

# Flex Fuel Bluetooth Kit Evo X install



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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
- (4) Stainless Steel Lock Nut
- (2) Fuel Lines

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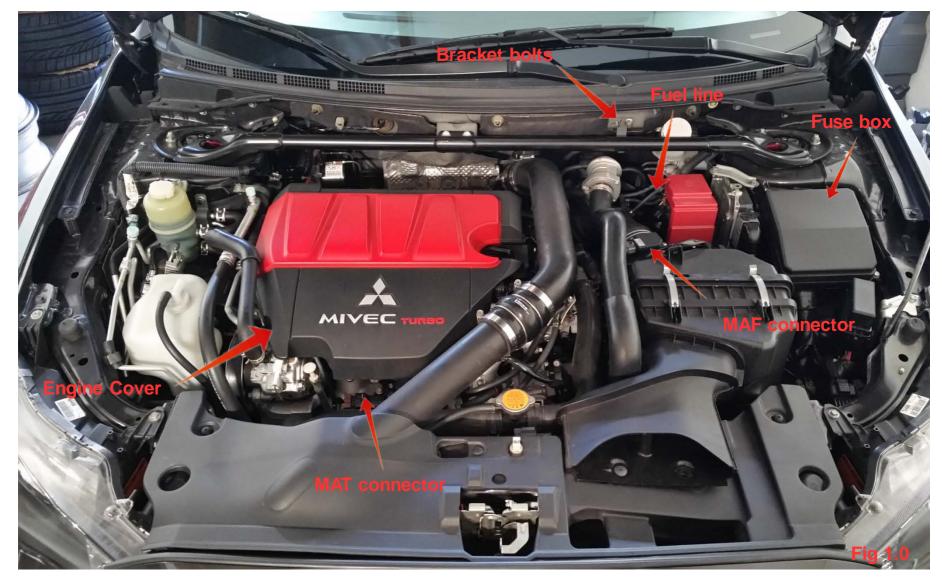




# **Tools required for installation:**

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





# **Working areas:**

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

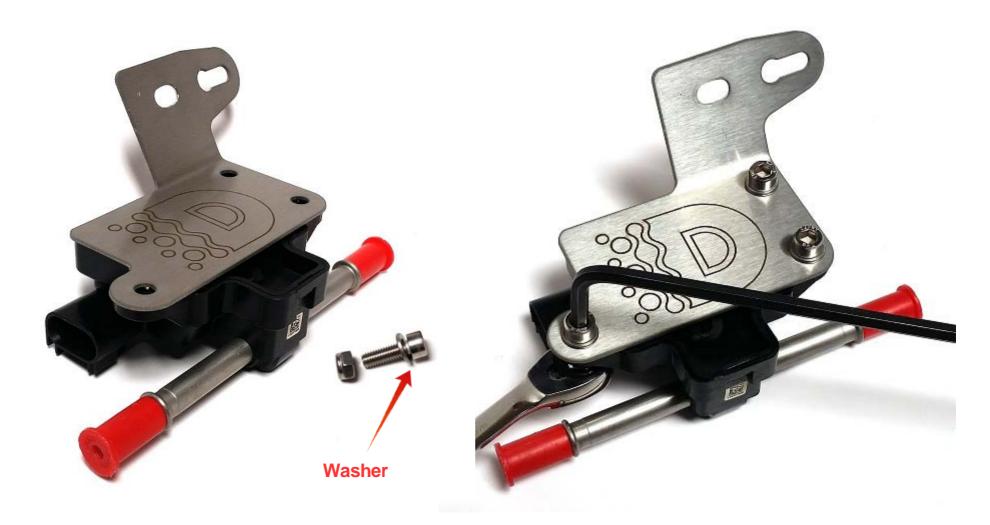




# Fuel pump relay:

Ensure the vehicle is off, then disconnect the blue fuel pump relay, in the main fuse box. 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.

