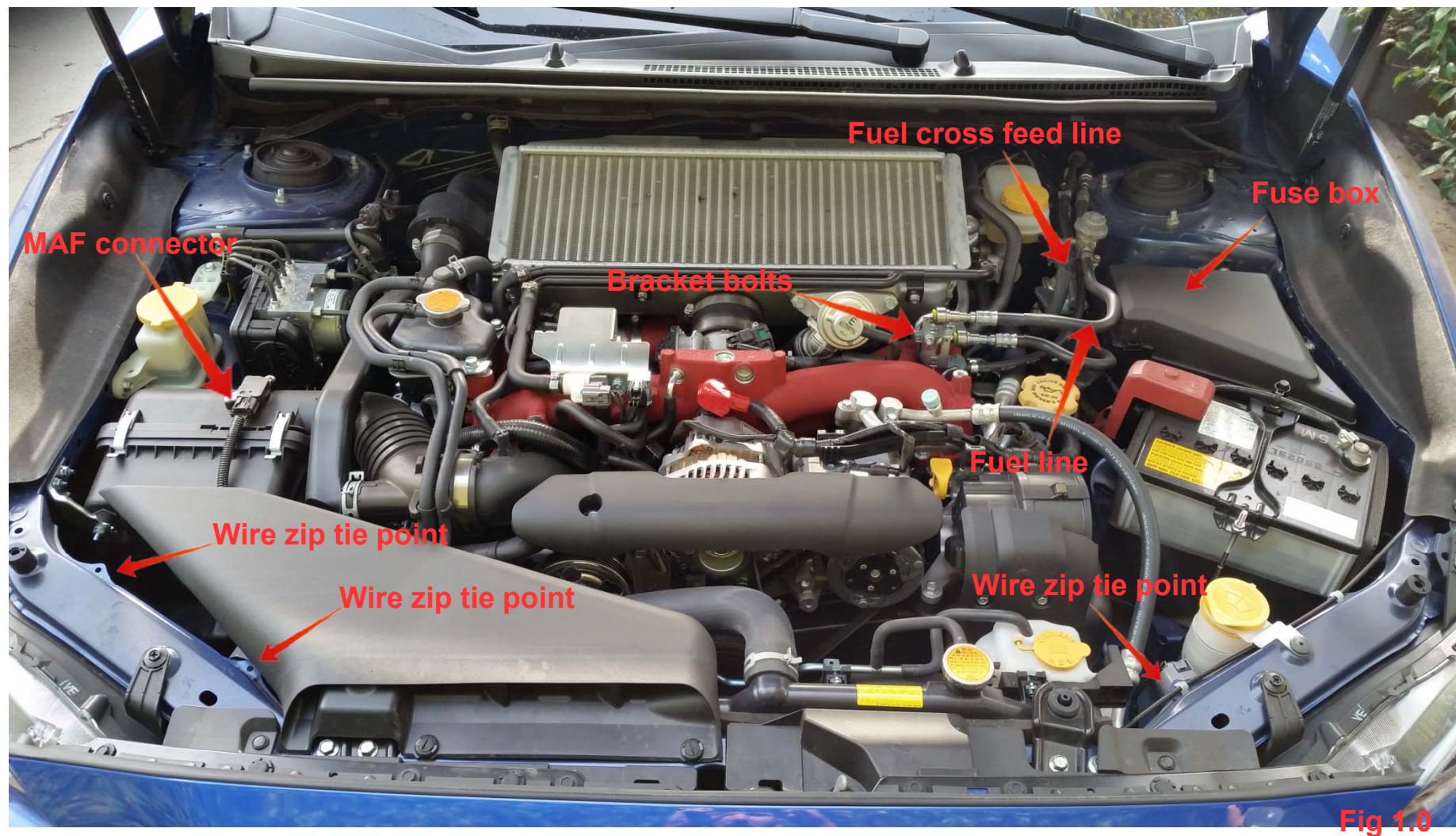
- (1) Ethanol Content Analyzer Module
- (1) Ethanol Content Analyzer Sensor
- (1) Sensor Bracket
- (1) Velcro Strip
- (3) Small Stainless Steel Bolts
- (3) Small Stainless Steel Washers
- (3) Small Stainless Steel Lock Nut
- (2) Large Stainless Steel Bolts
- (2) Large Stainless Steel Washers
- (2) Nylon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

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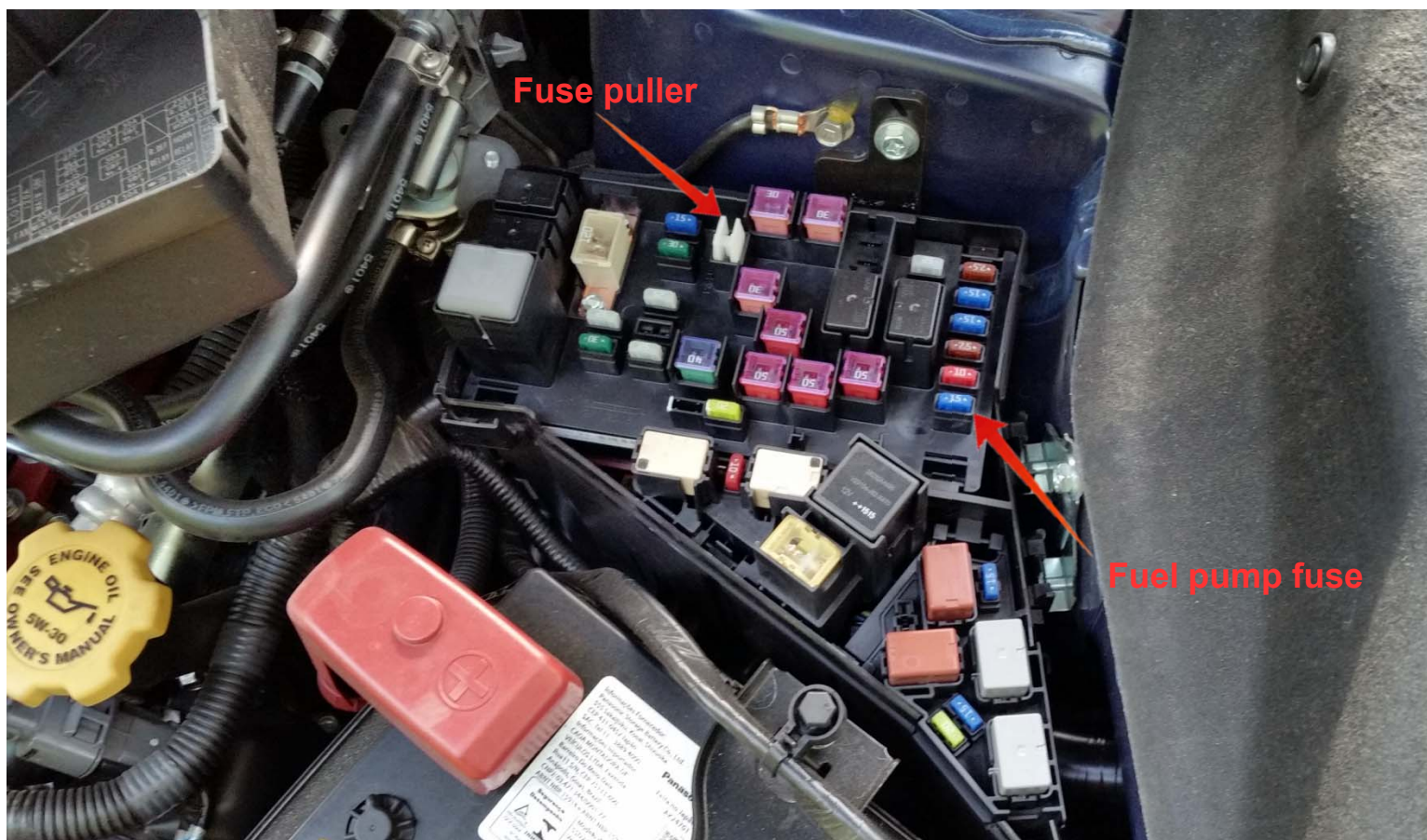


