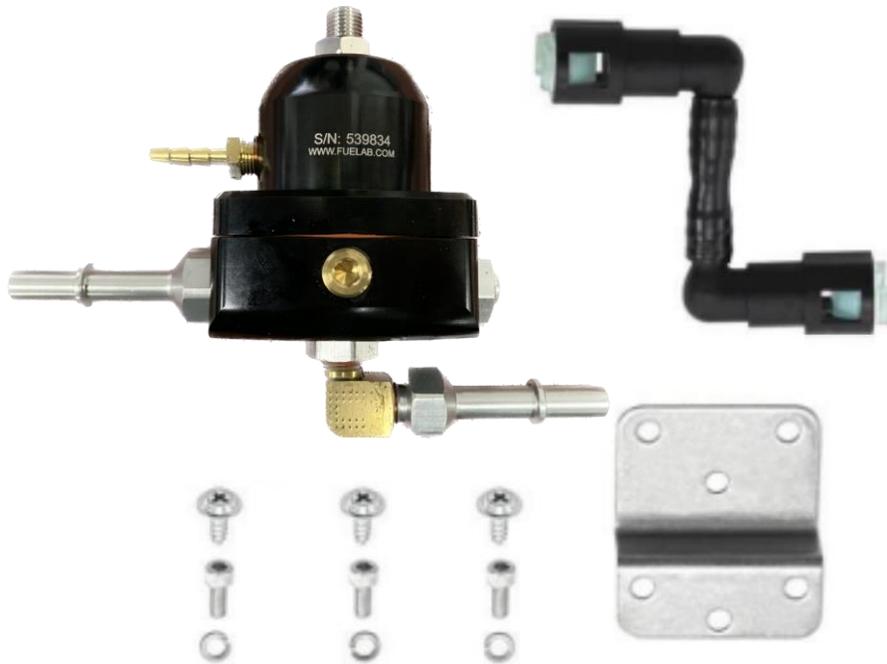




**ZZPERFORMANCE**

**Installation Instructions**  
Boost Reference Fuel Pressure System  
ZZ-BRFPS



The ZZPerformance Boost Reference Fuel Pressure System (BRFPS) easily installs into your Cobalt or Redline allowing fuel pressure adjustment above the PCMs ability of adjustment. This kit lowers fuel pressure at idle to cure large injector idle issues and raises fuel pressure under boost to help fuel high HP applications. Recommended for LSJ's running over 42# injectors and/or 17psi of boost.

### ***So how and why does this kit work? What is it doing?***

The LSJ PCM does not compensate for boost over 17.5psi, so the car begins to go lean after that because the PCM file does not see boost above 17.5psi. This is unless you raise fuel pressure the same (1:1) amount as boost, which is exactly what our BRFPS does. You can try and tune around the 17.5+psi but it is guess work and a very poor solution.

**Estimated Installation Time: 3-4 Hours**

**Installation Difficulty: 4/5**

#### **Kit Contents:**

- 1 – Regulator Assembly
- 3 – ½" Self Tapping Screws
- 1 – Boost Reference Double 90 Connector
- 12' – 3/16 Fuel Line

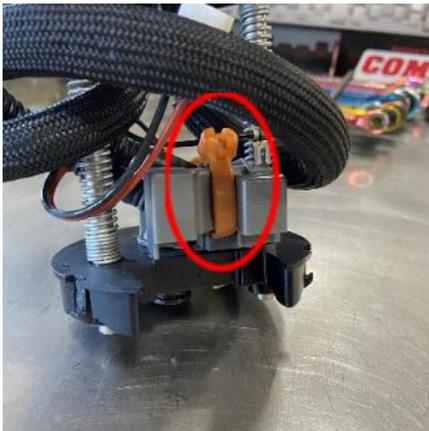
## Installation Instructions:

All install options require installing the regulator module at the back of the car near the fuel tank (pictured below). Once under the car, this part of the process takes less than 5 minutes. The regulator uses a factory bolt for install.