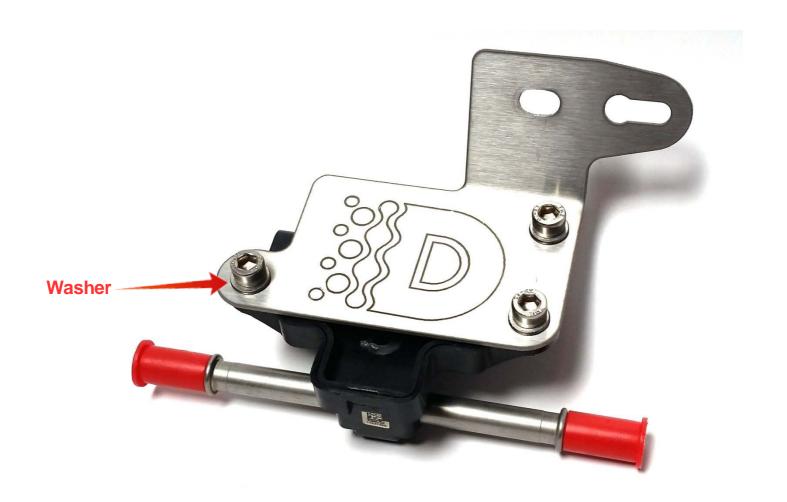




### **ECA** sensor bracket:

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 snuggly.





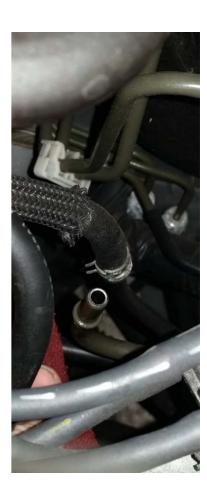
# ECA sensor bracket assembly:

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 disconnection:**

Locate the fuel line with the red locking tab on the fuel hard line near the firewall and put a couple of shop towels around the hard line. Next unlock the locking tab and slowly pull away the line to release it from the hard line. Use the shop towel 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.





**Bracket nut:** 

Locate the OEM bracket nut on the firewall.





### **Bracket nut removal:**

Remove the nut holding on the intercooler bracket with a 12mm wrench or ratchet. Set aside the nut for use later.





# **ECA** bracket:

Install the ECA bracket assembly on to the fire wall studs. You may need to slightly bend the existing bracket back for clearance.



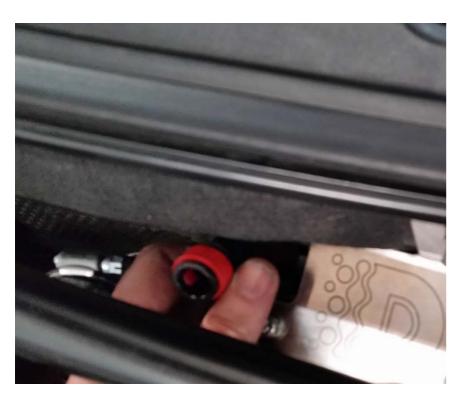




# **Bracket nut install:**

Install the OEM nut with the 12mm wrench or ratchet. Install the supplied nut with a 10mm wrench or ratchet.

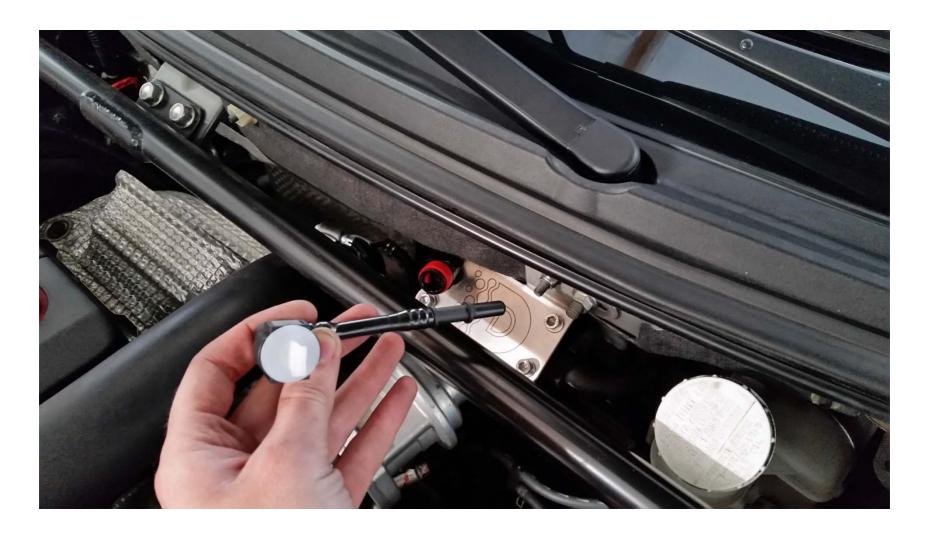






Fuel line routing:
Route the OEM fuel line up and around the ECA bracket.





