



Thank you for choosing the Free Spirits Fuel Injection Module, the module1.
The module is **"ONLY"** usable for Buell 1125 models

This is an Electronic Jet Kit. Like jet kits in the past, the more you modify, the more responsibility you take in getting your fuel curve right. Going to www.freespirits.it will help you obtain better high horsepower tuning.

INSTALLATION PREP

- Install Time: 60 minutes
- Required Tools for:
 -Disconnecting the negative terminal of the battery.
 - Removing your seat
 - Loosening and propping up the fuel tank

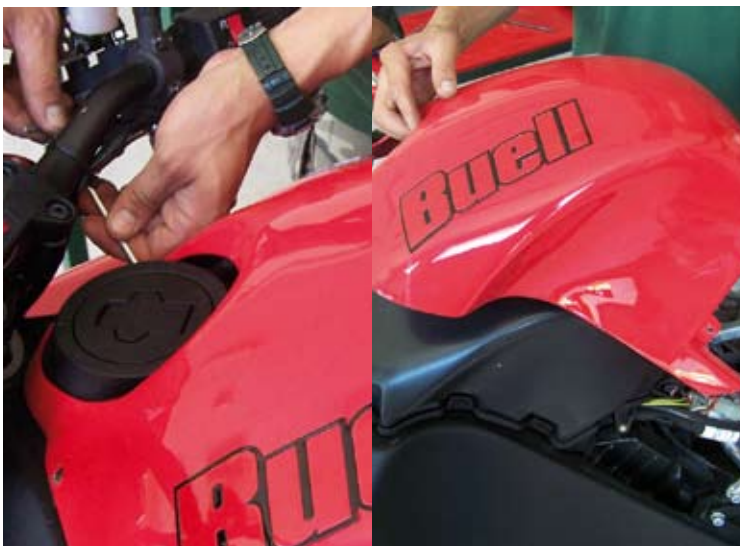
Some vehicle modifications with Techlusion Inc. products must not be used on public roads and in some cases may be restricted to close course competition. Those products not identified as US EPA legal are intended for off-road or marine applications only. Not intended for use on emission controlled vehicles.

1



Remove seat and tail section.

2



Remove airbox cover.

3



Disconnect tank vent hose from frame and remove the airbox lid.

4

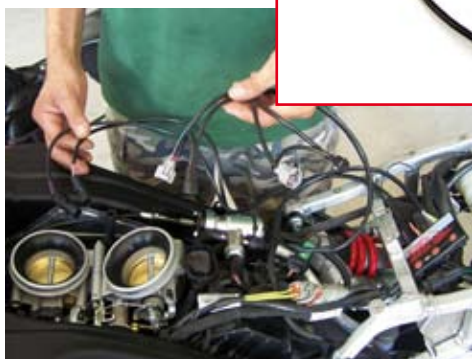


Remove filter, unlock carefully the fuel pressure sensor and the 4 screws that attach the airbox floor.



5

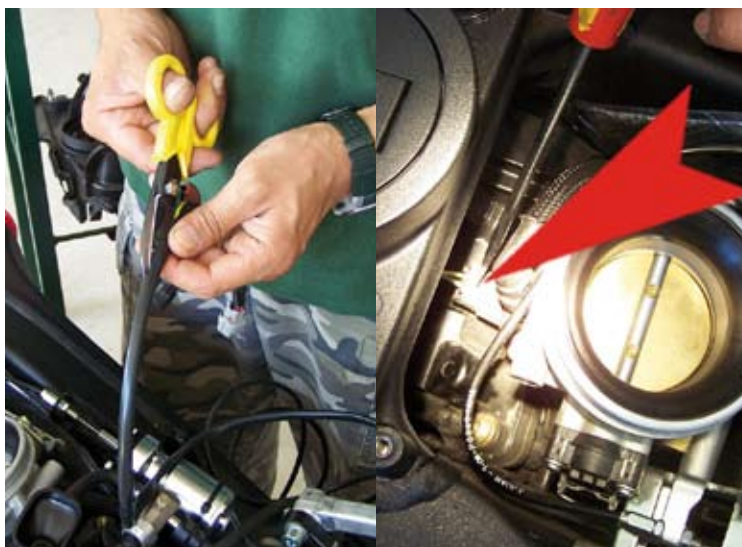
Work the rubber gasket through the airbox floor, slowly lifting the airbox floor as you go. Do the same on throttle body.



