



1250 Activity Drive Suite A Vista CA, 92081 408-480-0995 http://www.delicioustuning.com

BJP Rev: 2.0 Date: 8/2/17





FFBT parts:

- (1) Ethanol Content Analyzer Module
- (1) Ethanol Content Analyzer Sensor
- (1) Sensor Bracket
- (1) Velcro Strip
- (3) Short Stainless Steel Bolts
- (4) Stainless Steel Washers
- (3) Stainless Steel Lock Nuts
- (1) Long Stainless Steel Bolt
- (2) Fuel Lines in Heat Sleeve
- (1) Flex Fuel Badge

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.





Tools required for installation:

- (1) Needle Nose Pliers
- (1) 10mm Wrench or Socket
- (1) Phillips Head Screwdriver
- (1) 5mm Allen Wrench
- (2) Shop Towels
- (1) Zip Tie





Working areas:

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





Battery:

Ensure the vehicle is off. Remove the battery compartment cover and disconnect the negative terminal of the battery with a 10mm wrench or ratchet.

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 the assembly aside for now.





Engine cover removal:

Remove the four engine cover bolts with 5?mm hex key. Set the engine cover aside in a safe place.





Zip tie removal:

Locate and remove the OEM zip tie that holds the factory wiring harness from the threaded hole on the intake manifold. Use a flat head screw driver to pry it out of the hole. Then push the harness back toward the firewall.





ECA assembly:

Insert the long bolt with washer into the bracket hole. Position the ECA sensor assembly so that the bolt threads into the intake manifold hole. Use the 5mm allen wrench to attach the bracket. Reposition the OEM wiring harness so it does not rub edges of bracket.





Clearance:

Check for clearance from carbon fiber cross brace. If you need to do some slight adjusts bend the bracket carefully. Note: Don't bend too far forward as the engine cover will be going on later.





Fuel line disconnection:

Locate the fuel line that will be disconnected





Fuel line disconnection:

Disconnect the fuel line by depressing the locking tabs of the OEM fuel line connection. Now gentle release it from the hard line and remove the line form the fuel line holding clip. Use a shop towel to 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 clip:

Remove the fuel line retaining clip from the hard line and insert it into the OEM fuel line connector.





Fuel line orientation:

Orient the fuel line as shown with the exposed portion on nylon line closer to the center of the engine.





ECA sensor connections:

Connect the straight connector to the ECA sensor first, then do the same with the 90 degree, by carefully routing behind the ECA bracket and slightly bending the fuel line. ***Caution*** do not kink the line. Push the connectors until you here an audible click.





Fuel line connections:

Connect the 90 degree connector to the hard line first, then connect the 90 degree barb to the OEM fuel line, you'll need to rotate the OEM fuel line 90 degrees to connect it to the new barb.

Caution do not kink the line. Push the connectors until you here an audible click.





Fuel line clip: Push the OEM fuel line back into the holding clip





Completed fuel lines:

Your fuel lines and sensor assembly should look like this when completed.





Secondary air pump connector:

Locate the secondary air pump connector in the battery compartment and disconnect it. Pull it up as shown.





Signal Input: Insert the ECA module's plug into the connector.





Poppet removal:

Remove the two poppets holding the battery cowl with a screwdriver.





Route ECA harness:

Route the ECA harness under the battery cable.





ECA harness routing: Route the ECA harness under the battery cowl.

http://www.delicioustuning.com





Harness routing:

Route the harness through the channel near the corner closest to the engine bay.





Harness Routing:

Pull and route the harness under the rubber seal and around the retaining support.







Attaching ECA module:

Remove the Velcro's clear film to expose adhesive, ensure the surface you're sticking to is clean of dirt and oil. Firmly press the module down to adhere Velcro to the fuse box in front of the battery, for optimum Bluetooth signal. Alternatively you can tuck the module down into the battery compartment, but the Bluetooth signal will be less.





ECA harness routing:

Route the ECA harness as shown and connect to the ECA sensor. Pull any excess length back into the battery compartment. Zip tie the harness to the carbon fiber brace and engine harness as shown.





Engine cover:

Reinstall the engine cover and put the negative terminal back on the battery and tighten bolt.





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)

http://www.delicioustuning.com





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 Play or App 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.