**Fuel line:** 

Remove the black protective cap from the small fuel line nipple.





# Fuel line install:

Insert the fuel line nipple into the OEM fuel line push until you hear and audible click.



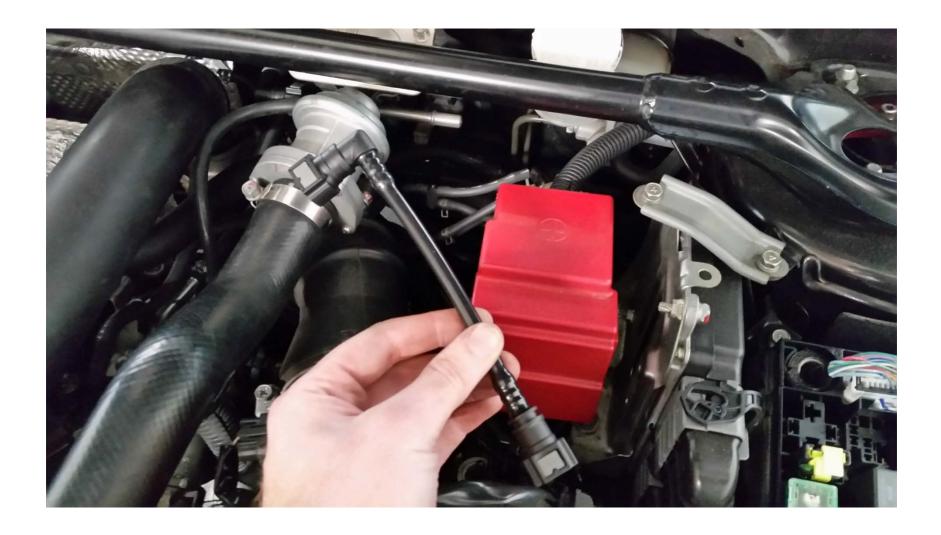




# **Fuel line installation:**

Remove the white protective cap and push the fuel line onto the ECA sensor hard line, push the connector until you hear an audible click.



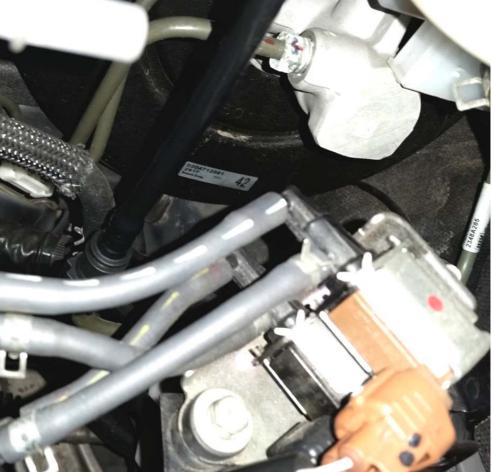


# **Fuel line:**

Take the remaining line and remove the white protective caps.







# **Fuel line install:**

Remove the white protective cap and push the fuel line onto the OEM hard line, push the connector until you hear an audible click.







# **Fuel line installation:**

Gently bend the fuel line onto the ECA sensor hard line, push the connector until you hear an audible click.