6

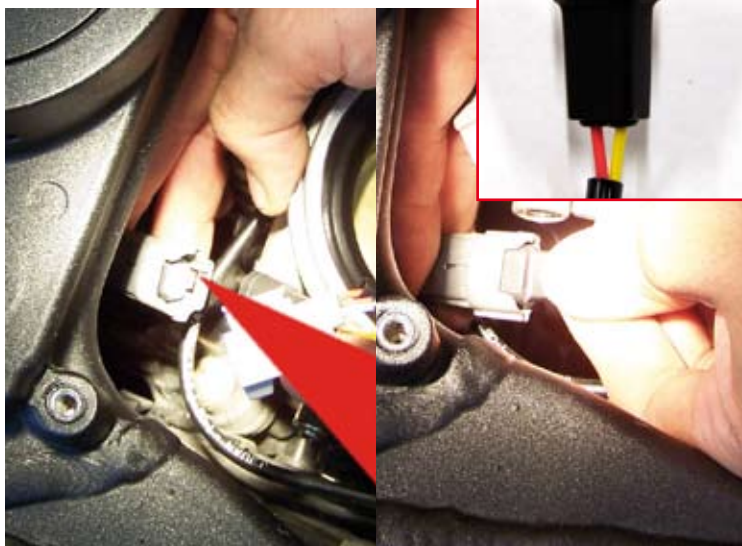
Feed the harness through the body as shown.

7

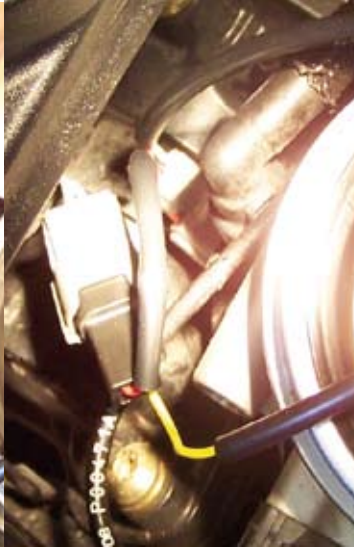


Start from the front Injector.
Cut the cable cover.

8



Connect the fuel unit harness to the injector leads.



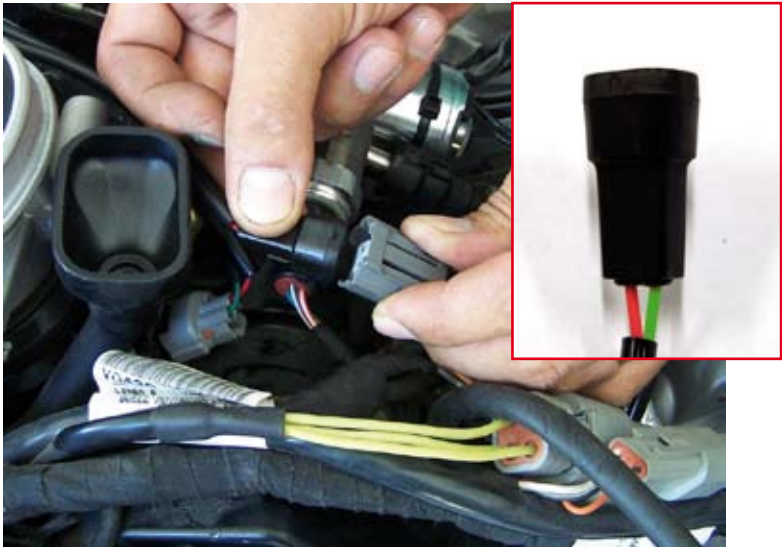
9

Install the Fuel unit female plug on their respective injectors.



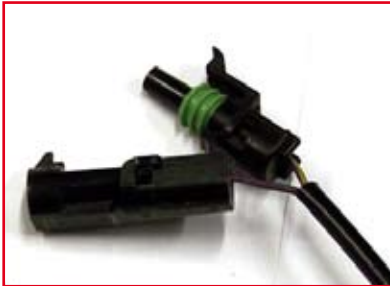
10

Locate the rear injector and Install the fuel unit plug on their respective injectors.