Tools required for installation:

- (1) 14mm Wrench or Socket
- (1) 13mm Wrench or Socket
- (1) 12mm Wrench or Socket
- (1) 10mm Wrench or Socket
- (1) Phillips Head Screwdriver
- (1) 5mm Allen Wrench
- (2) Shop Towels
- (3) Zip Ties

**Fig 1.0****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.

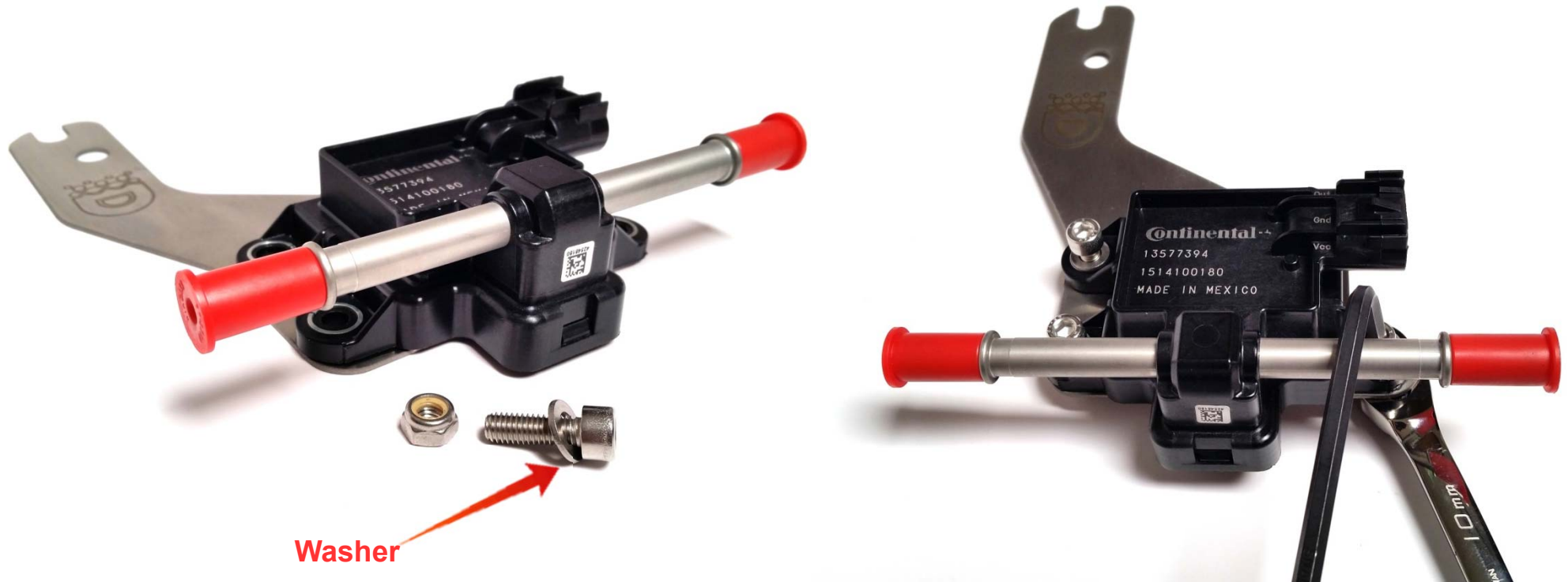
Now try starting the vehicle; it should either refuse to start or start and die once the remaining fuel is used up in the fuel lines.

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.

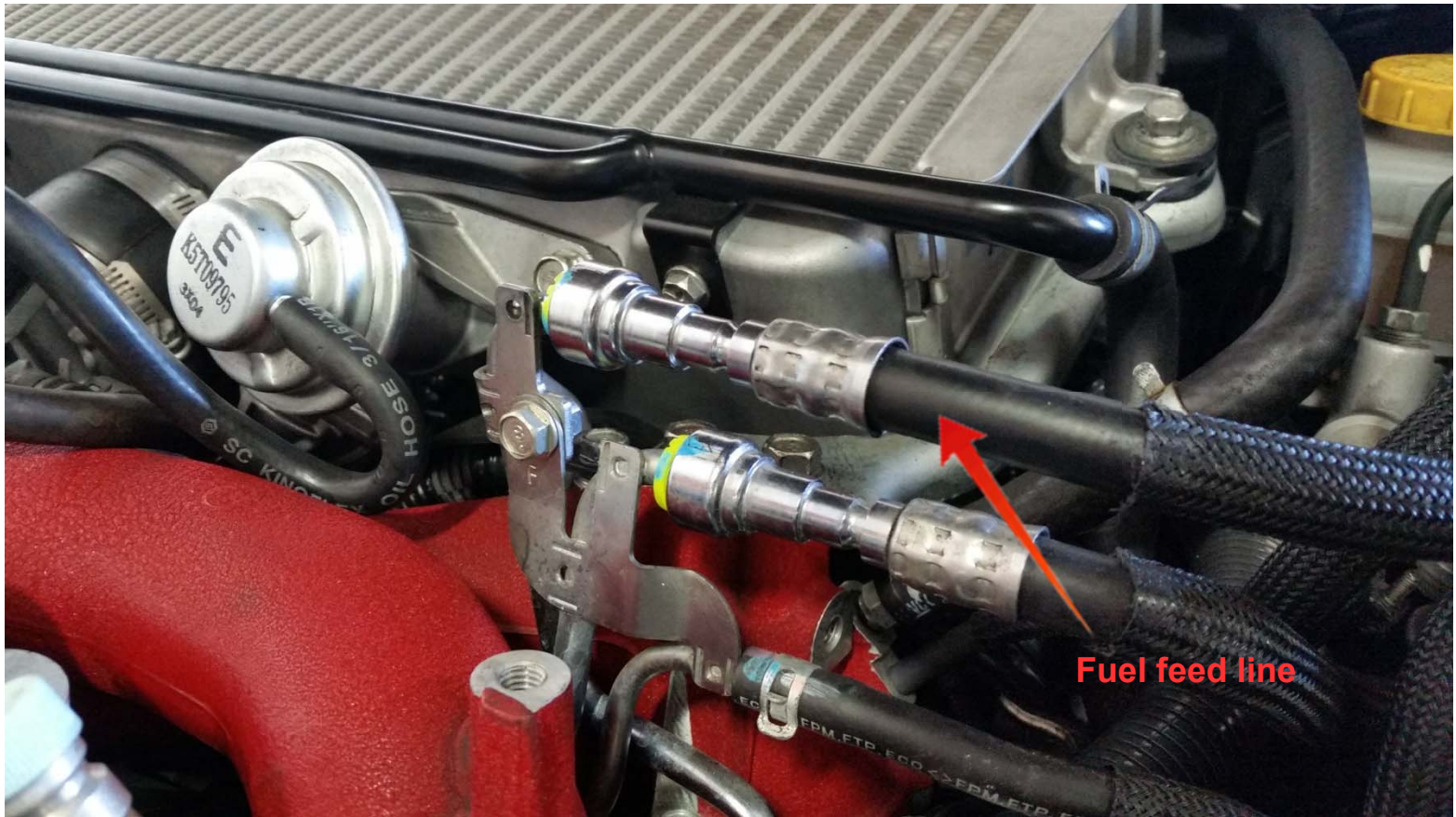
**ECA sensor bracket:**

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.

