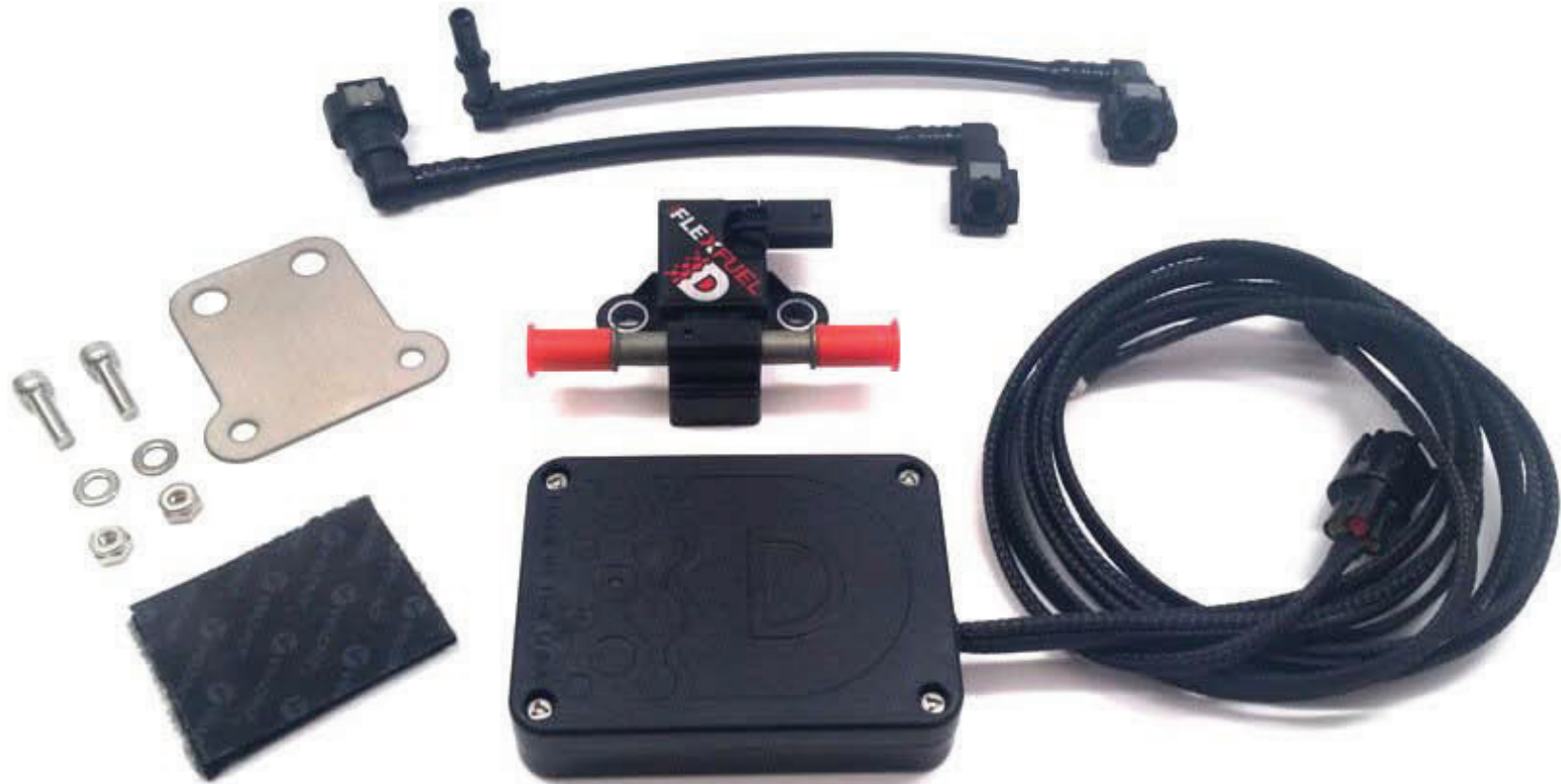




## Flex Fuel Bluetooth Kit BRZ / FRS / GT86 install instructions



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### FFBT parts:

- (1) Ethanol Content Analyzer Module
- (1) Ethanol Content Analyzer Sensor
- (1) Sensor Bracket
- (1) Velcro Strip
- (2) Stainless Steel Bolts
- (2) Stainless Steel Washers
- (2) Stainless Steel Lock Nut
- (2) Fuel Lines
- (1) 5/16 Quick Disconnect Removal Tool

**DISCLAIMER:** The information provided within this manual is for informational purposes only. Delicious Tuning Inc. accepts no responsibility, and is excluded from all liability for damage and/or loss which may be suffered by any other party as a result of using or in connection with such use or loss of use of this information, including but not limited to loss of profit, loss of opportunity, loss of business, indirect damages, incidental damages, special or consequential loss, injury or loss of life. We recommend professional installation.



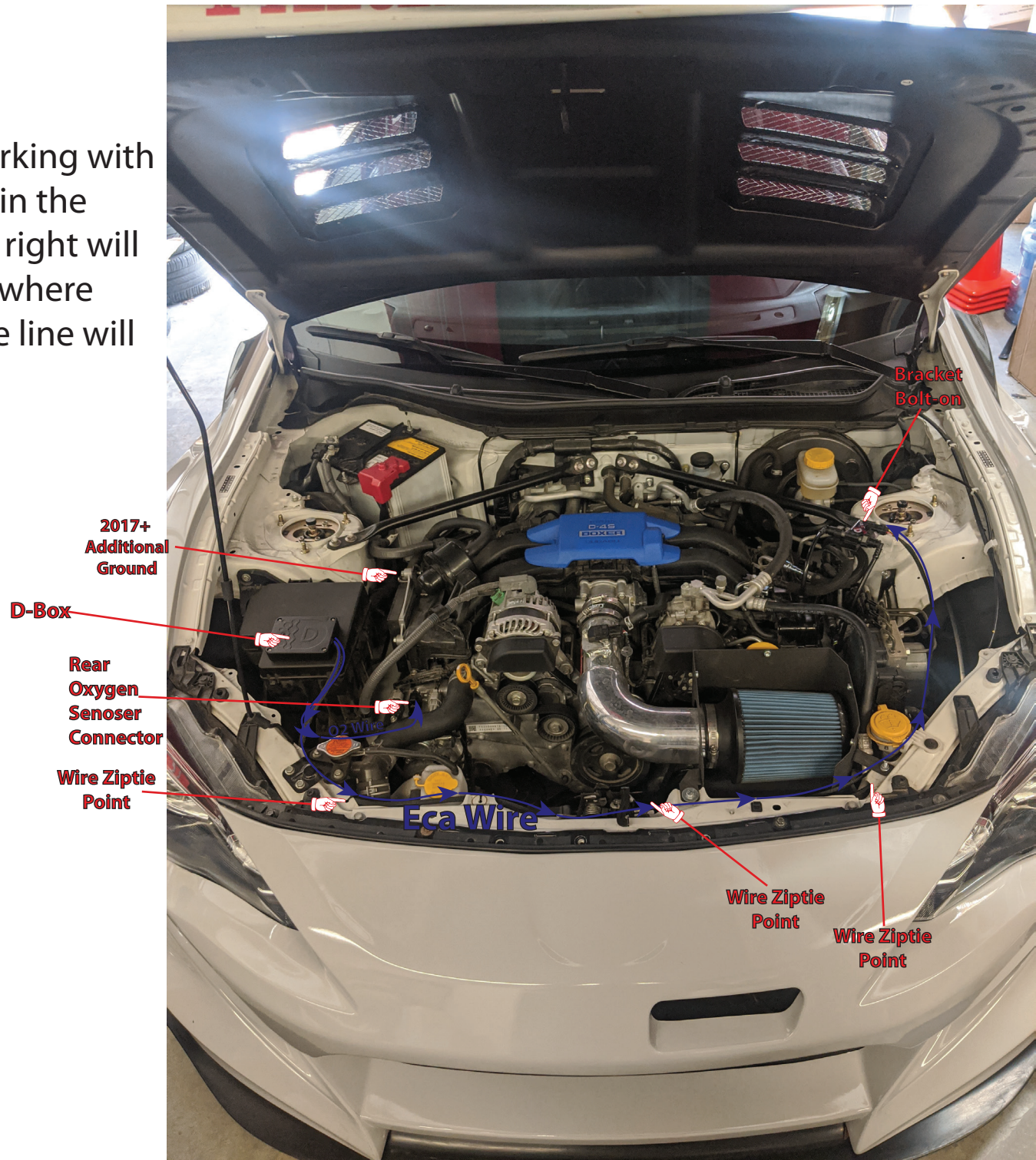
## Tools required for installation:

- (1) 10mm wrench or ratchet
- (1) 5mm allen wrench or ratchet attachment
- (1) 12mm wrench or ratchet
- (2) Shop towels
- (1) 5/16 Quick disconnect fuel line removal tool (included in kit)
- (4) Zip ties (or as needed)



## Working Area:

Locate the areas you will be working with when installing the flex fuel kit in the engine bay. The diagram to the right will point out all of the areas in red where you'll be working on, and a blue line will show you the wire pathing.

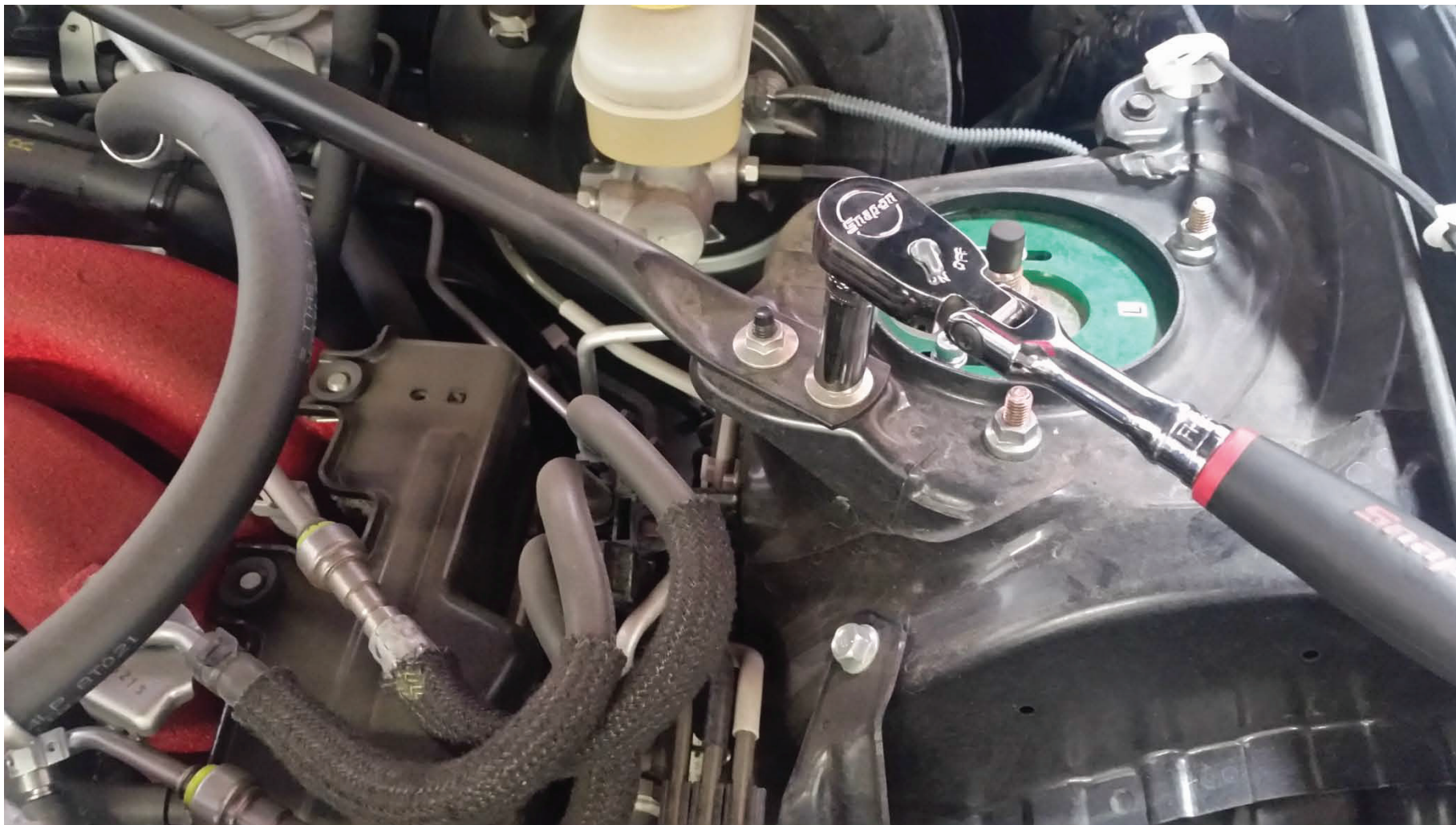