11

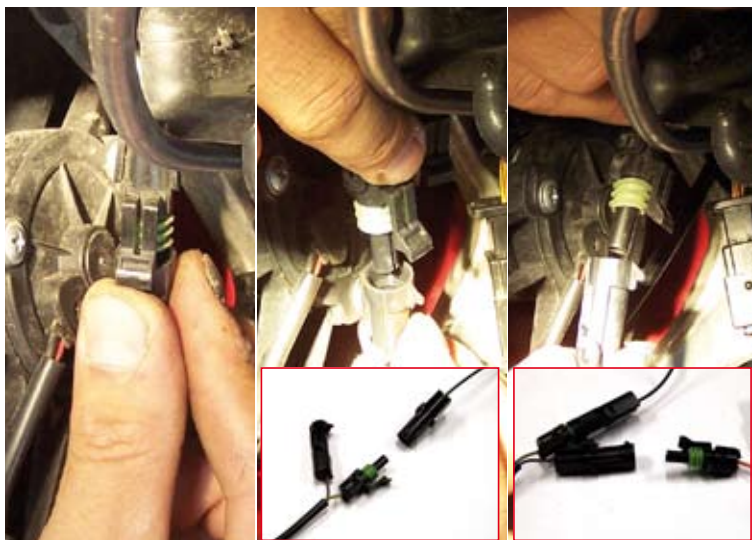
Connect the fuel unit harness to the injector leads.



12

Feed the harness through the internal right side body to end above front heads.

13



Locate and disconnect the front O2 sensor.
Connect the plugs to the stock connectors as show in the pictures



14



Locate and disconnect the rear O2 sensor.

15



Connect the plugs to the stock connectors as show in the pictures.

16





17

Connect the single black wire of the fuel unit to the battery ground.

Fixed the Fuel unit with the supplied Velcro.



18

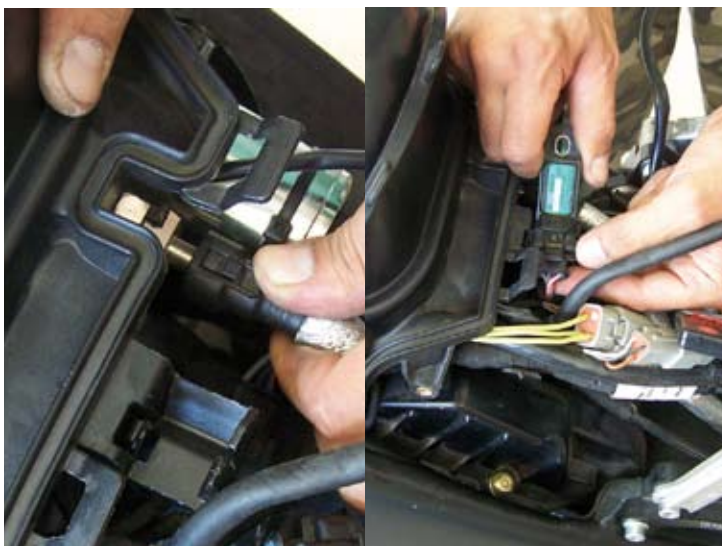
Lube all hoses and rubber gasket with silicon spray or liquid soap to facilitate Installation of airbox floor.

19



Reconnect both hoses through the airbox floor and place the harnesses back into their original position as show on pictures 19-20.

20





21

Install the retaining screws in the airbox floor and air filter.



22

Install back airbox lid and connect tank vent hose at the frame.

