



Flex Fuel CAN Kit 2022+ BRZ/GR86 Install Installation



**Flex Fuel CAN Kit:**

- (1) Ethanol Content Analyzer Module
- (1) Ethanol Content Analyzer Sensor
- (1) Sensor Bracket
- (1) Velcro Strip
- (2) Short Stainless Steel Bolts
- (2) Stainless Steel Washers
- (2) Stainless Steel Lock Nut
- (1) 90-180 Degree Quick Disconnect Fuel Line
- (2) 90-90 Degree Quick Disconnect Fuel Line

Optional Add-Ons:

- (1) Fuel Pressure Sensor
- (1) Fuel Pressure Fuel Line
- (1) ZipTie Clip



Tools required for installation:

- 10mm wrench or ratchet
- 12mm wrench or ratchet
- Flat head screwdriver
- 1/8 allen wrench
- Shop towels
- Zip Ties



Working areas:

Locate the areas you will be working with when installing the CAN Flex Fuel Kit in the engine bay.

Fuel pressure:

If the car was running recently, let the vehicle sit for a minimum of 30-60 minutes to relieve fuel pressure and cool the engine before installation.

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.

The supplied quick disconnect fuel lines when being installed will make an audible click. When this happens this is to confirm the fuel lines are secure. Please tug on the lines to make sure they are secure and will not pop off or leak while driving.

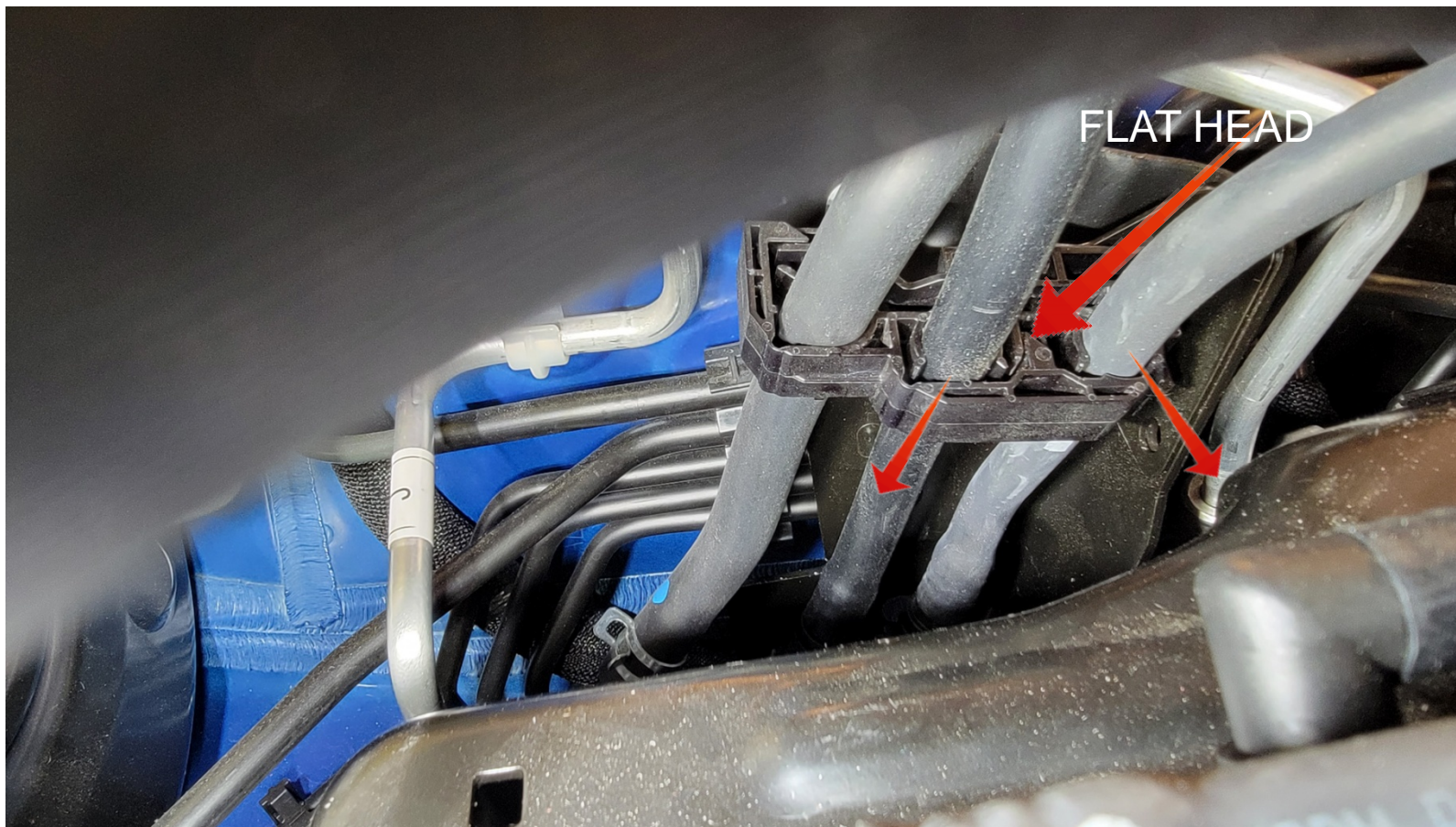
ECA sensor bracket:

Use the supplied two short screws, washers and lock nuts. to tighten down the FlexFuel Sensor to the supplied mounting bracket, using the 1/8 allen wrench and 10mm wrench.