**ECA sensor bracket:**

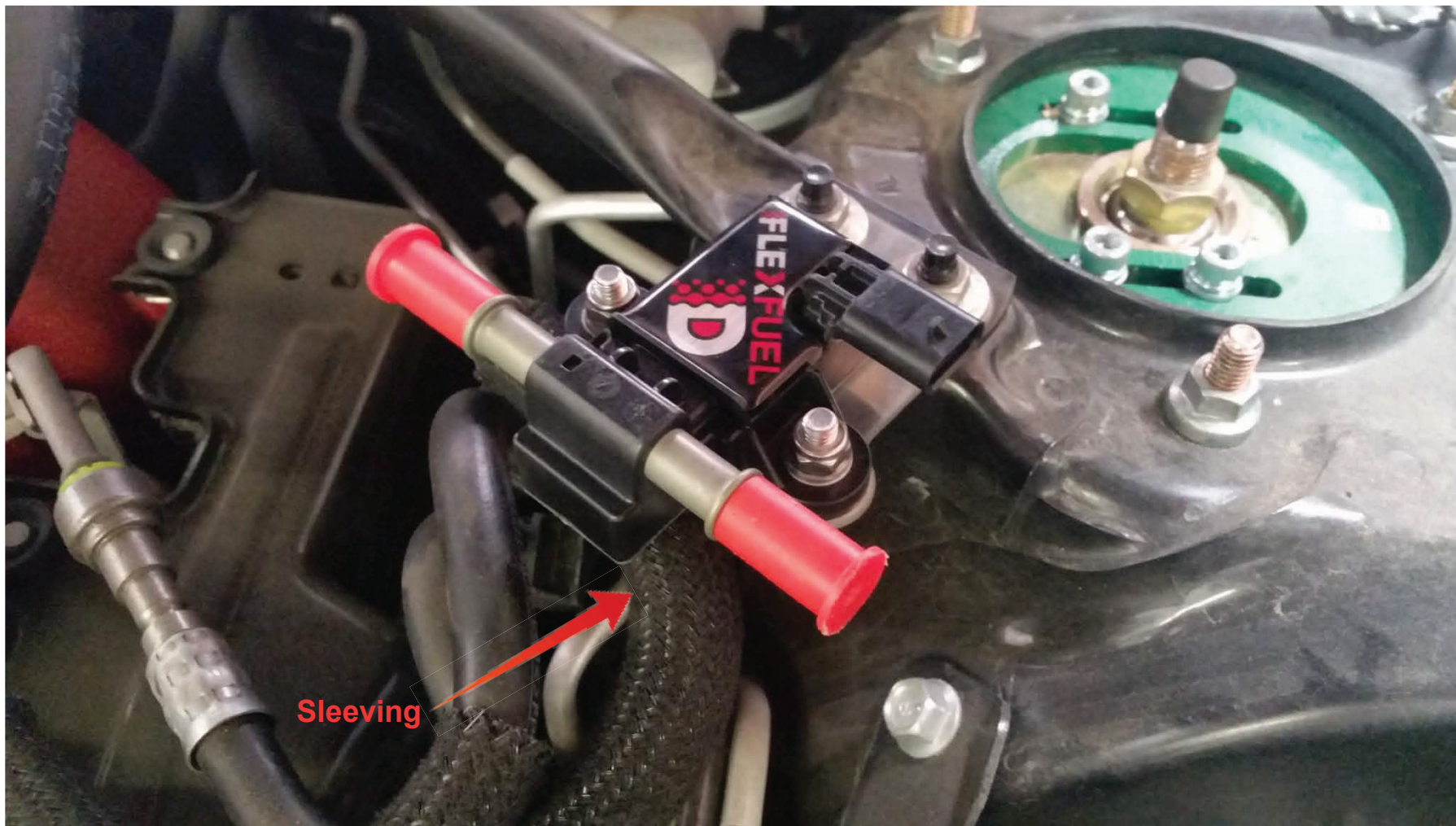
Use the supplied bolts, washers and nuts to attach the flex fuel sensor to the mounting bracket, by using the 5mm allen wrench and 10mm wrench or ratchet.

**Note:** Washers and lock nuts are on top of the sensor flange.

**Bracket bolts:**

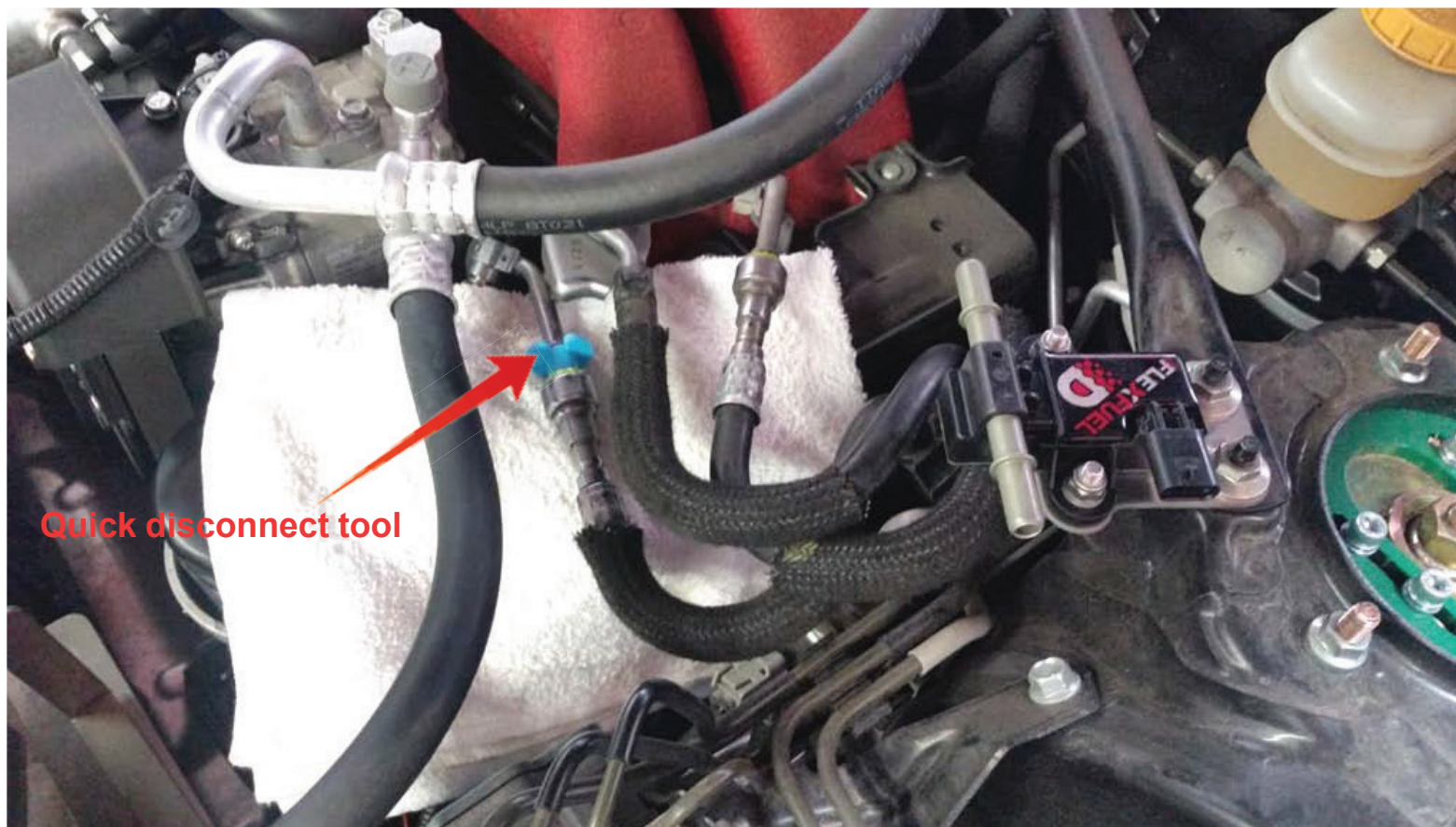
Locate the support strut bracket bolt, on the strut tower, remove the nuts by using a 12mm wrench or ratchet. Put them aside for later use.