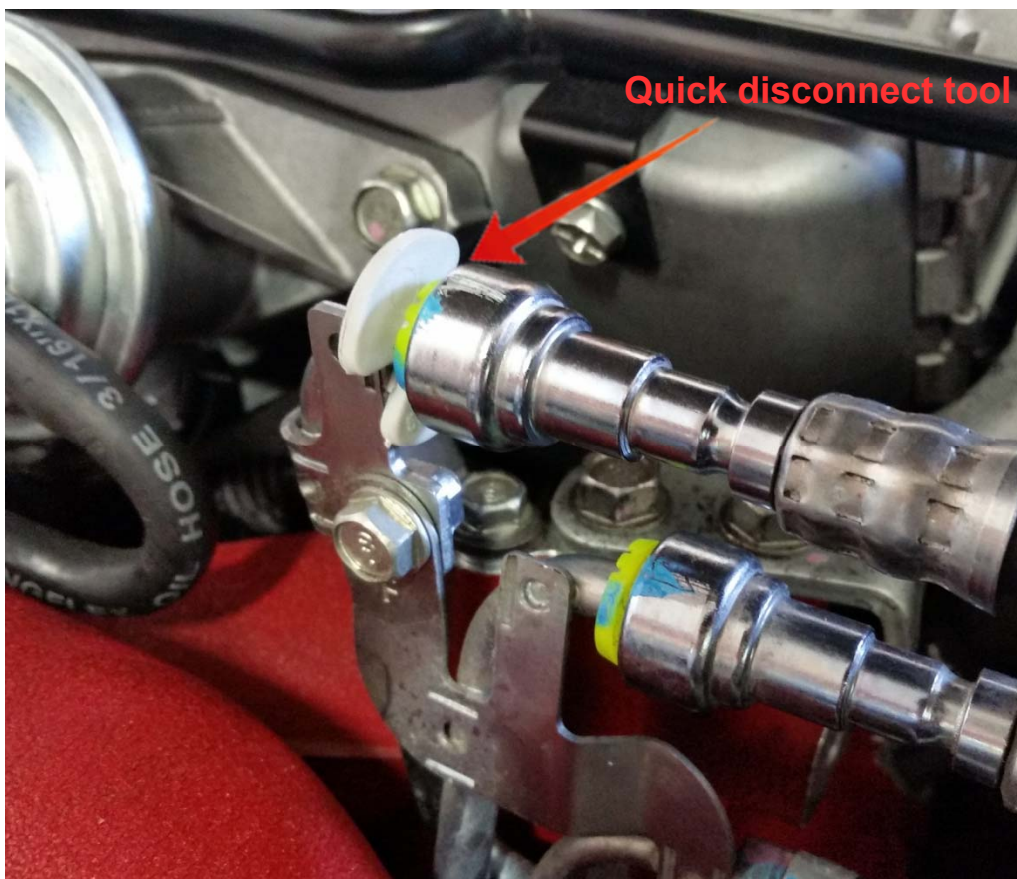


ECA sensor bracket assembly:

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 lines:**

Locate the fuel feed line on the left side of the vehicle near the intake manifold. It is the upper most fuel line. This is the line that will be replaced.



Fuel line disconnection:

Disconnect the fuel line with the supplied 5/16 quick disconnect tool, by pressing the tool inside the yellow plastic fitting on the OEM connection. Now lightly press the fuel line towards the quick disconnect tool to engage the tool and 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. **Note:** Shop towel not shown for clarity.



Fuel line disconnection:

Locate the other end of the fuel feed line near the firewall between the brake master cylinder and left strut tower.

**Fuel line disconnection:**

Disconnect the fuel line with the supplied 5/16 quick disconnect tool, by pressing the tool inside the yellow plastic fitting on the OEM connection. Now lightly press the fuel line towards the quick disconnect tool to engage the tool and 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.



Cross feed disconnection:

Using a Phillips screwdriver, unscrew the hose clamp on the cross feed line. Move it further down the hose towards the protective sleeving. Pull the hose away from the hard line. *****Caution***** Take care when removing the line, as some fuel may spill out of the line. Also, make sure to manage the ends of the line that are disconnected, so fuel does not spill.



Fuel line removal:

Fully remove the fuel line and prop the cross feed line up as shown.

*****Caution***** Take care when removing the line, as some fuel may spill out of the line. Also, make sure to manage the ends of the line that are disconnected, so fuel does not spill.



Drain remaining fuel:

Remove the fuel line without spilling any fuel and drain the remaining fuel into an approved fuel storage container. Set stock fuel line aside for storage later.