Strut brace bracket bolts:

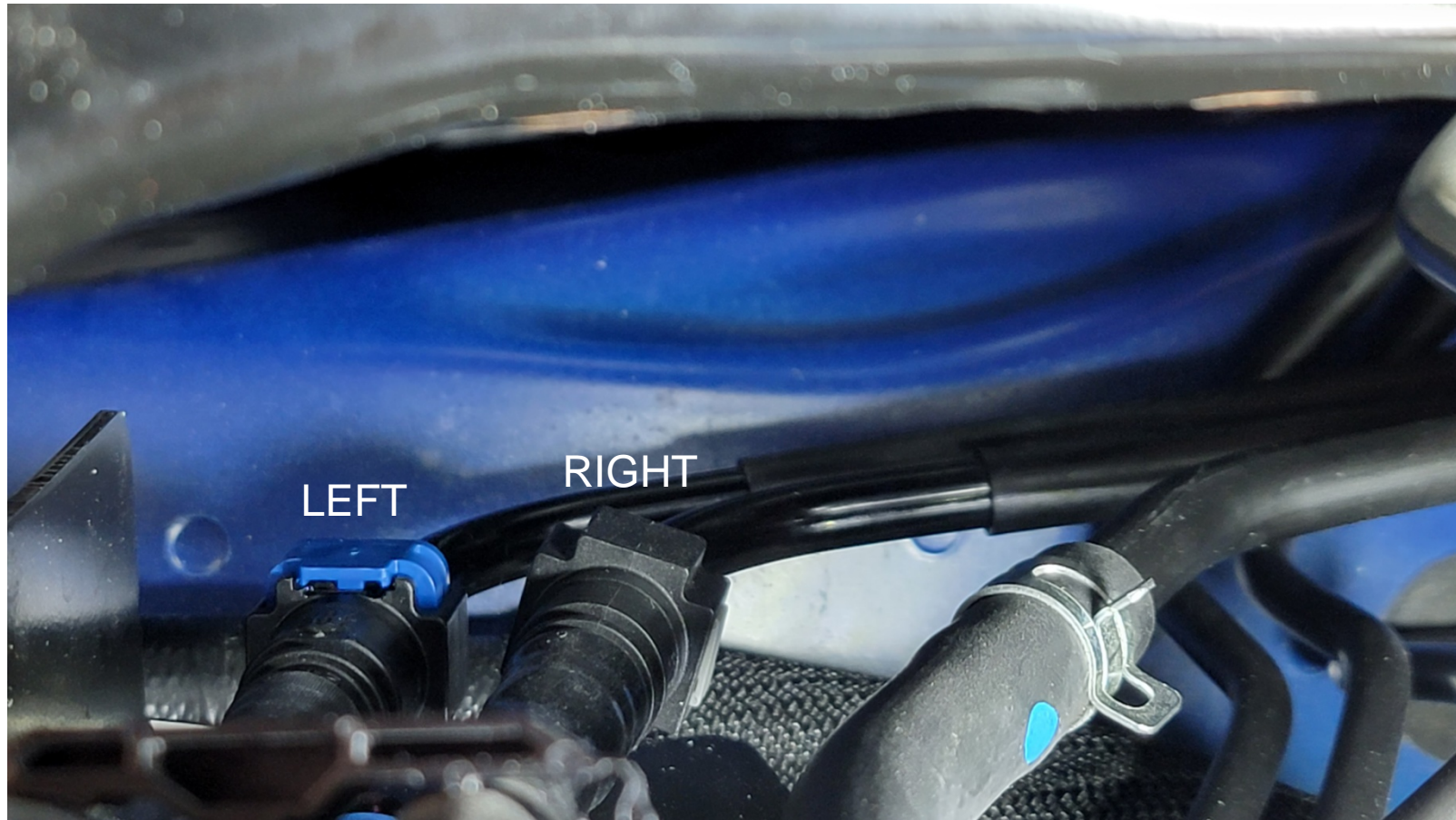
Locate the two strut bracket bolts on the left side (drivers side, North America), located on the strut tower. Using a 12mm wrench, remove them from the strut.

Mount the bracket (with Flex Fuel Sensor mounted) above the strut tower brace, insert the two bolts (you just removed), through the bracket and strut brace. Tighten the 12mm bolt down on the strut tower.

**Black Fuel Line Bracket, Open Clip:**

Open the clip by placing a flat head screwdriver in clip and rotate. This should loosen the clip and pop it open.

Dislodge the two fuel lines from the plastic bracket.