**ECA bracket install:**

Install ECA bracket assembly on the support strut studs. Reinstall the nuts with a 12mm wrench or ratchet. Adjust the OEM fuel line and braided sleeving under the bracket, so the line will not rub on any sharp edges. Remove the red caps from the flex fuel sensor.





Quick disconnect tool

### Fuel line disconnection:

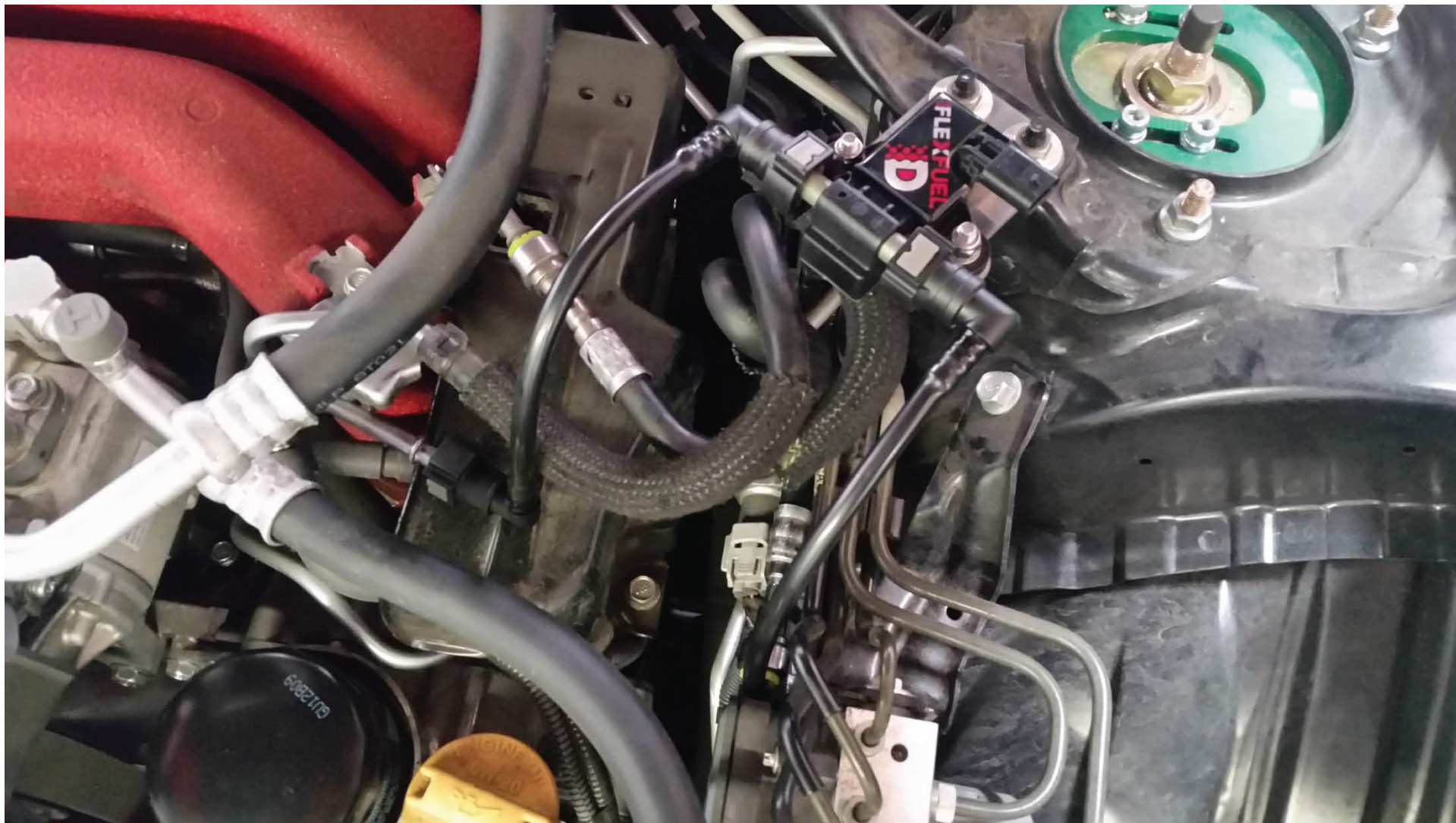
Disconnect the fuel line closest to the front of the vehicle with the supplied 5/16 quick disconnect tool, by pressing the tool inside the yellow plastic fitting on the OEM connection. Now press the fuel line towards the quick disconnect tool to engage the tool and pull away the line slowly to release 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 pressurized fuel in the line. If you pull slowly the pressure will release slowly and should not spray fuel.