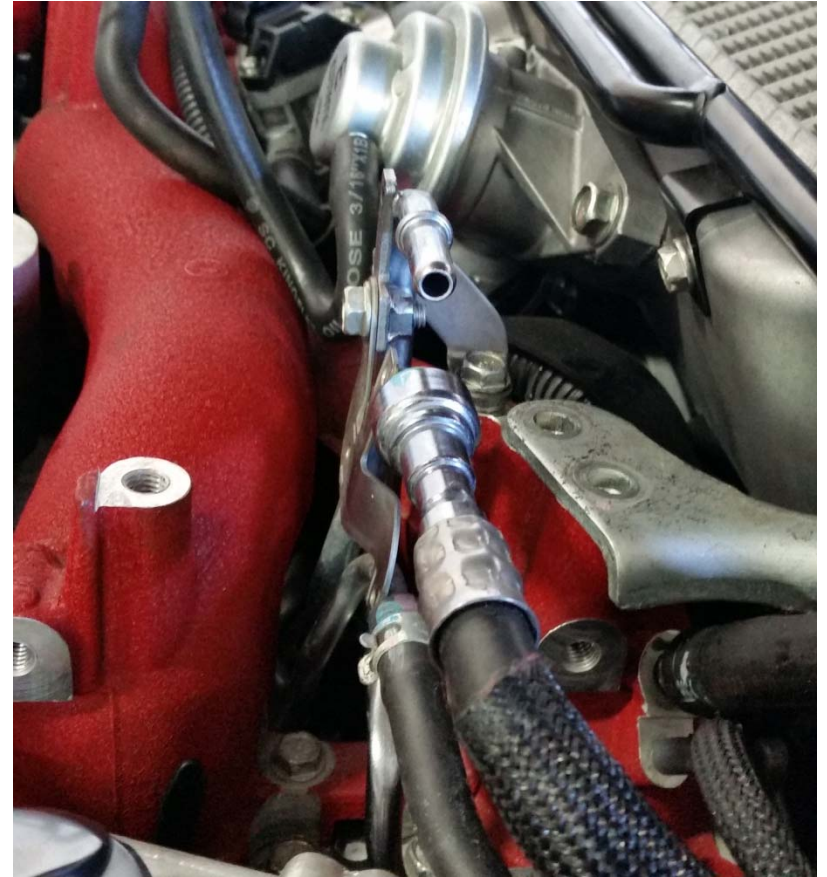
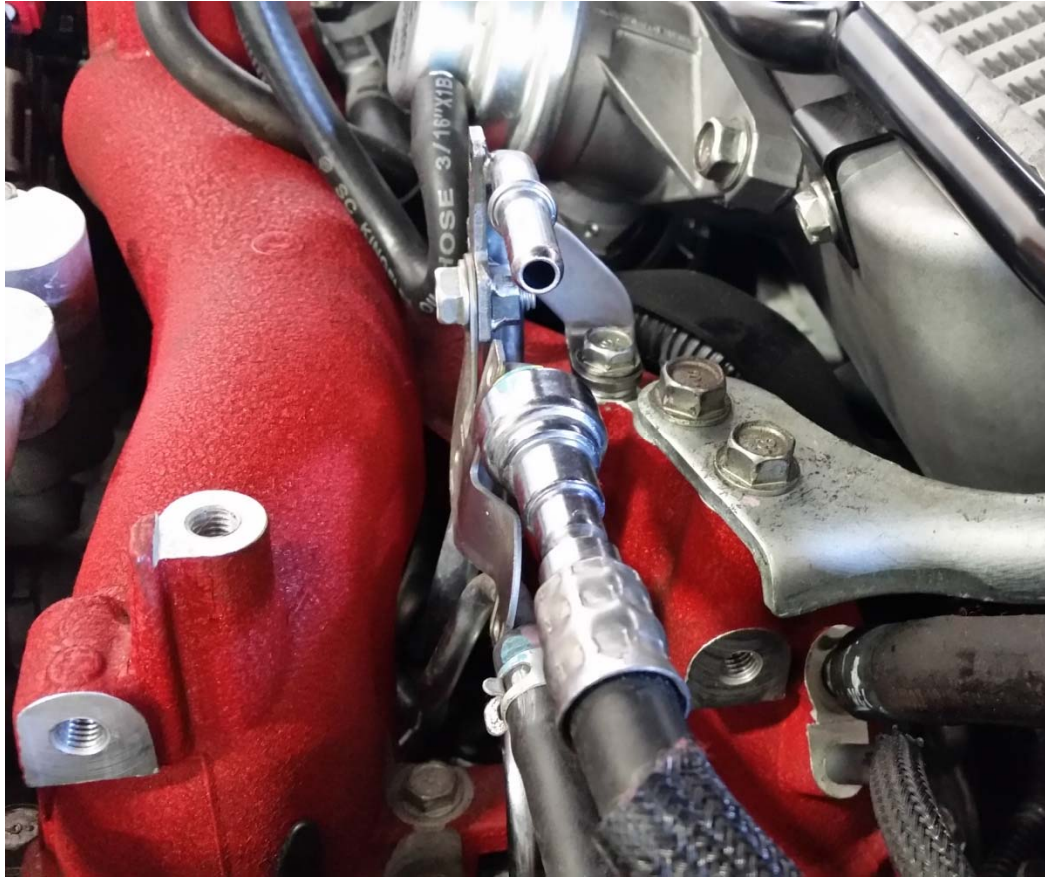
**Cross feed plug:**

Insert the supplied fuel line plug into the cross feed line. Move the clamp back up and over the bump and tighten the clamp snug with a Phillips head screwdriver as shown. Note: If your having problems inserting the plug use a little saliva to lubricate it when inserting.



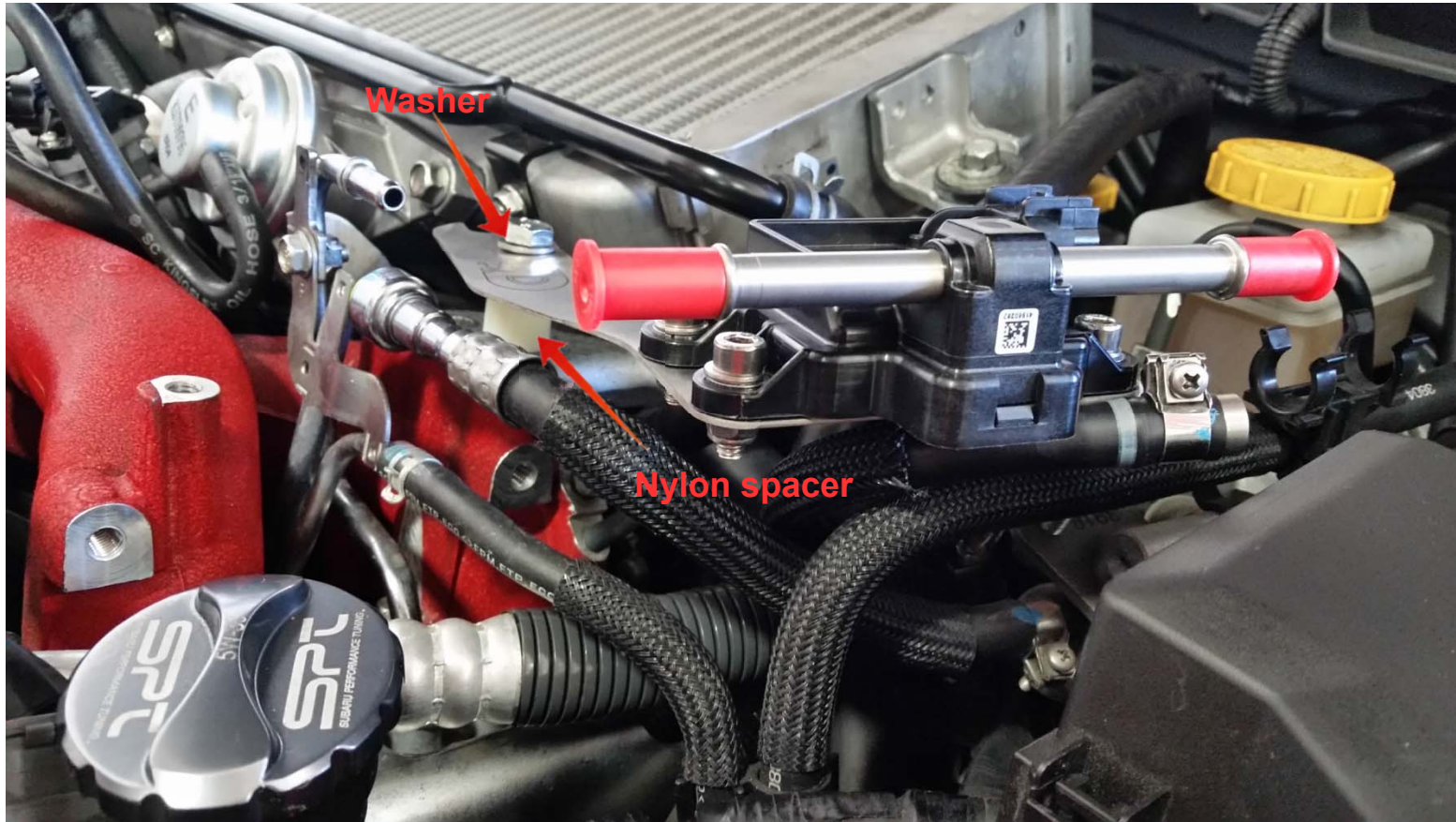
Cross feed line routing:

Route and mount the cross feed line in the OEM fuel line retaining clip as shown.