Fuel Lines Disconnect:

Disconnect the two OEM fuel lines from metal fuel lines near the chassis. Using a flat head screwdriver, pry the blue clip outwards gently.

Disconnect the single OEM fuel line on the top side (initially routed from the left metal line), this will also have a plastic bracket that will need the clip opened. This OEM fuel line will not be used and should be placed in a safe place if needed at a later.

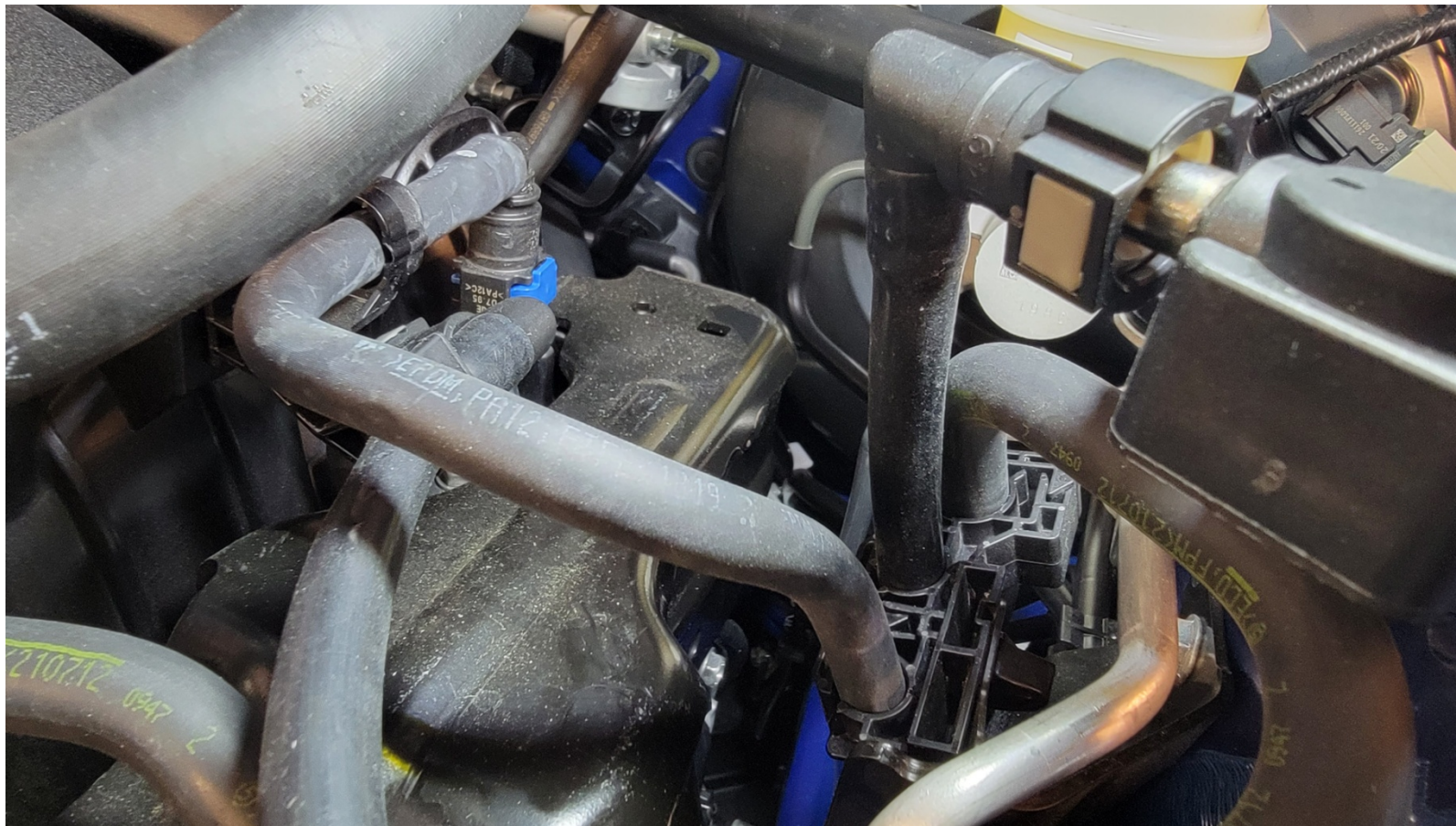


Fuel Lines Installation (Bottom):

Reconnect the OEM fuel line from the right metal line to the left metal line. And make sure to press the clip in. Tug the line upwards to make sure it is secure.

Install the supplied "90-180 degree" fuel line on the right metal fuel line. Then press down firmly on the metal fuel line down towards the chassis and connect the angled quick disconnect to the ethanol sensor.