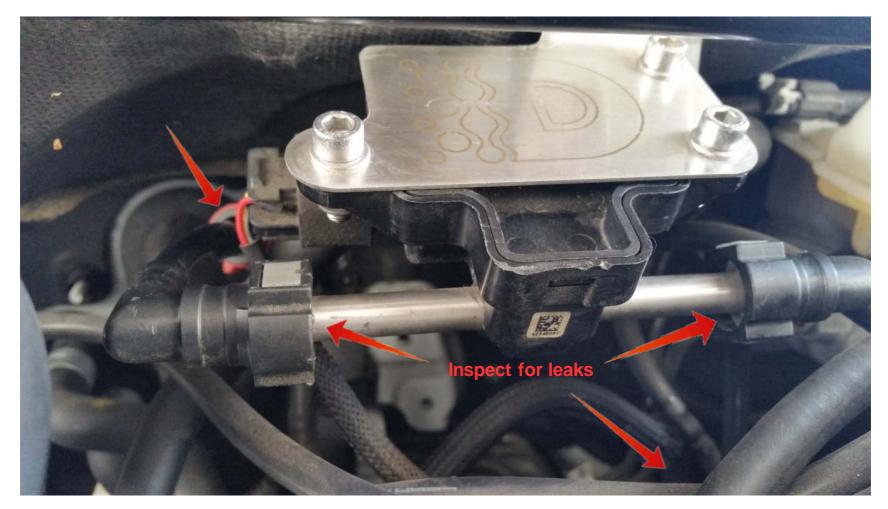




# Priming & fuel line check:

With the fuel pump relay back in the fuse box, 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)



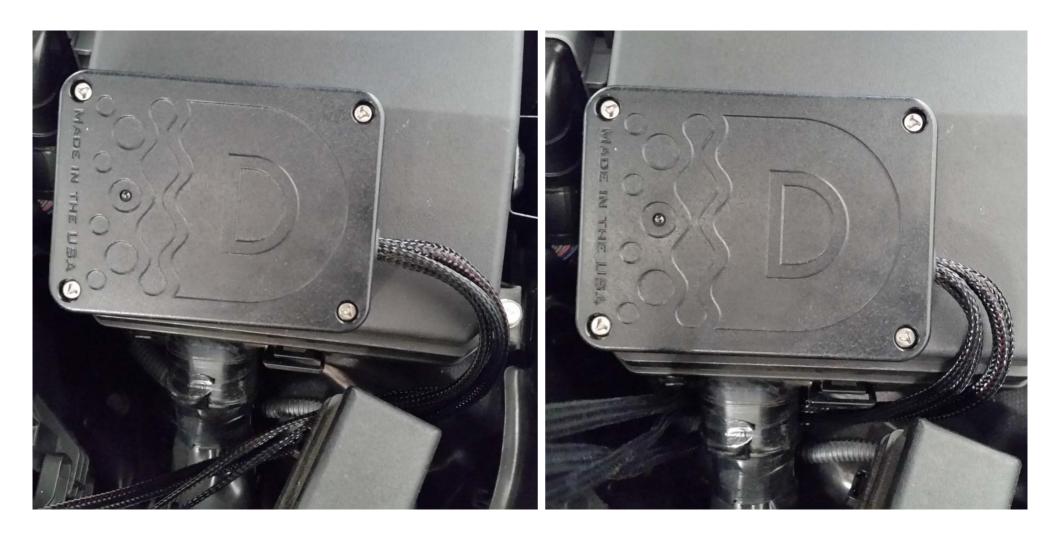




# **Attaching ECA module:**

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 D box's wire harnesses underneath the OEM electrical harness going to the fuse box.



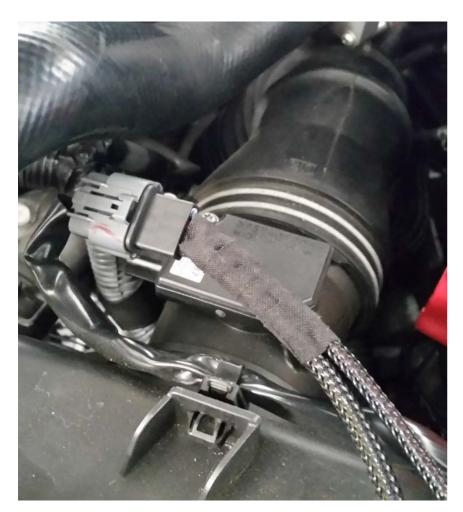




**MAF** sensor:

Disconnect the OEM MAF sensor connector.







# **MAF** sensor connection:

Connect the MAF sensor to the mating connector from the "D" box and connect the other side to the MAF sensor.