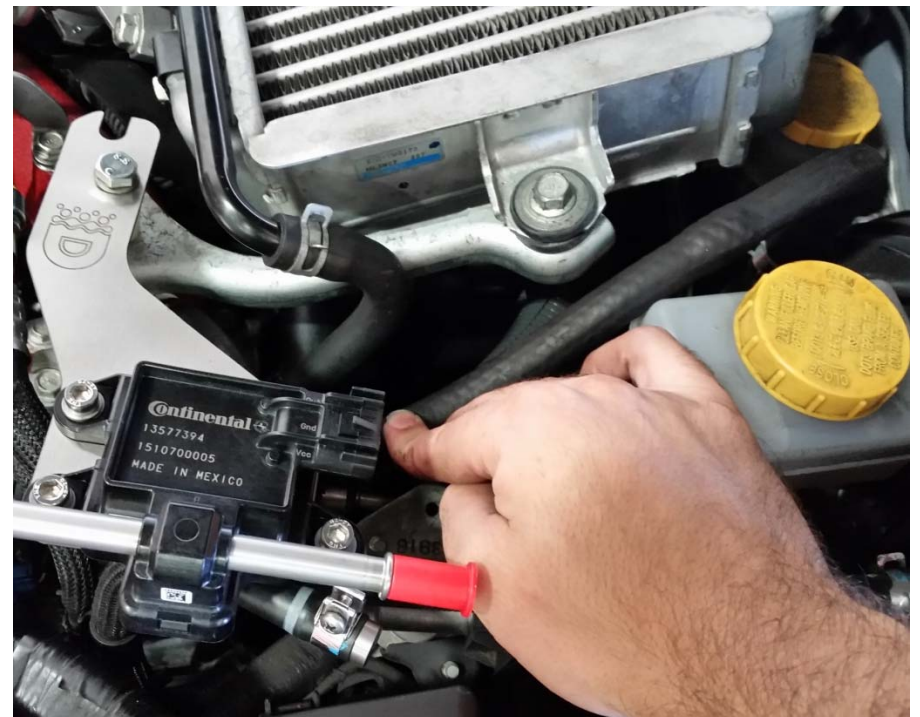
Bracket bolt removal:

Remove the two bolts holding on the intercooler bracket with a 12mm wrench or ratchet. Set aside the bolts for storage as they will be replaced by new supplied bolts that come in the kit.



Bracket installation:

Install one of the long bolts with the washer on top and nylon spacer on the bottom of the bracket.



Brake booster hose:

Make sure to push down the brake booster line so it doesn't rub against the edge of the bracket in the next step when aligning the bracket. You can optional zip tie it down to the AC line below it if you prefer to have it not contact the surface of the bracket.

**Fuel line installation:**

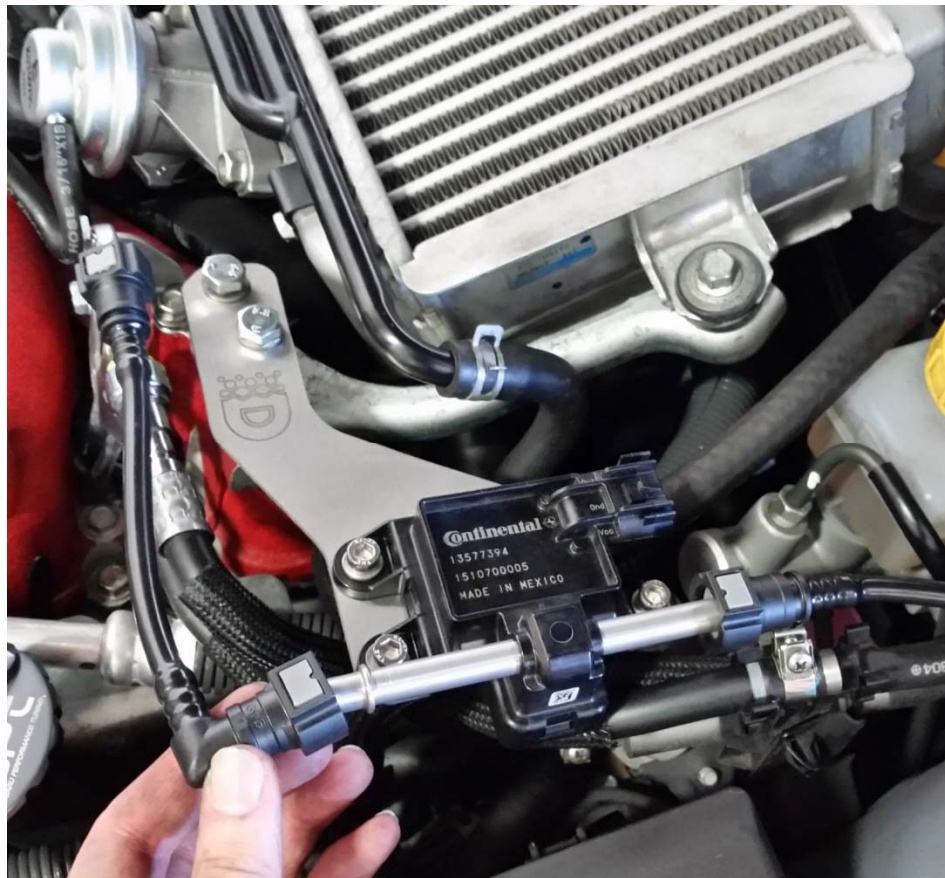
Remove the white protective caps from the fuel line and push the straight fuel line onto the OEM hard fuel line, near the firewall, push the connector until you hear an audible click. Remove the red cap on the ECA sensor and insert the ECA sensor nipple into the other end of the fuel line. Push the line connector until you hear an audible click. **Note:** one end of the fuel line is larger and will only fit onto the sensor nipple.

**Bracket alignment:**

Carefully align the bracket holes to the intercooler bracket holes, creating a subtle "S" bend in the quick disconnect line. *****Caution***** Do not bend too far and kink the line. Insert the remaining nylon spacer under the bracket and insert the remaining bracket bolt. Tighten the bolts with a 13mm wrench or socket, while still maintaining alignment and the "S" bend.