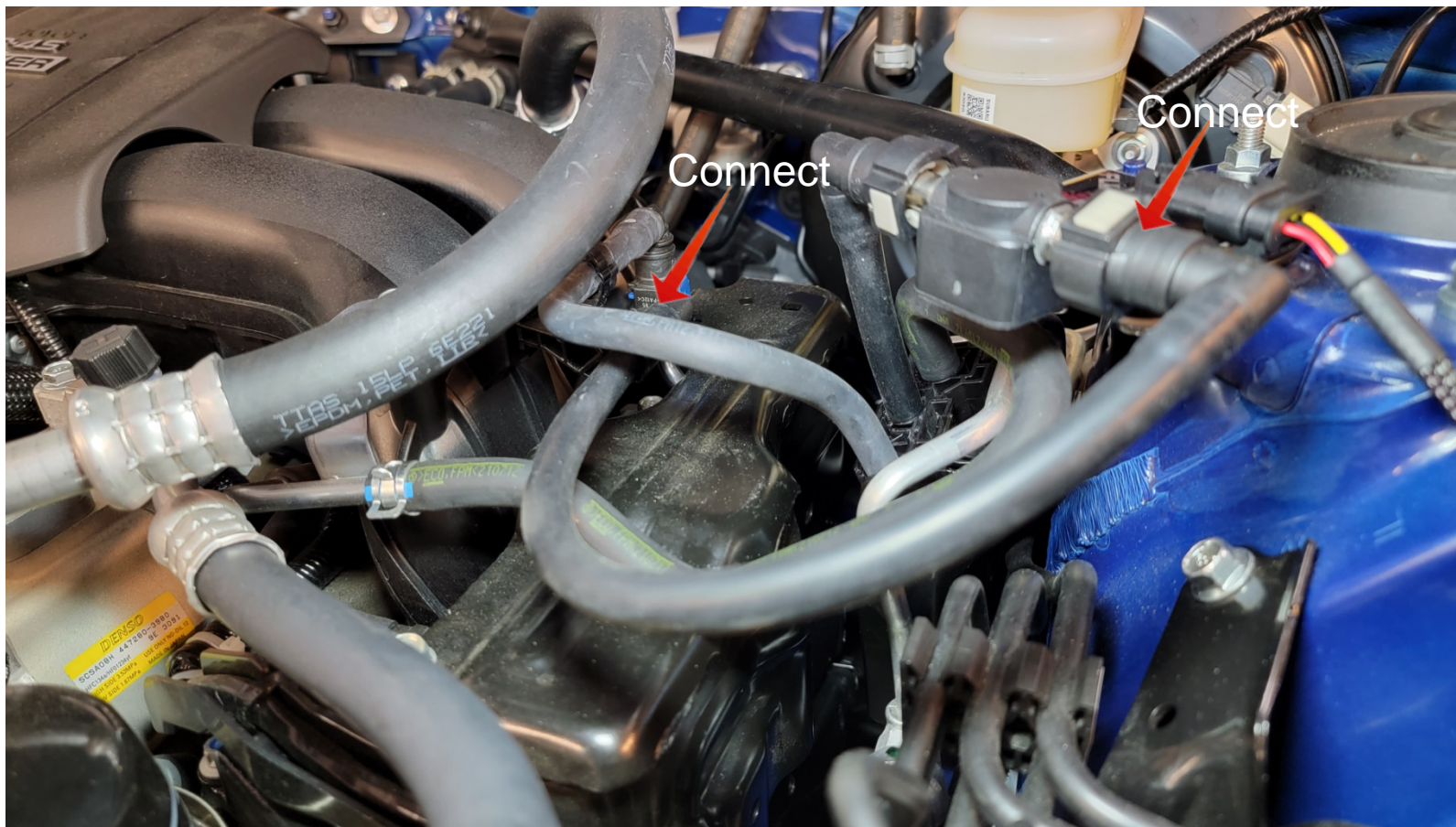
Press fuel lines in the plastic bracket and close the clip of the fuel lines.