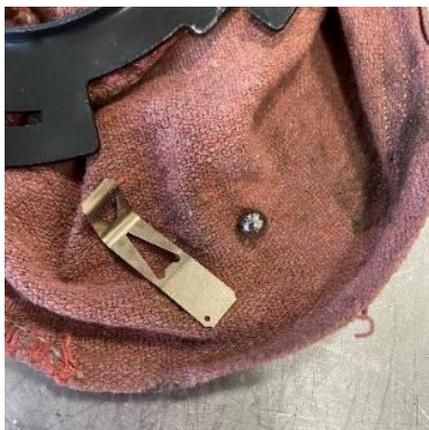
### Manifold Regulated Fuel Pressure:

For this kit, the factory pressure regulator needs to be bypassed. This requires dropping the tank and bypassing the factory 60psi regulator. This method lowers your fuel pressure 38-42psi at idle under full vacuum and rises 1:1 under boost. This requires PCM programming.

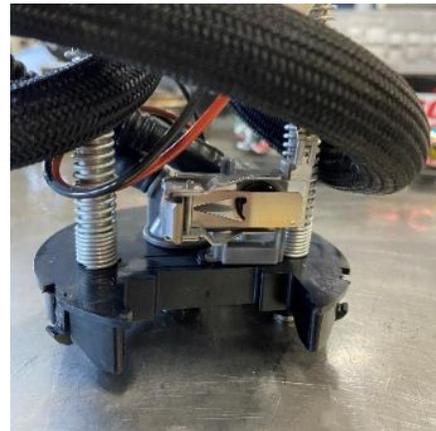
1. Disconnect fuel feed line and return line from fuel filter using quick push connects.
2. Disconnect main EVAP line from canister (line runs from top of tank to EVAP canister near rear beam, should have a white quick disconnect).
3. Unplug fuel pump harness from body.
4. Disconnect fuel filler neck from filler tube.
5. Undo the (4) 13mm bolts holding the tank straps in.
6. Drop the fuel tank. You may want assistance from someone else while dropping the tank, dependent on how much fuel is in the tank.
7. Remove fuel pump assembly from the tank.
8. Once you have the fuel pump assembly out you will need to locate the regulator and cut factory zip tie.  
(NOTE: Not all pumps will have the zip tie.)
9. Remove the ball and steel spring from the regulator.
10. Clip regulator assembly back together.
11. Re-install fuel pump canister and re-install the tank in the reverse order.



Clip Zip tie and gently remove cover.



Remove ball and spring



Before



After, replace grey cover.

**You may choose to bypass the whole regulator assembly:**

This method requires running a hose from the return inlet at the top of the canister. To do so you will:

1. Remove grey regulator assembly from the top of the canister and unplug.
2. Remove and replace, or extend the hose from the top of the canister, through the existing hole used to bottom of canister.
3. Re-install per instructions above.