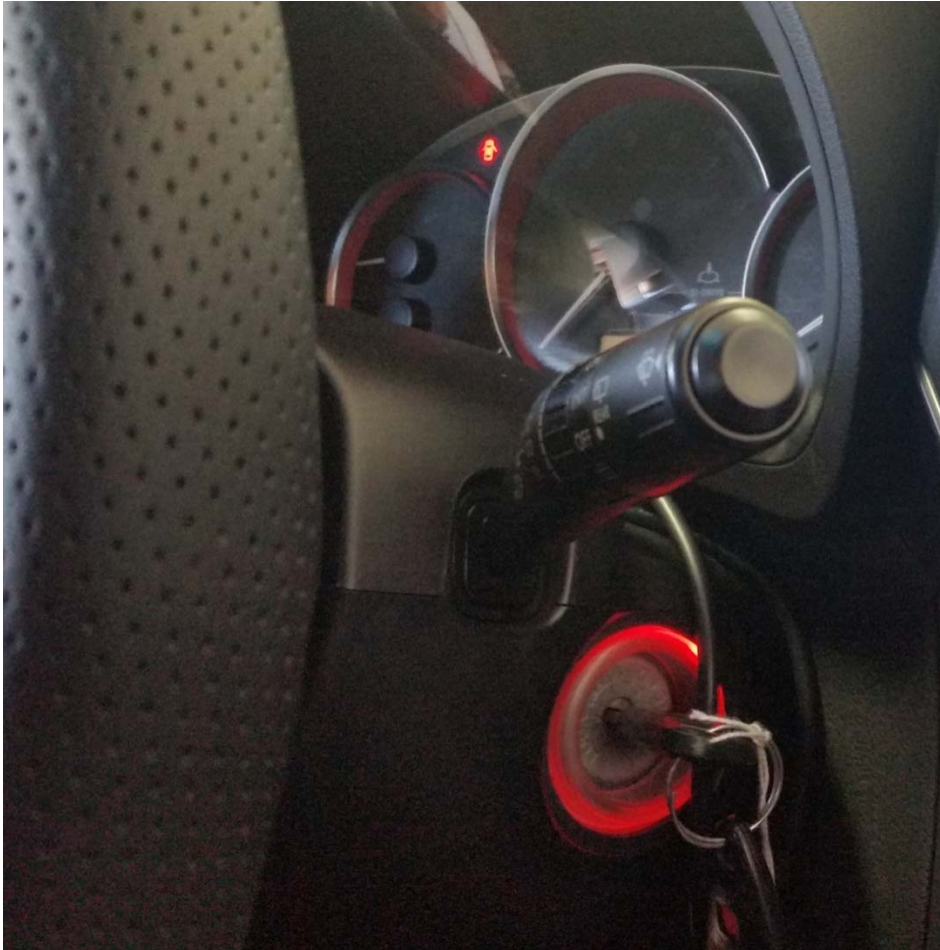
**Fuel line installation:**

Remove the white protective caps from the fuel line and push the straight fuel line onto the OEM hard fuel line near the intake manifold. Push the connector on to the line until you hear an audible click. Remove the red cap on the ECA sensor.



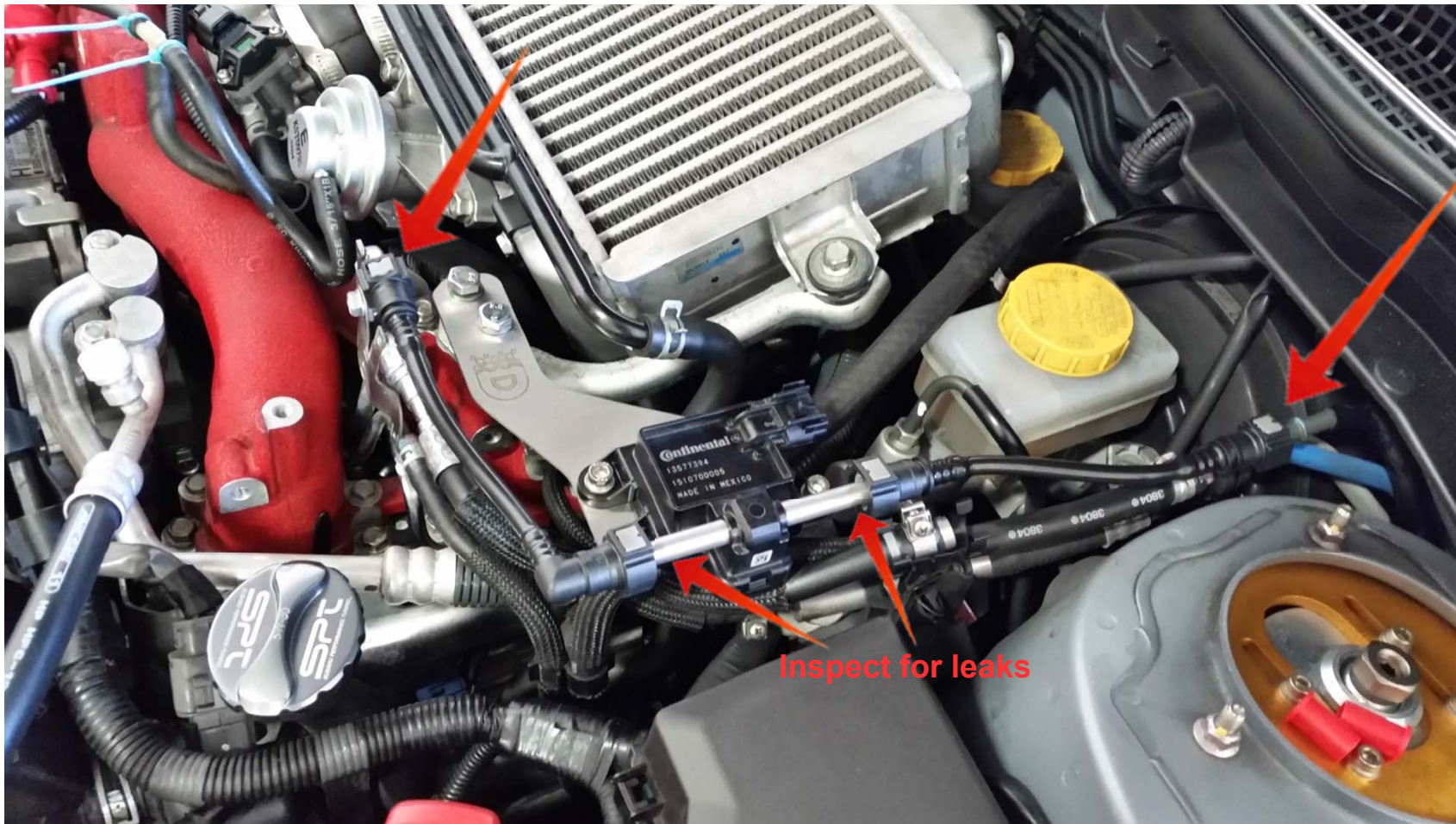
Fuel line installation:

Carefully 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.



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 the 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.