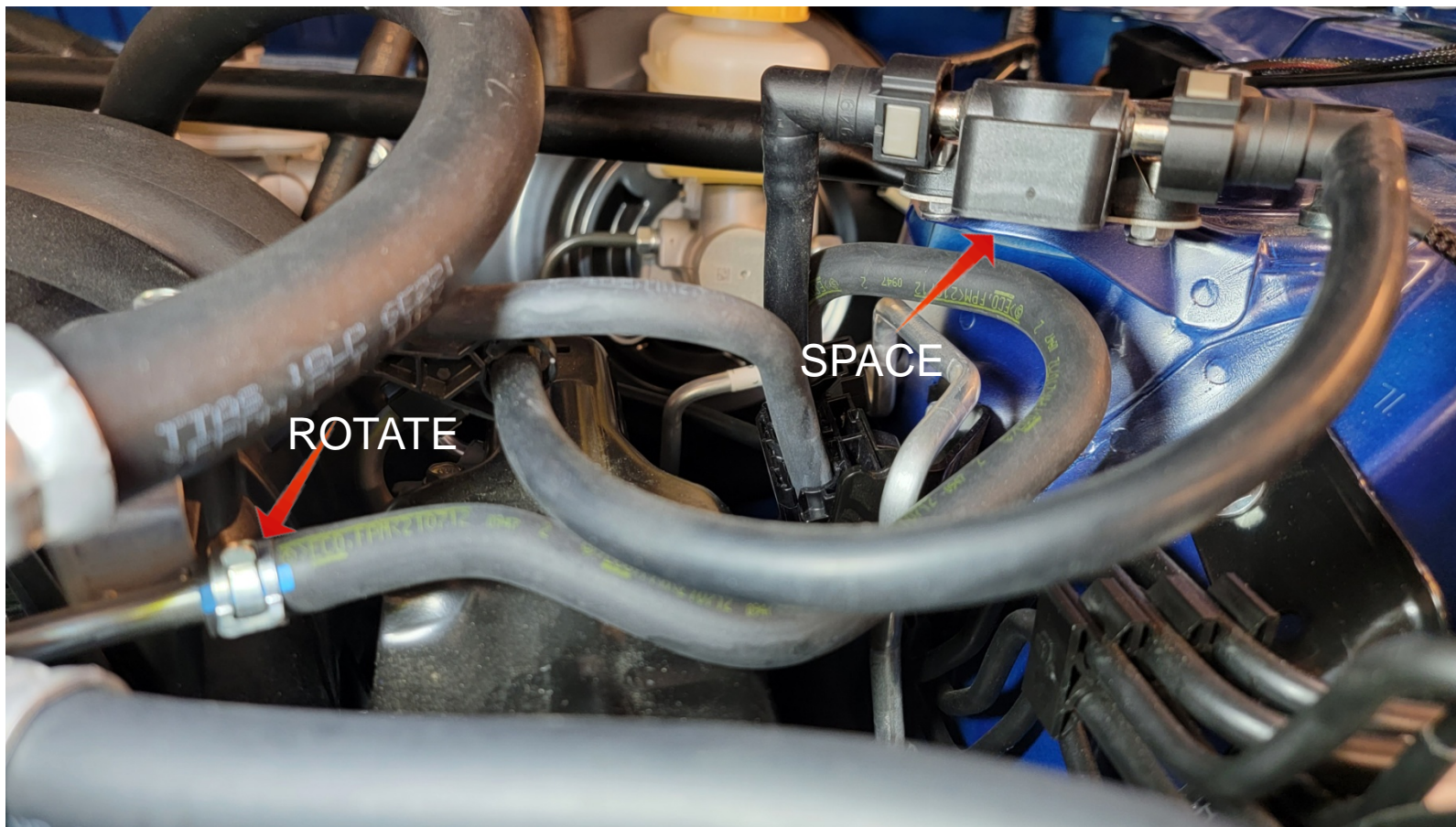
***** Notes Supplied Fuel Lines: *****

The supplied quick disconnect fuel lines when being installed will make an audible click. When this happens this is to confirm the fuel lines are secure. Please tug on the lines to make sure they are secure and will not pop off or leak while driving.

Above is another angle of how the fuel lines should be connected and aligned.