INSTALLATION

(For any and all help during install or tuning please call us(8-5M.T. m-f), we can't help if you don't call)

1. After connecting the box, check all wire connections to ensure proper connection. Do this by pulling on the connection to make sure the connectors are properly locked in.
2. Be sure to check the wire harnesses are not in direct contact with any sharp edges, exhaust and/or other objects, which could result in long term wear and/or damage.
3. Start the bike up. In approximately five seconds, the lights inside the module will energize and become visible. With a proper installation, the module will have a continuous lighting sequence where green lights come on from left to right and then back again. Sequence repeats until the bike is fully warmed up. It will then stop scrolling the lights and go to a steady green light to the far left and "MAY" have a flashing blue light to the far right. With an improper installation the light display will consist of a flashing green and a flashing red light. This occurs when the module is not receiving a proper injector signal. Recheck the wire connections for any defects. (The flashing green and flashing red lights is common for a proper installation during deceleration because the stock fuel map shuts off the fuel injectors during this process.)
4. At this point you are ready to adjust the module to the base settings supplied with the unit. The first thing to do is ensure the proper code was supplied by checking that the five programmable features are available. To begin this process press the MODE button and to enter each successive mode, just press the MODE button again.
 - a. The **first mode** represents an additional amount of fuel added during light load steady throttle cruise/idle. A flashing **green light** should appear somewhere on the light display.
 - b. The **second mode** represents an additional amount of fuel added during acceleration. A flashing **yellow light** should appear somewhere on the light display.
 - c. The **third mode** represents an additional amount of fuel added during full throttle. A flashing **red light** should appear somewhere on the light display.
 - d. The **forth mode** represents an adjustment for when the yellow fuel engages. A flashing **yellow light** should appear somewhere on the light display along with a flashing **blue light** on the very right side.
 - e. The **fifth mode** represents an adjustment for when the red fuel engages. A flashing **red light** should appear somewhere on the light display along with a flashing **blue light** on the very right side.

If each mode is present then the proper code exists and you are ready for making manual adjustments. If you failed to enter a mode, try going through the sequence again and be sure to only press the MODE button once in between each step.

INSTALLATION

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5. **You are now ready to manually program each mode. Consult the base settings supplied with the unit or you can look up the most up-to-date settings by going to www.dobeckperformance.com.**

To program the module, the bike must be running in order to supply power to the box.

If at anytime you stay in an adjusting mode for longer than 7 seconds without pressing any buttons, the module will exit adjusting mode and will return to the ready state.

To save settings for a particular mode, press the MODE button which goes to the next adjustable mode or wait for the module to exit back to the ready state.

The settings are adjusted by pressing the PLUS and MINUS buttons located on the right and left side respectively of the MODE button. To start adjusting, first press the MODE button the desired amount of times to reach the mode you wish to adjust. Pressing the PLUS button signifies an increase of 0.5 for the mode setting. Similarly, pressing the MINUS button signifies a decrease of 0.5 for the mode setting. The range of settings for each mode is 0 to 8. Light settings of 0 or 0.5 are essentially the same and are displayed by the very left light blinking at a faster rate than normal. When entering into green/blue, yellow/blue, or red/blue modes, a flashing blue light will appear on the very right. For light settings of 7.5 and 8 within these modes, the very right light will flash back and forth between the respective mode's color and blue. To see a visual display of adjusting settings go online to dobeckperformance.com

6. Your module should now be properly programmed and you are now ready to tune your bike.

Always make sure your bike is at normal operating temperature when making tuning adjustments.

TUNING

(For any and all help during install or tuning please call us(8-5M.T. m-f), we can't help if you don't call)

Tuning for mode 1 – Fuel addition during steady throttle cruise/idle.

This adjustment deals with adding fuel during all steady throttle/idle conditions. The lowest light setting (0) represents the factory fuel at the factory level.

Tuning for mode 2 – Fuel addition during acceleration.

Tuning for this mode depends greatly upon your individual bike and can vary widely from the base setting. After market high flow exhaust systems and high flow air filters “MAY” cause you to tune differently from the base settings. This combination could have a setting difference as great as three yellow lights. Note that this adjustment is only for hard acceleration. The lowest light setting (0) represents the factory fuel addition level and the highest light setting (8) represents the maximum amount of module fuel added to the factory level.

Tuning for mode 3 – Fuel addition during full throttle.

This adjustment deals with adding fuel for primarily 4000 RPM and up to red line. For example, running to red line in 1st, shifting, running to red line in 2nd, shifting, and continuing this all the way through the gear range, you would have been engaging the red light all the time. Again this mode could vary widely from the base settings depending on the set up of your bike and could have a difference as great as three red lights or more. The lowest light setting (0) represents the factory fuel addition level and the highest light setting (8) represents the maximum amount of module fuel added to the factory level.