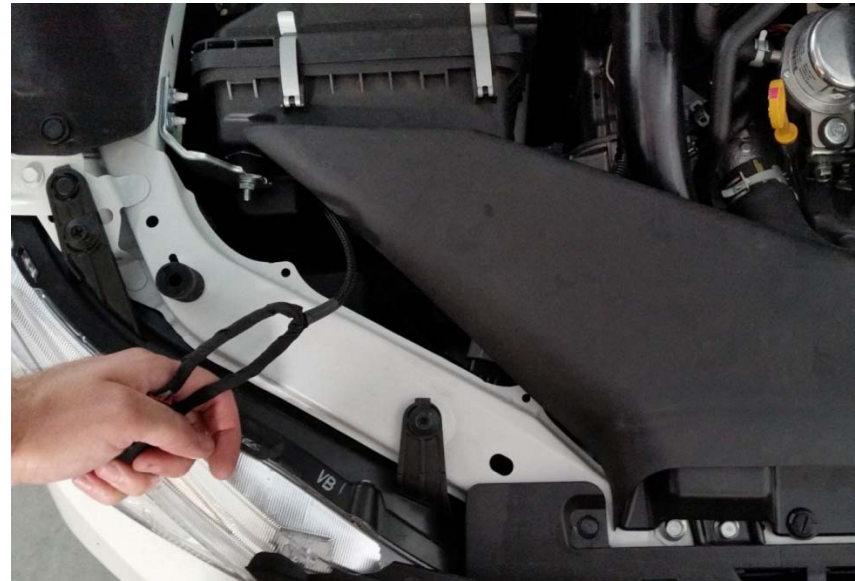
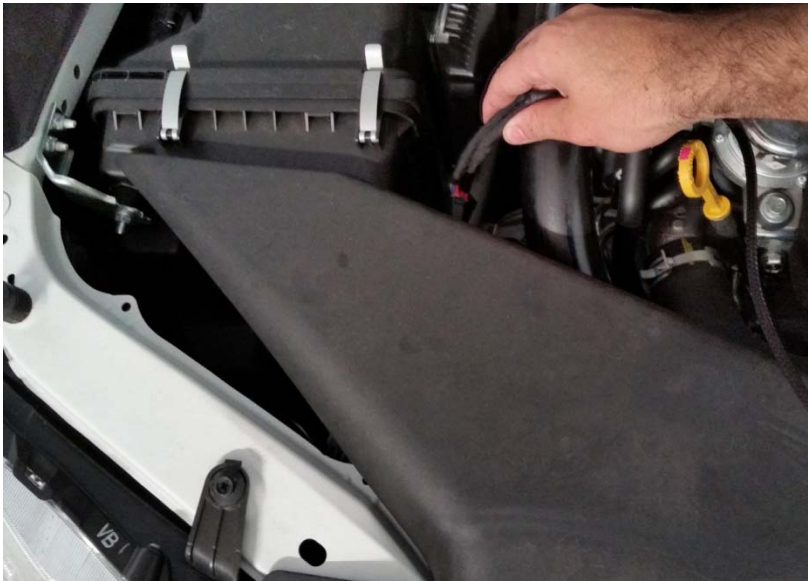


Wire routing:

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.



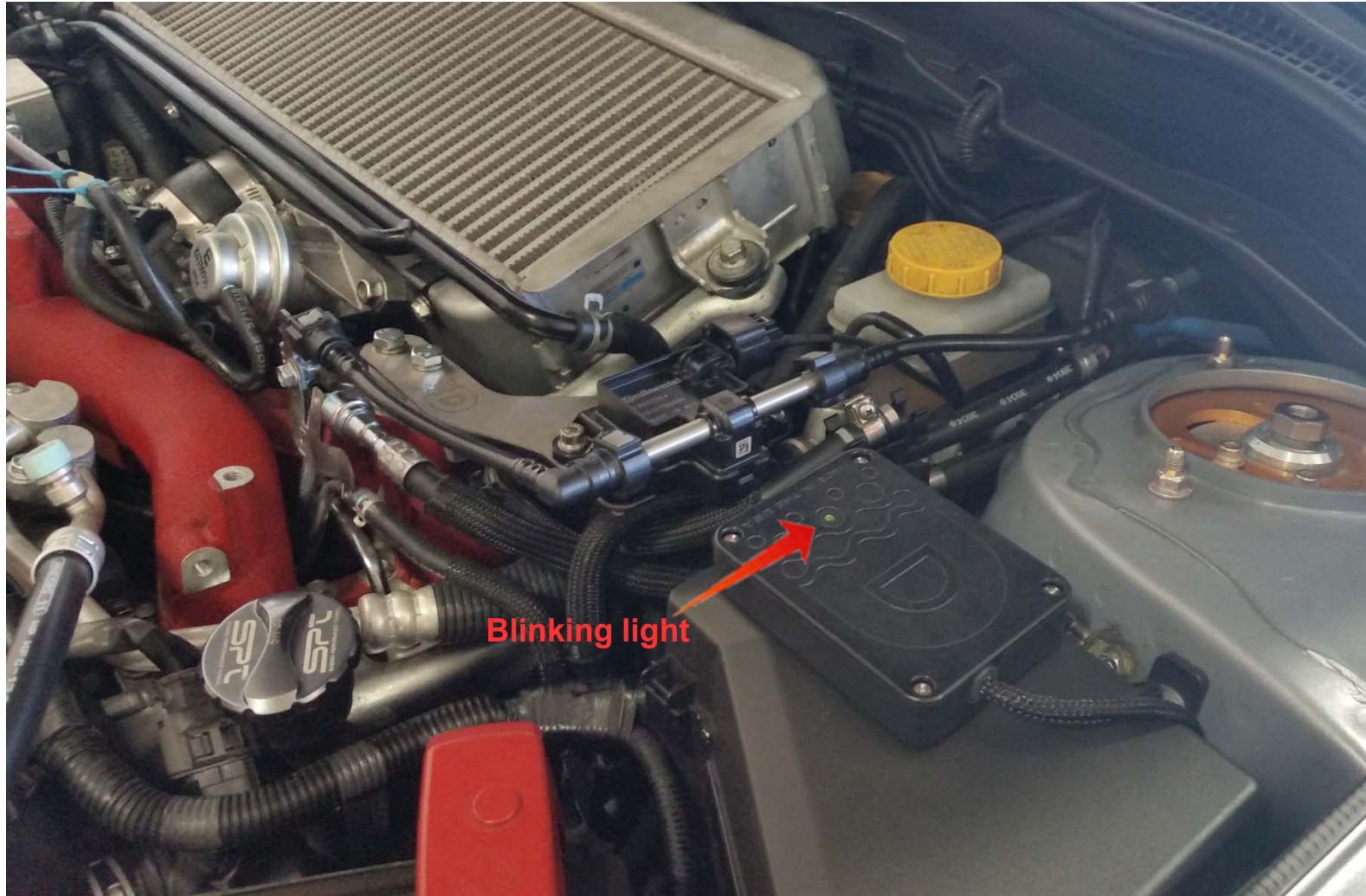
Wire routing:

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.