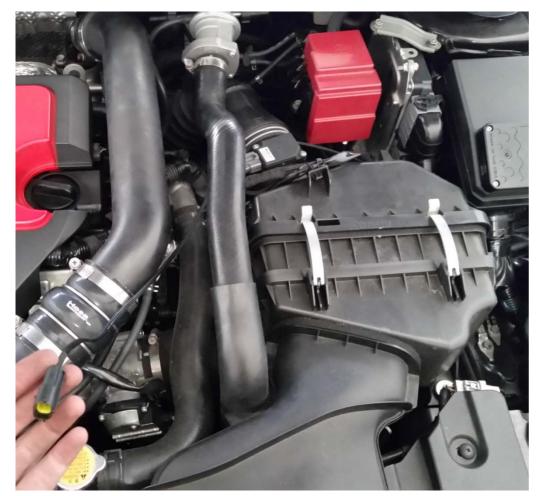




# Wire routing:

Route the ECA wire harness down and around the ECA sensor, as shown in the pictures above.



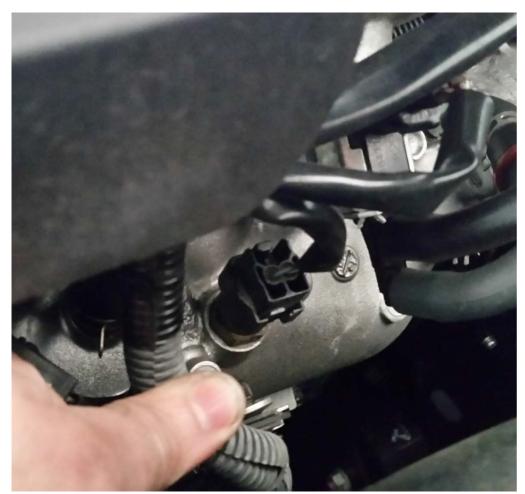


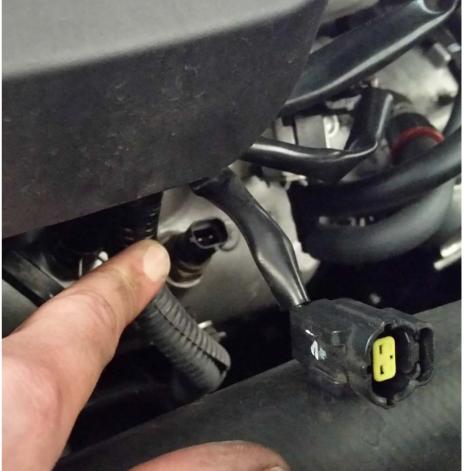


# **MAT** harness:

Remove the engine cover and route the MAT harness as shown.







# **MAT** sensor:

Disconnect the MAT sensor connector on the intake manifold...







# Wire routing:

Using a flat head screw driver gentle pry the release tab to open the wire harness tunnel to the right of the engine oil cap. Route the MAT wiring harness through the tunnel and then close the tunnel.





# Wire routing:

Using a flat head screw driver gentle pry the release tab to open the wire harness clip under the engine oil cap. Route the MAT wiring harness through the clip and then close the clip. Connect the OEM MAT connector to the mating MAT connector.

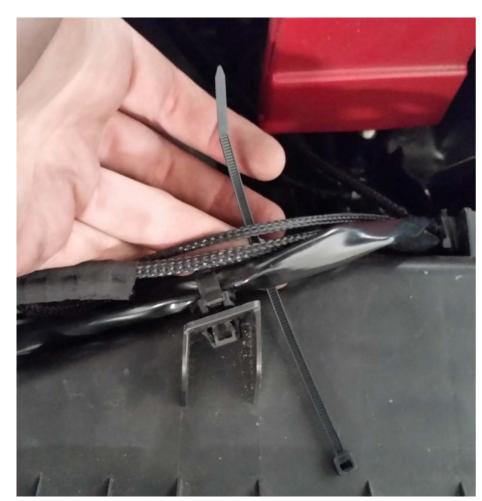




# **Engine cover:**

Reinstall the engine cover.







# Wire harness bundling:

Zip tie the two wiring harnesses and OEM MAF sensor harness that route over the intake near the MAF sensor.