## Fuel line installation:

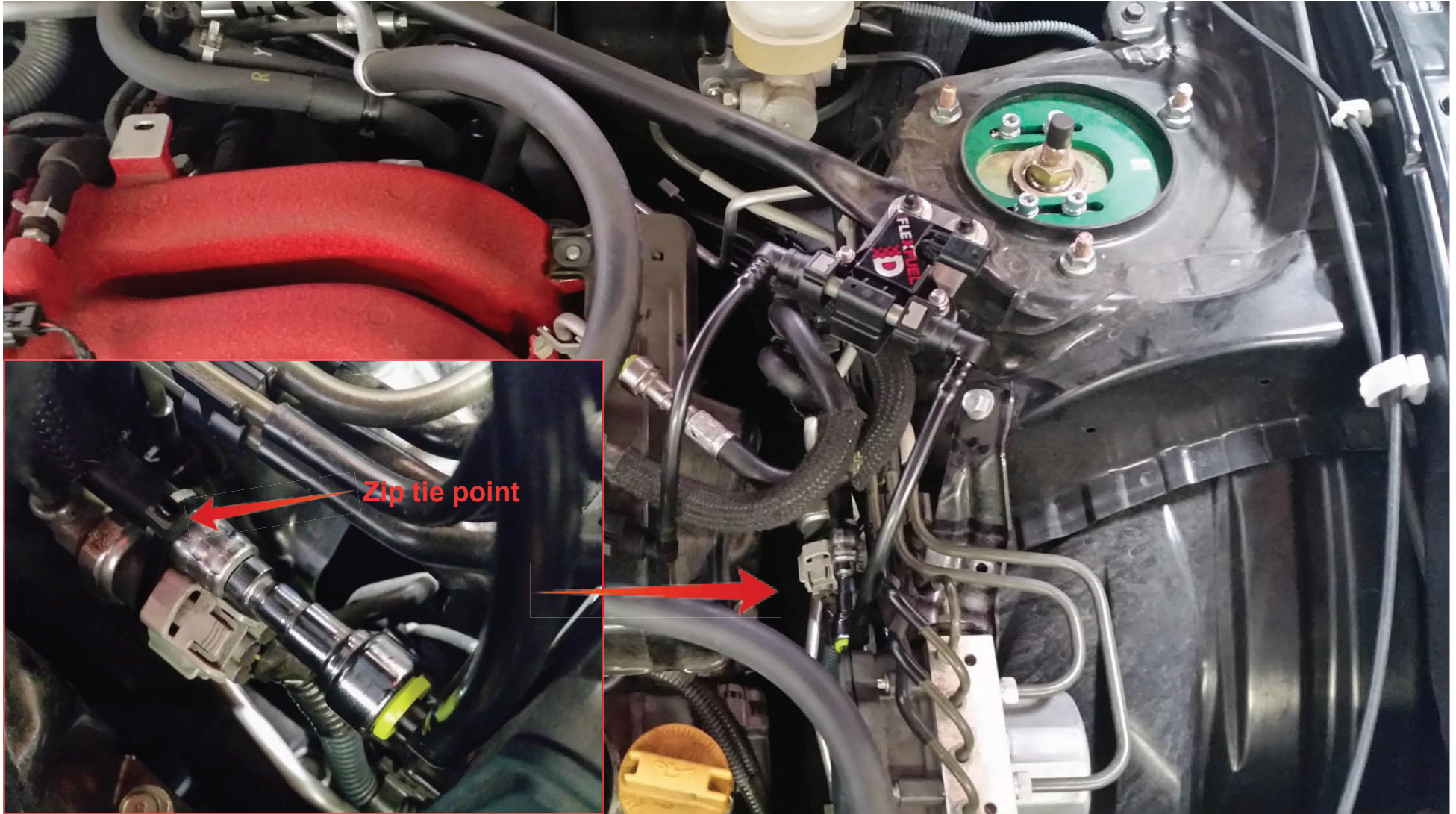
Remove the white protective covers from the fuel lines. Connect the smaller connector to the OEM hard line on the intake manifold. Push until you hear an audible click on all connections. Next connect the other end to the ECA sensor. **Be very careful not to kink the line.** Tug on all connections to make sure they are fully locked without pressing the release buttons.



**Fuel line installation:**

Remove the black & white protective covers from the fuel line. Insert the male fuel line nipple into the OEM fuel line, then connect the female end on the ECA sensor, push until you hear an audible click. Tug on all connections to make sure they are fully locked without pressing the release buttons.

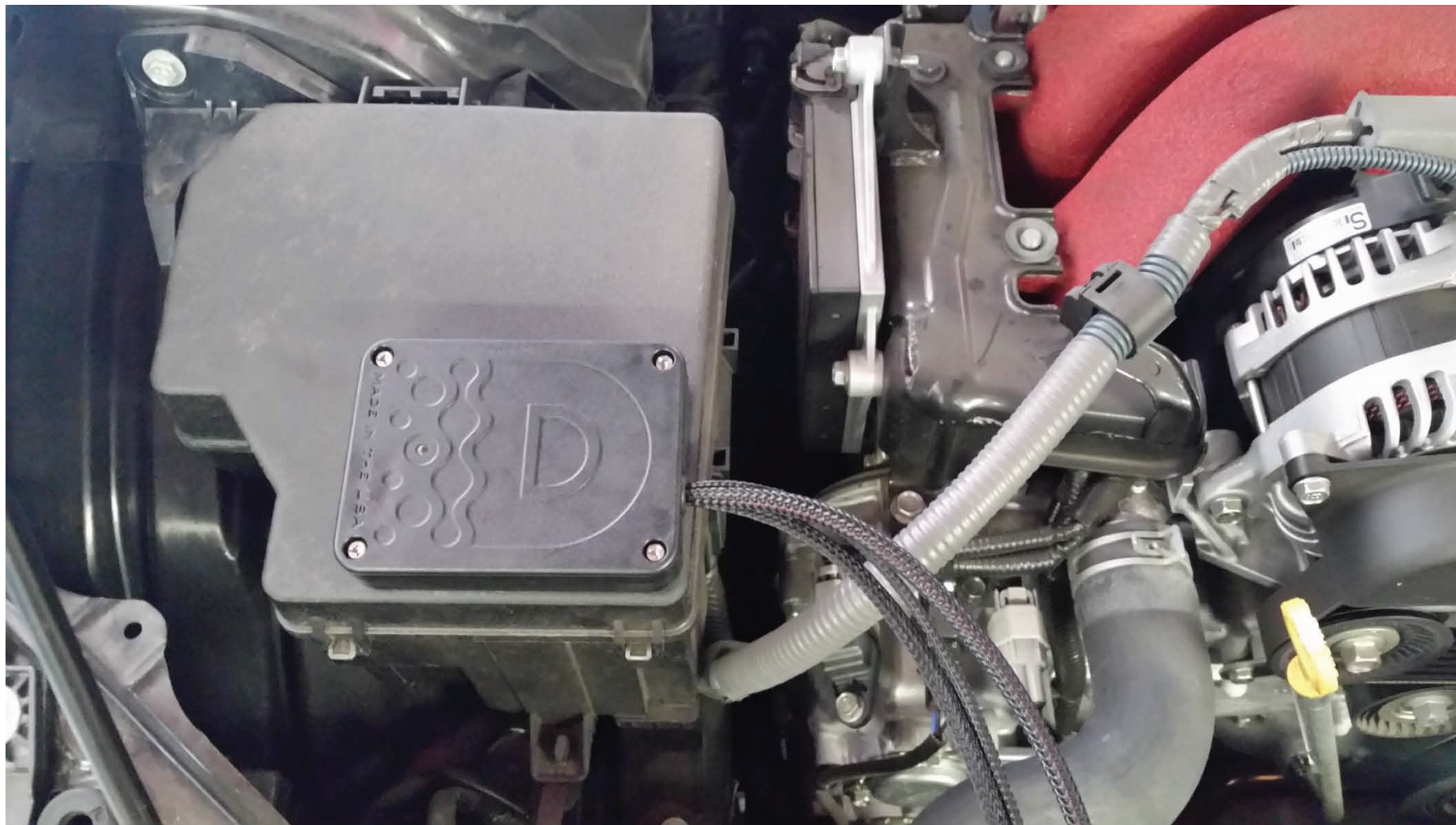




## Fuel line routing:

Adjust the OEM fuel line in the plastic support bracket so you can put a zip tie around the OEM fuel line and hard line to keep the fuel lines from moving.