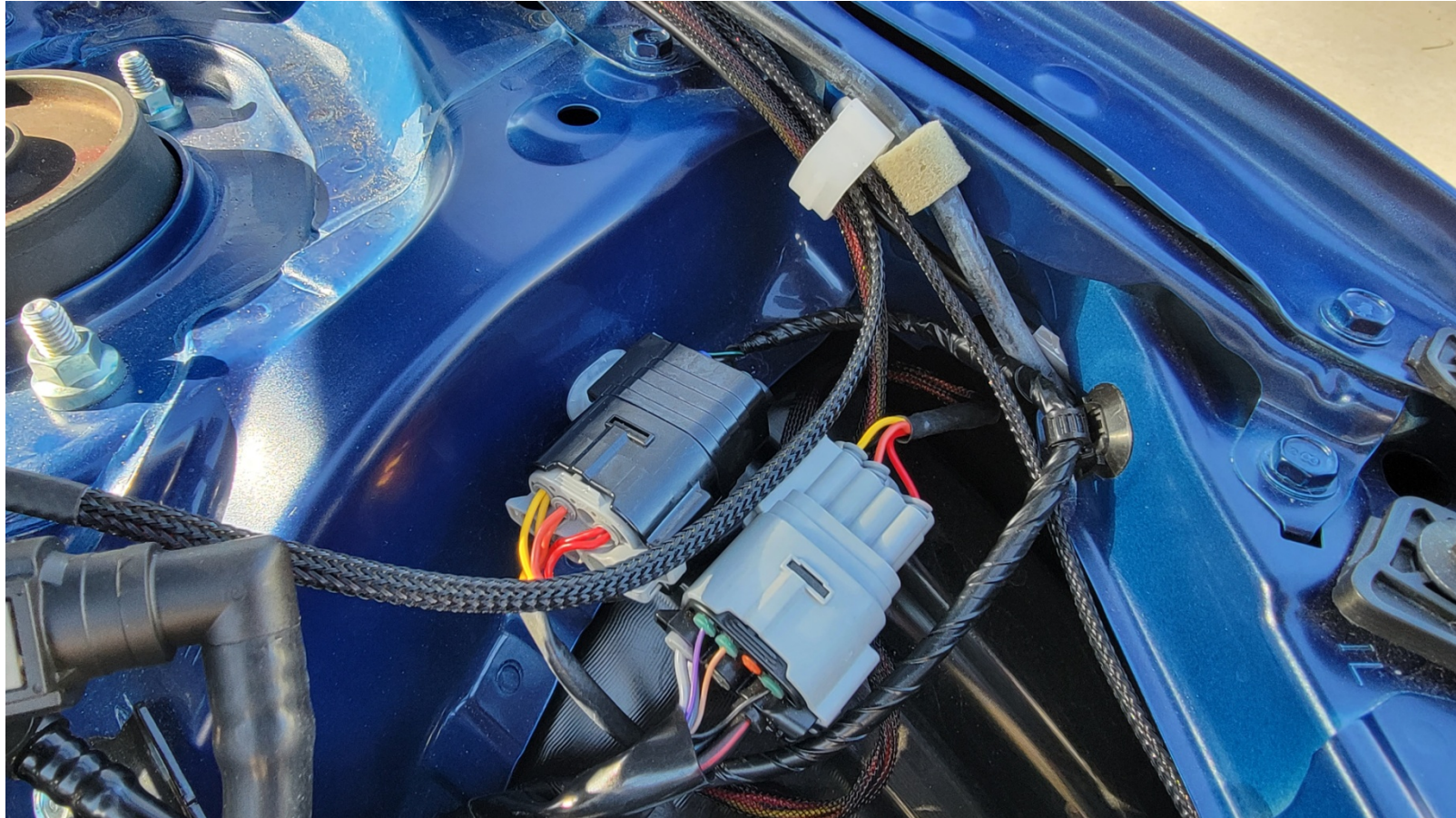
**Fuel Lines Installation (Top):**

Install the supplied "90-90 degree" fuel line on the fuel line entering the engine, and the other end on the ethanol sensor. Listen for an audible click and tug on the lines to ensure it is secure. Press the fuel line into the plastic bracket and close the clip.



Vapor Line (Rotate):

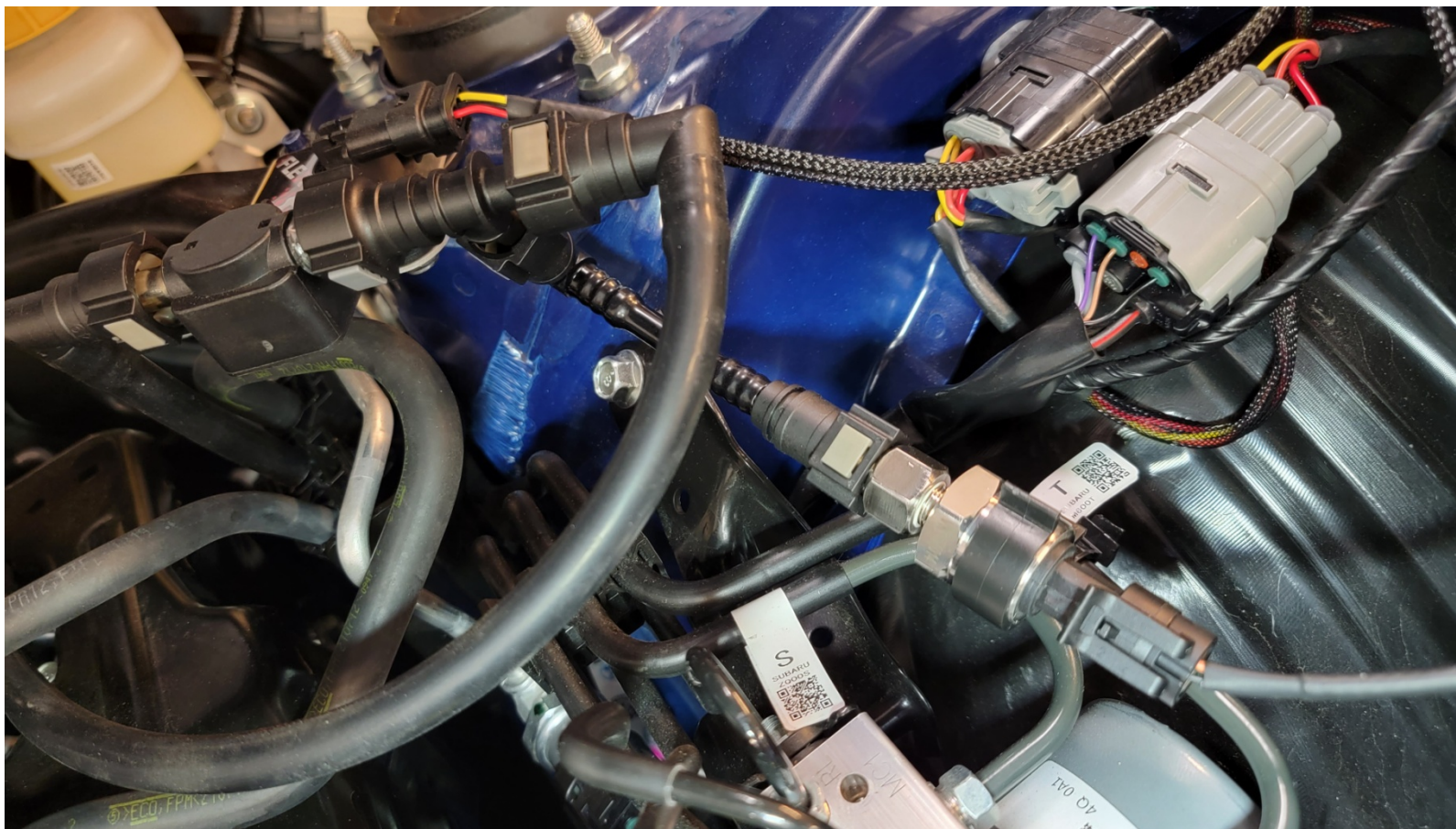
The vapor line may need to be rotated ($\frac{1}{8}$ th of a turn) at the metal clip to ensure there is space between the line and the flex fuel bracket located at the strut tower.