Tuning for mode 4 - Represents an adjustment for when the yellow fuel engages

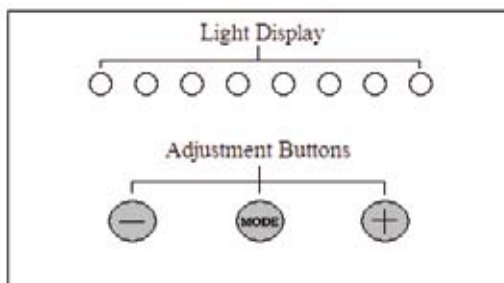
This mode “MAY” vary from the base settings depending on the set up of your bike. The lowest light setting (0) represents the lightest load to switch on the yellow fuel and the highest light setting (8) represents the heaviest load to switch on the yellow fuel.

Tuning for mode 5 – Represents an adjustment for when the red fuel engages

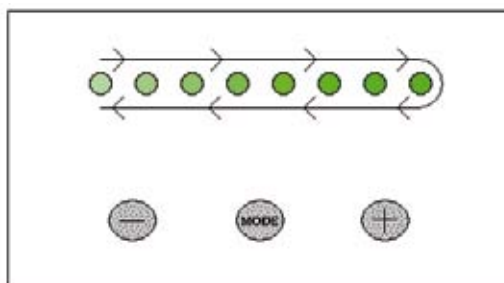
The base setting for this mode will rarely have to be changed. The red light should be engaged during the full throttle period. For example, running to red line in 1st, shifting, running to red line in 2nd, shifting, and continuing this all the way through the gear range, the red light should be engaged the whole time. If you do not see the red light the whole time then you need to lower this setting to make the red light turn on sooner.

Module Instructions

General Layout

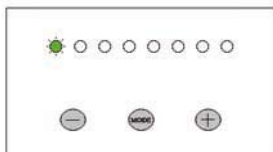


Start-Up Light Sequence

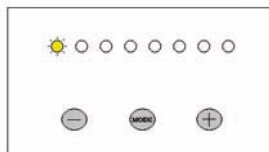


Adjustment Modes

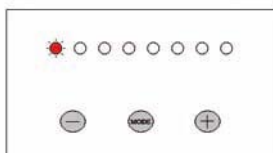
Mode 1 – Green



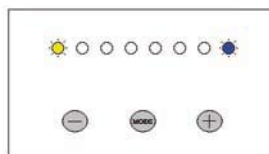
Mode 2 – Yellow



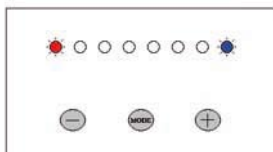
Mode 3 – Red



Mode 4 – Yellow/ Blue

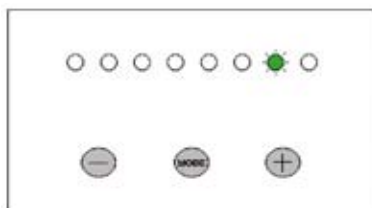


Mode 5 – Red/Blue

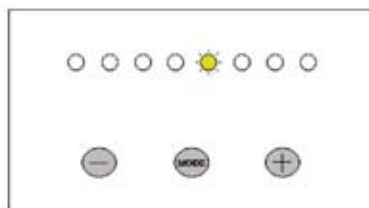


1125 Stage 2 Settings

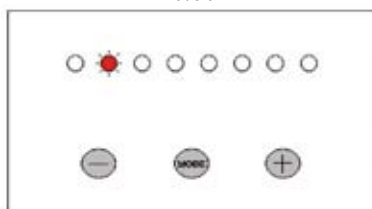
Mode 1



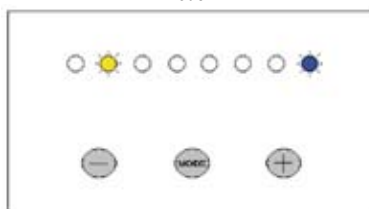
Mode 2



Mode 3



Mode 4



Mode 5