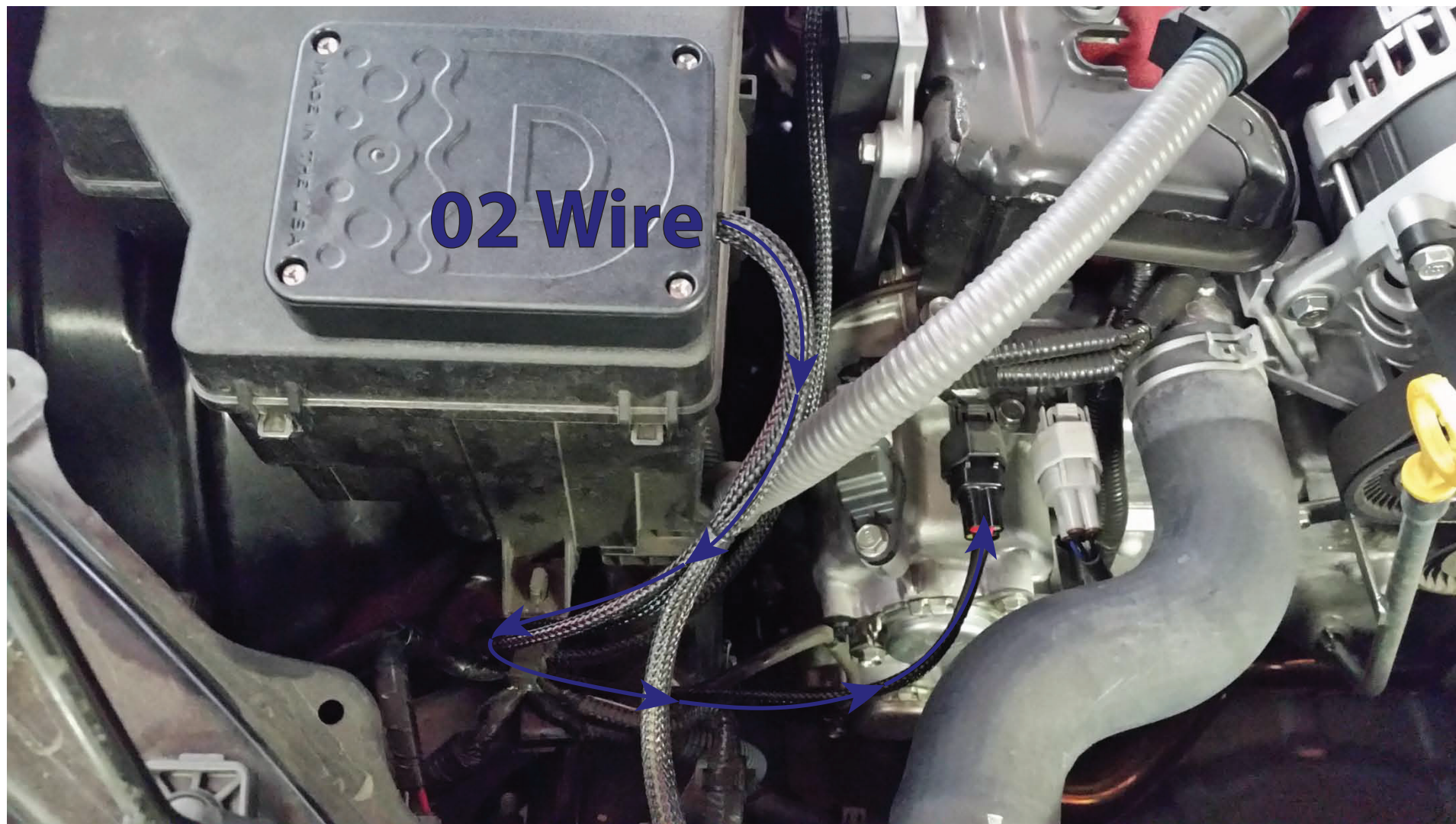


**ECA module mounting:**

Mount the ECA module “D” box on top of the fuse box with the supplied Velcro. It may be necessary to clean the surfaces to get good adhesion.

**Note:** The ECA is water resistant not waterproof it is an electronics module.



**O2 sensor connection:**

Disconnect the rear O2 sensor connector from the black harness on top of the engine towards the front passenger side. Connect the black or gray connector that is coming from the “D box” into the black OEM connector as shown in the pictures. You may want to loop the harness through the OEM fuse box harness to keep it from moving around.



**Ground Lug:**

For model year 17+ BRZ / 86 your ECA module has an additional harness that needs to be grounded. Ground to an unpainted vehicle ground surface. We suggest using the direct injection controllers bolt as that needs to always be grounded to work properly. Using a 10mm wrench or ratchet, attach the terminal lug.





### Wire routing:

Run the ECA harness from the “D-box” away from the alternator harness and underneath the radiator cap. Continue routing the harness underneath the hood latch, above the fans and over the intake port between the frame and then between the washer bottle and frame. Bundle the wires and Zip tie the harness together near the “D-box” then zip tie to the points shown in the picture. You may want to leave it loose before you connect to the ECA sensor.



**ECA sensor connection:**

Connect the harness into the flex fuel sensor and check all your connections and lines for proper fitment. Tighten and trim zipties if not already done. Make sure nothing is loose or at risk of being snagged, caught, or could rub through protective braided sleeving.