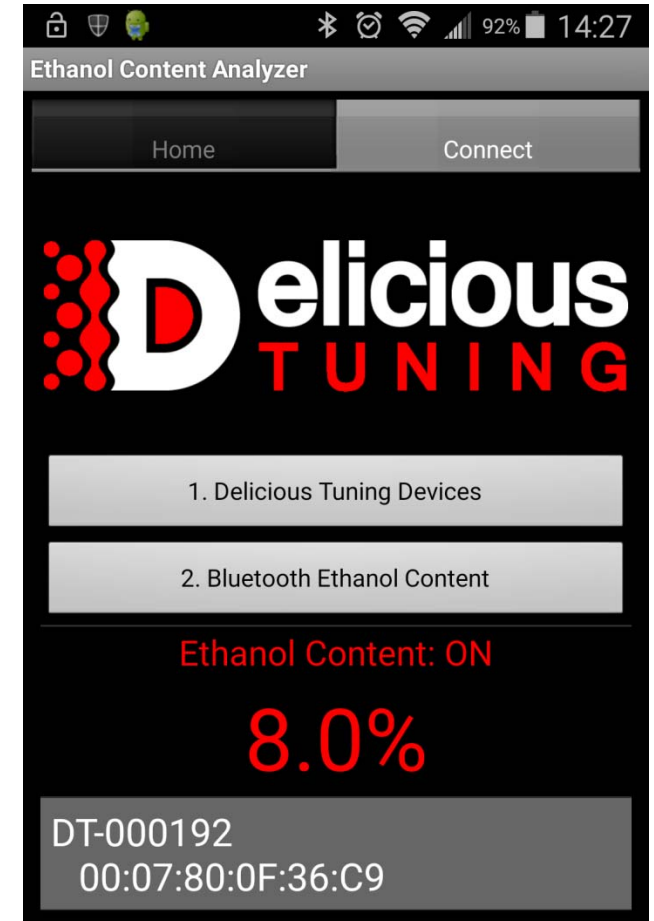
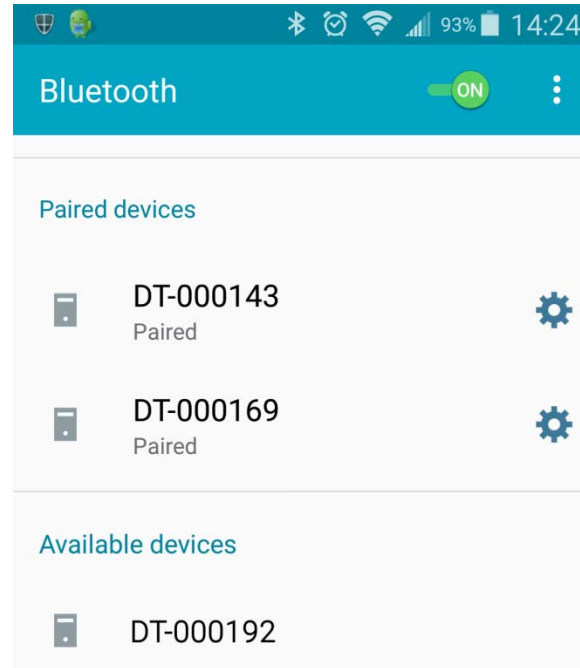
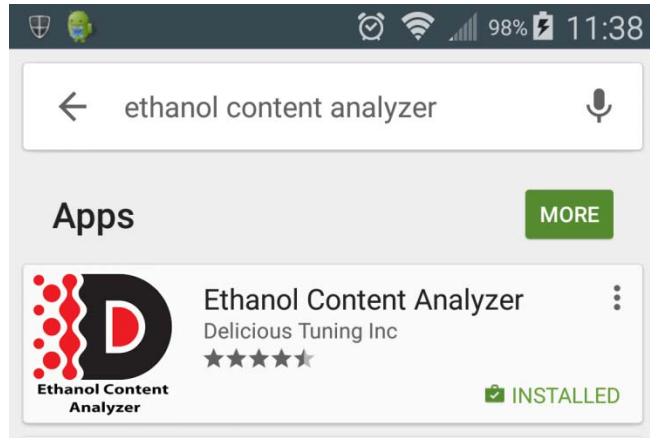
Installation check:

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



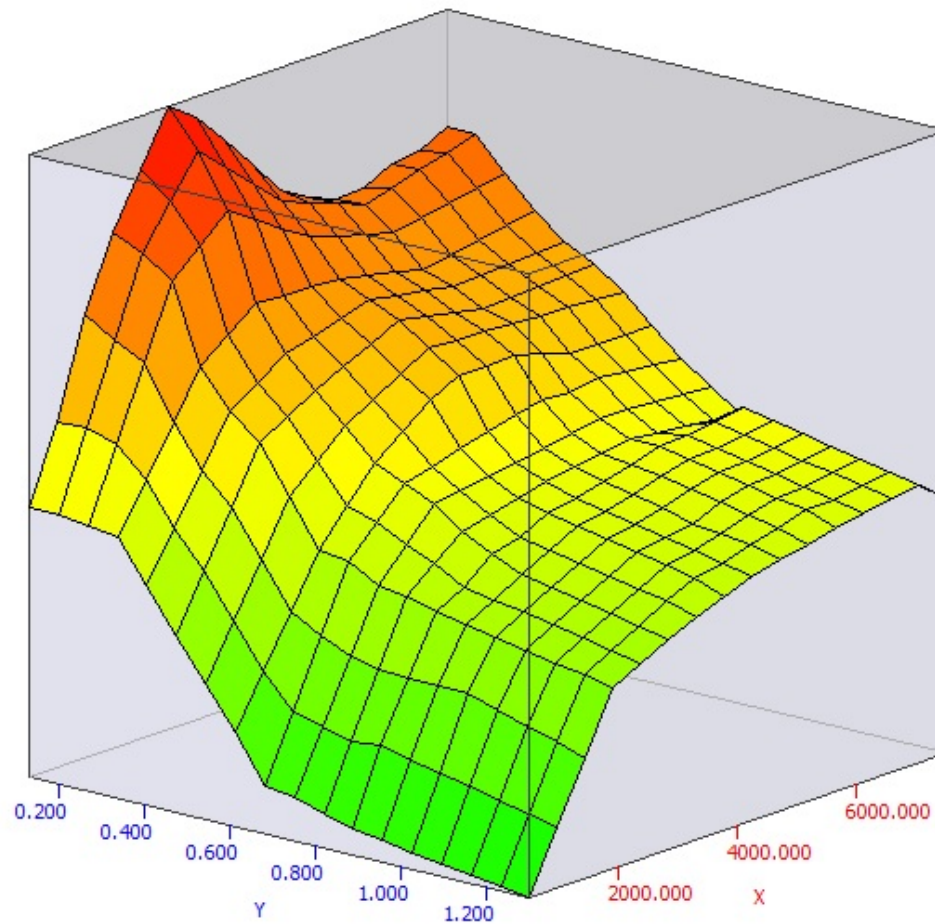
ECA module power:

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



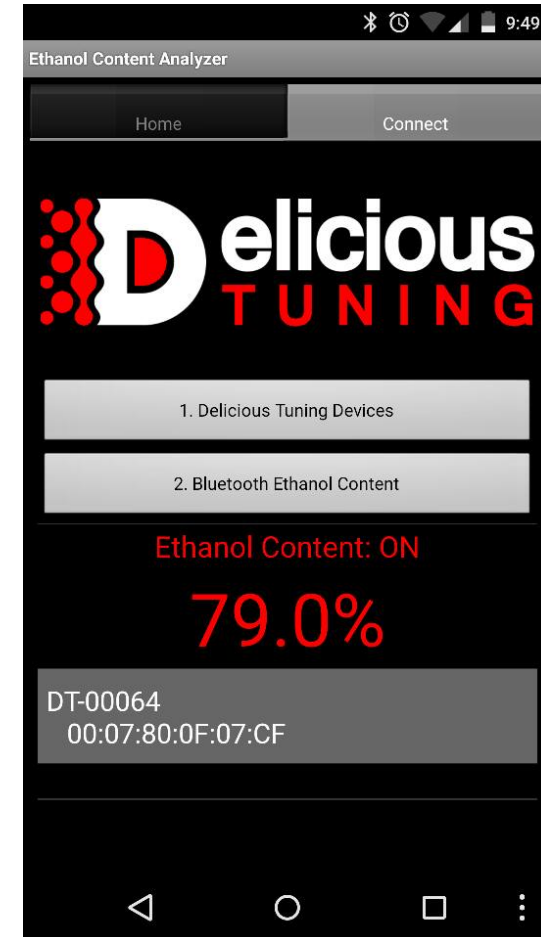
Bluetooth app:

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.