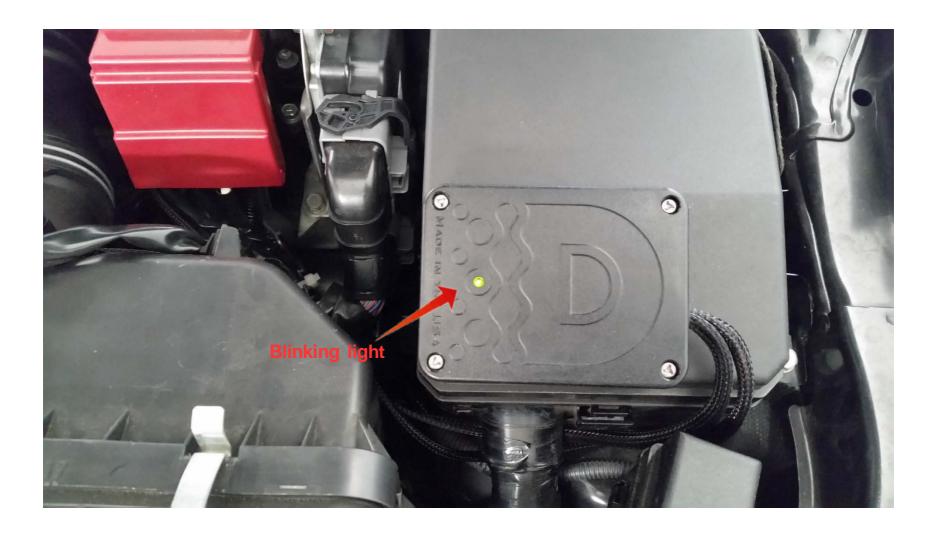




### **Installation check:**

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

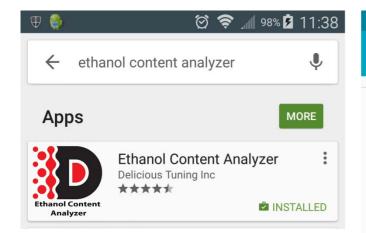


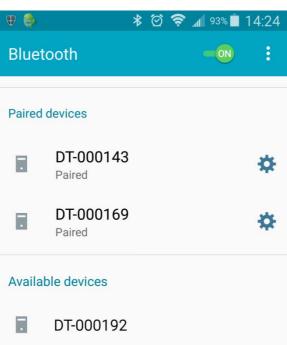


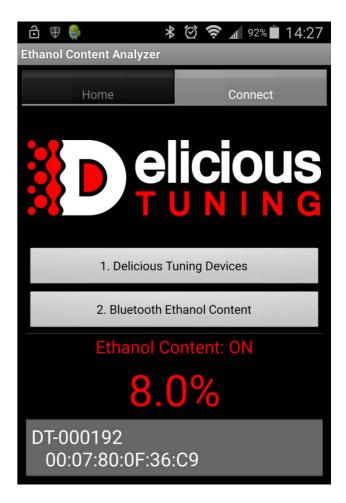
# **ECA** module power:

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





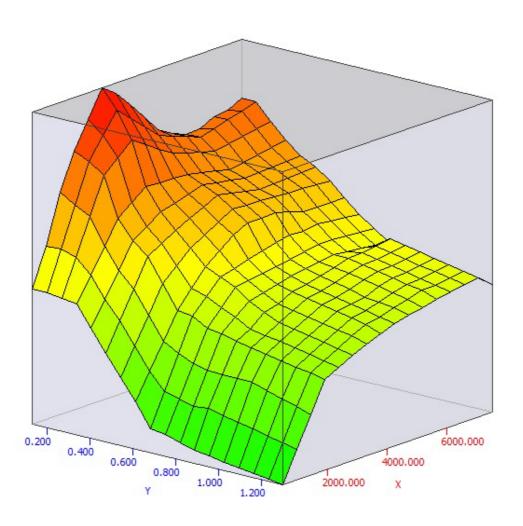




# Bluetooth app:

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.





# Accessport ethanol display:

In order to display ethanol content on your Accessport it must be setup the following way. Go to Gauges, go to Setup, select Imperial-Metric. Go back to the gauge display and if not present add Manifold Temp tile to viewed gauges the display should read a number, 6-10 generally for pump gas blends. This number now represent ethanol percentage 6-10% ethanol. For more detailed instructions see, Flex Fuel Bluetooth Kit for AccessPORT V2 & V3 Setup.







### E85 / Ethanol:

Add ethanol to your gas tank, then start the vehicle. With the Ethanol Content Analyzer app open or viewing your Accessport, 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.