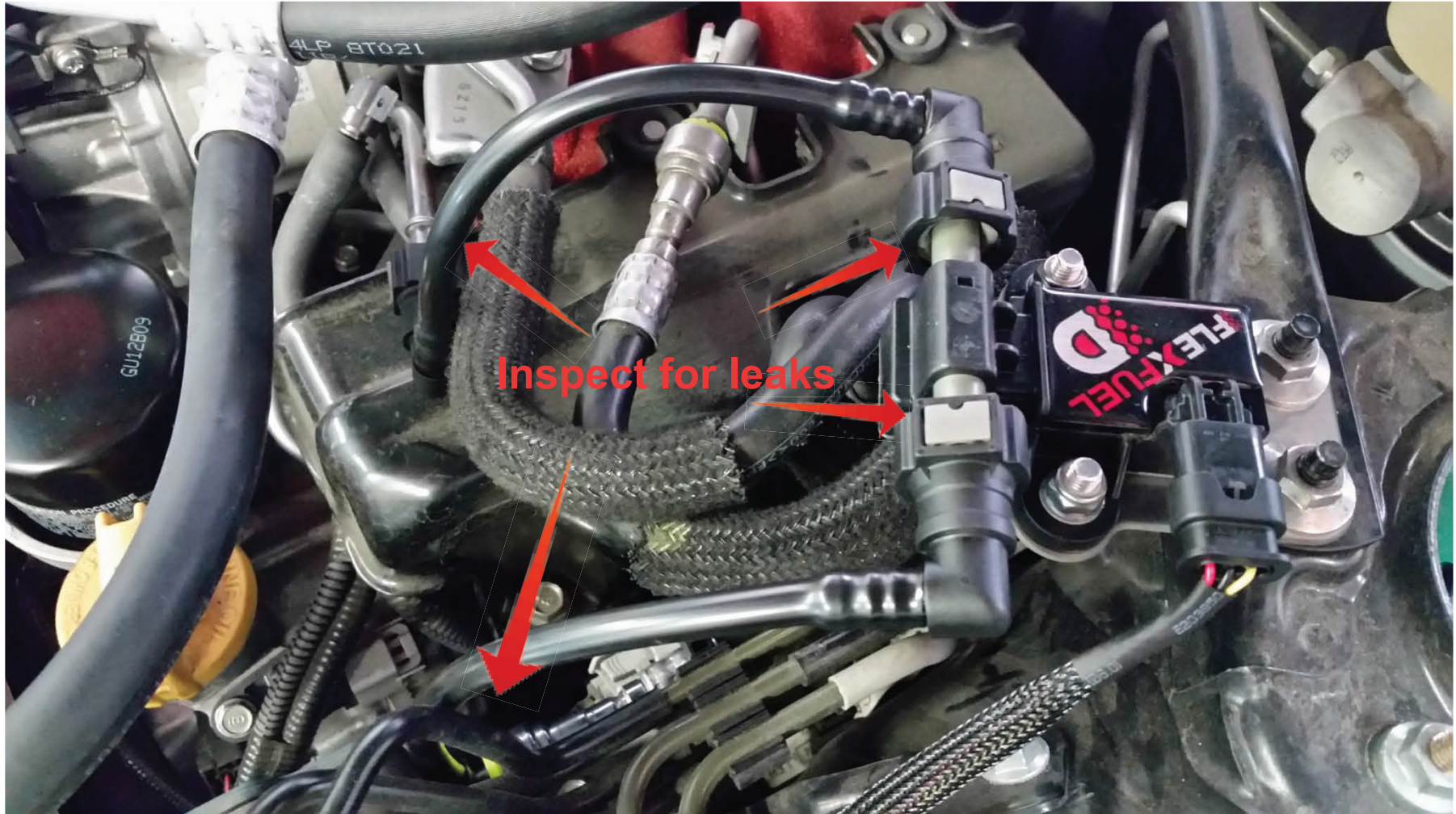




### **Priming & fuel line check:**

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 fuel leaks. To prime, turn ignition key to the ON position and off, you should hear the pump running and may hear air moving in the lines.





### **Fuel line check after starting:**

When starting the car for the first time, once again inspect all fuel lines for any fuel 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 or further troubleshooting.  
At this time it is NOT recommended to drive the vehicle.

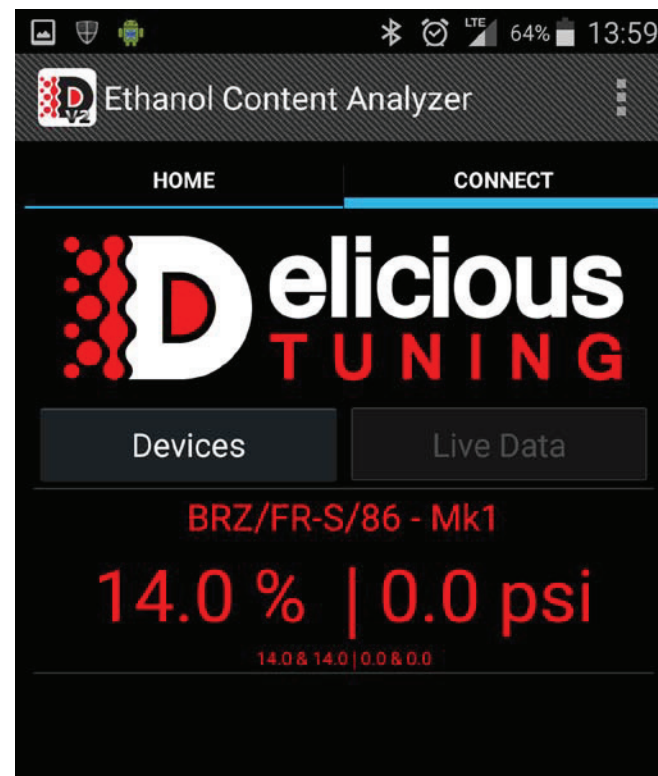
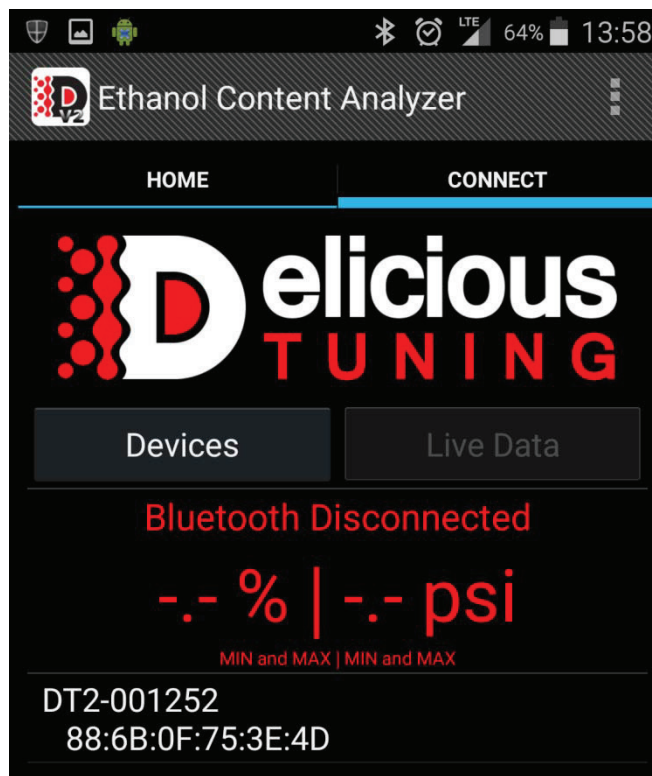
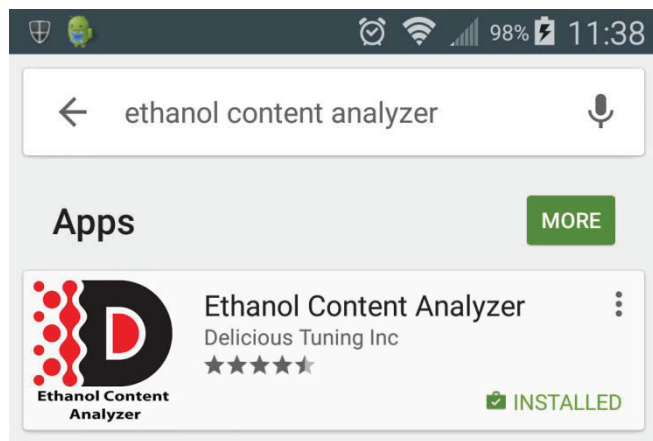