**Module and Connections:**

The Delicious Tuning module can be mounted under the left inside fender wall, near the firewall with the supplied velcro. Run the harness around the strut tower and connect it to the ethanol sensor and bulk harness in front of the strut tower.

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 very carefully for any small leaks. To prime, turn ignition key to the ON position.

**(Optional) Fuel Pressure Sensor:**

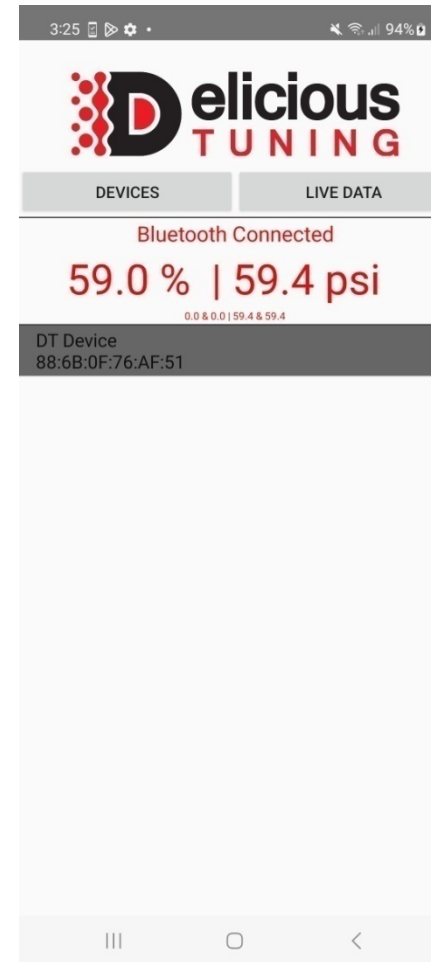
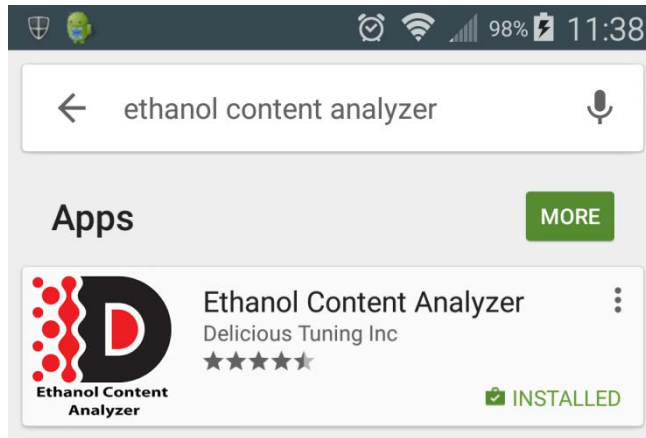
Disconnect the “90-90 degree” fuel line from the ethanol sensor. Insert the new three way connector, reconnect the “90-90 degree” fuel line and install the new pressure sensor fuel line. Connect the pressure fuel line to the fuel pressure sensor and use the supplied zip-tie clip to mount the fuel pressure sensor to the ABS brake lines. Plug the connector into the fuel pressure sensor.

ECA module power:

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

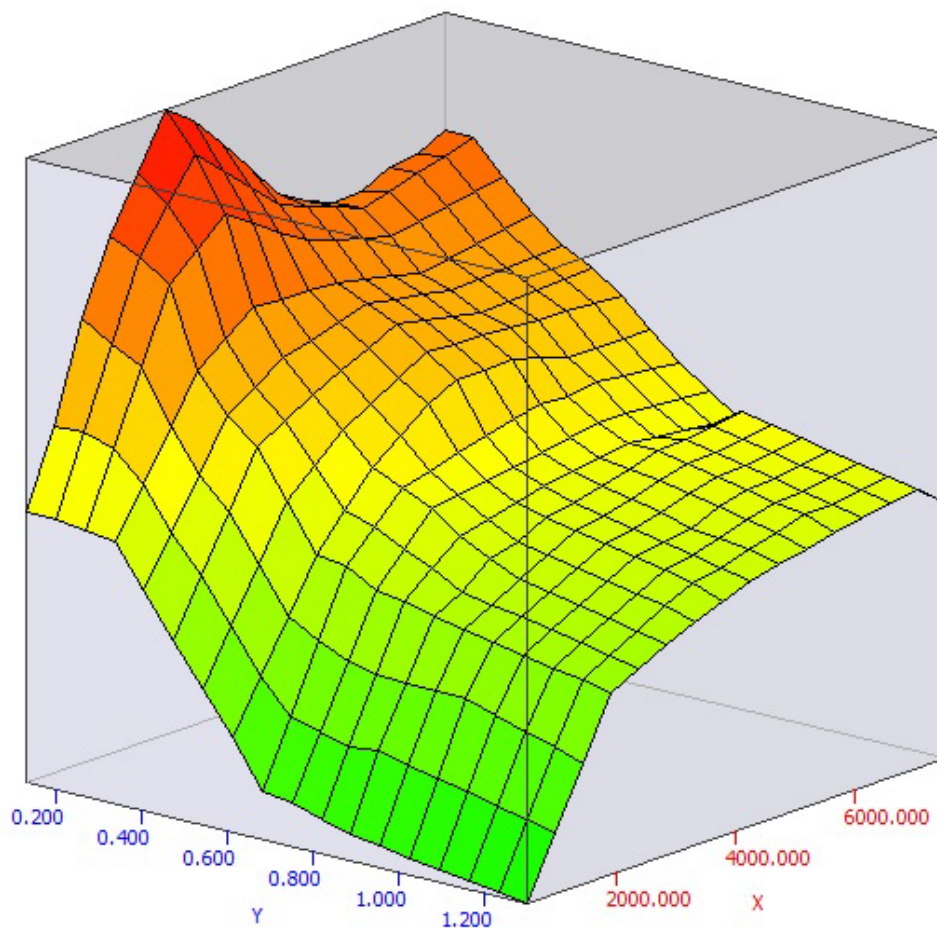
Troubleshooting (Lights, EcuTek or Delicious App):

- ECA Blinking Fast Green
 - Everything is working as intended
- ECA Blinking Slow Green
 - Bluetooth communicating with Delicious Tuning App
- ECA Blinking Red
 - Water Contamination or sensor failure
- ECA Not blinking at all
 - Module connection to power / ground has failed or module is dead
- ECA Blinking Slow Green – EcuTeK App Reading 2 – Delicious App Reading 0
 - Failed ethanol sensor, bad connection to ethanol sensor
- ECA Blinking Slow Green - Ethanol App Reading 10-80% – Delicious App Reading 0
 - Lost communication with Delicious App
 - Turn vehicle off, wait for the module to power down, and exit the Delicious Tuning App (Top right corner)
 - Turn vehicle on, open the Delicious Tuning App and try reconnecting
- ECA Blinking Slow Green – EcuTeK App Reading 2 – Delicious App Reading 10-80%
 - (if fuel pressure in the kit) Fuel Pressure Low or Fuel Pressure Sensor has failed
 - Connection to the vehicles harness is poor, loose, or the board might have water contamination
- ECA Blinking Or Not – Dash Lit Up Like a Christmas Tree (Check Engine Lights)
 - Bad connection or something has failed with the ECA



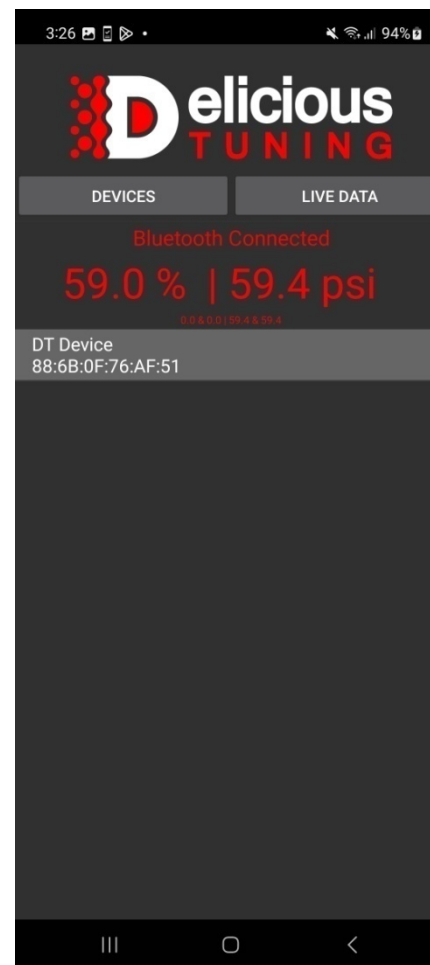
Bluetooth app:

Download the Ethanol Content Analyzer app in the Google Play store and install the app. Now with your vehicle in the ON position and modules light blinking, open the app and select "Connect" tab then press "Devices". Select the device DT2-XXXXXX, now press "Live Data". 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.