## ECA module power:

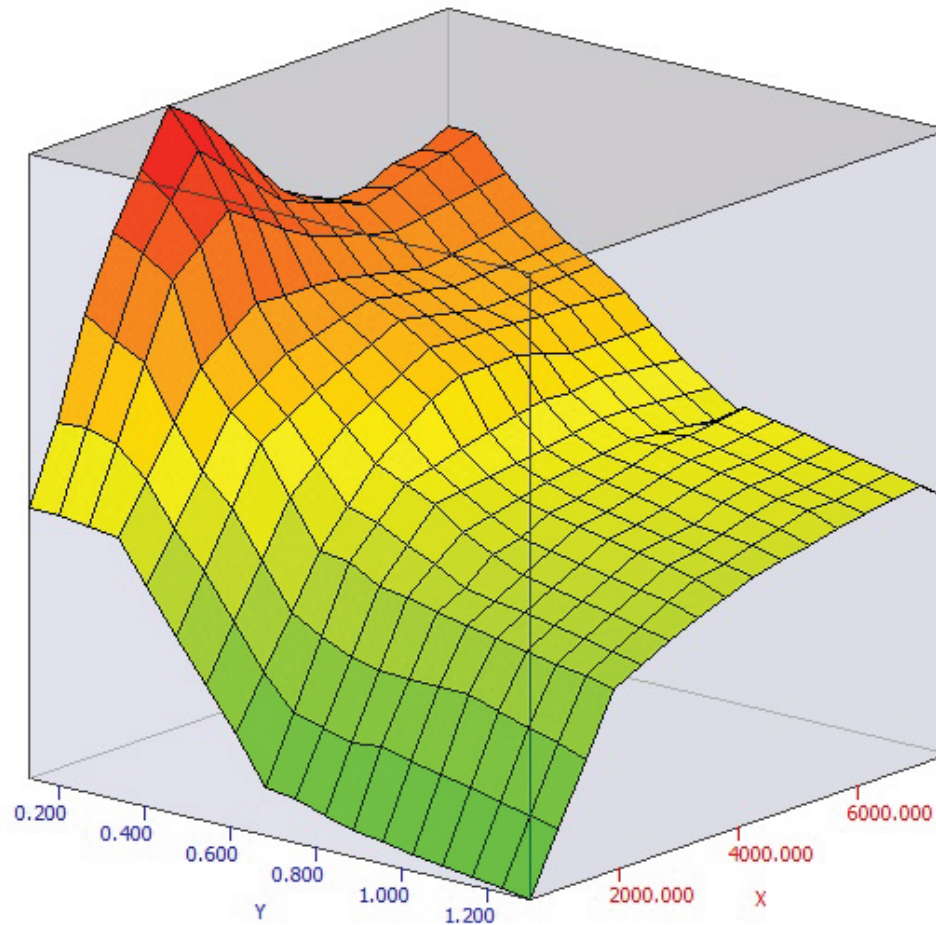
With the vehicle in the ON position verify that the green light on the ECA module has a green blinking light.





### Bluetooth app:

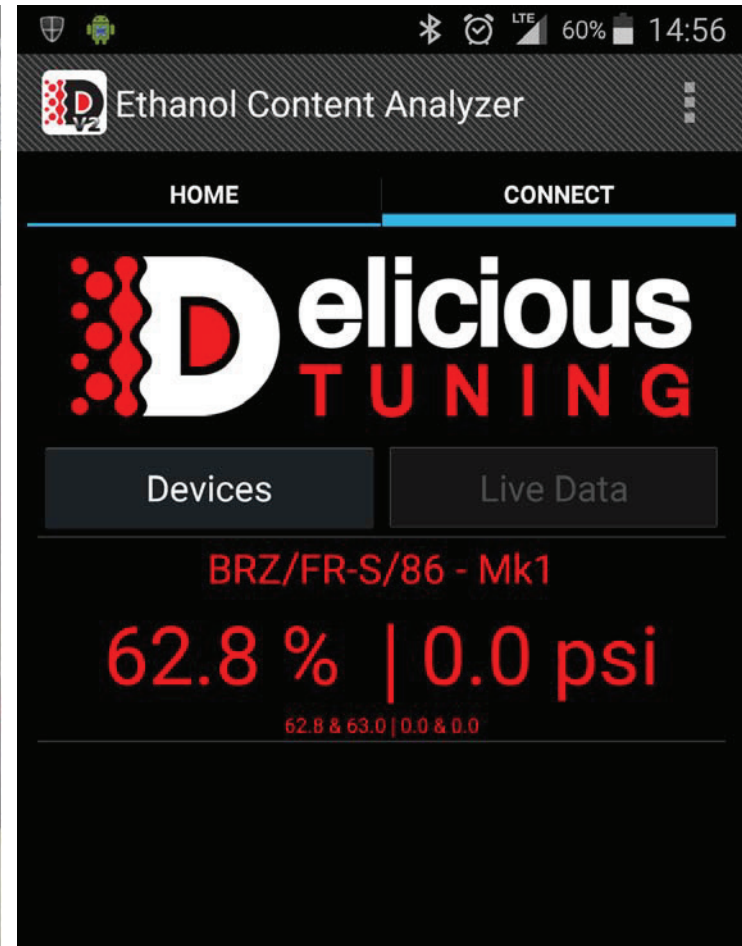
Download the Ethanol Content Analyzer V2 app in the Google Play or App store. Install the app and turn on your device's Bluetooth function. With your vehicle in the ON position and ECA module light blinking, open the app and select the "Connect" tab then press "Devices". Select the device that you see with serial number "DT2-XXXX", now press "Live Data". The app will then connect to the ECA, if it does not, press "Devices" again. The percentage of ethanol should now be displayed. Typically the percentage is around 7-15% 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 kit installation. You are now free to enjoy your new found horsepower, torque and fuel flexibility!

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