Return line



Remove



Return line hole

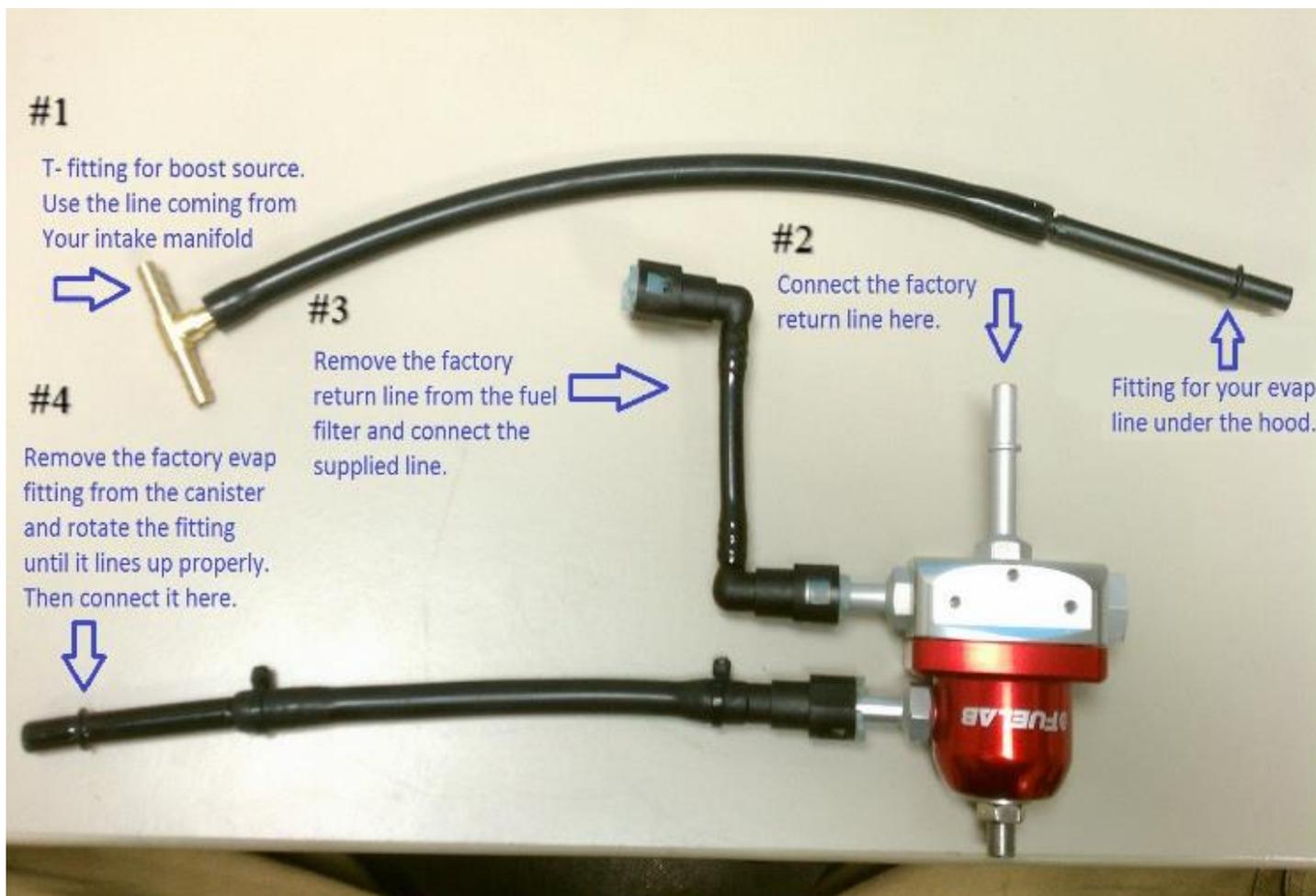
Once your fuel tank is back in place you will now install the new fuel pressure regulator assembly. This instruction set is intended for those who chose the **“add EVAP fittings”** option. If you chose the option to add new fuel line the instructions will be similar, but you will be using your new line you have run from the front of the car to the rear instead of adapting the original EVAP line that runs from your engine bay to the tank in the rear of the car.

1. Use the T-fitting and vacuum line assembly (labeled #1 in photo below) to tap into vacuum line coming out of the nipple on top of the intake manifold. You will then disconnect the incoming EVAP line and use the quick connect on the T-fitting assembly to plug into the EVAP line.



2. Remove factory return line from fuel filter using quick connect. This is the lighter blue quick connect and the smaller of the two lines.
3. Connect the factory tank return line to the bottom of the fuel pressure regulator (#2 down below)
4. Use double 90° fitting to connect to the middle fitting on the regulator and plug into the return spot on the fuel filter (#3).

5. Connect the final fitting to the topmost spot on the regulator (#4). This line then connects to the factory EVAP line that runs to the front of the car. Once under the car you can follow the fuel line and EVAP line from the engine back to the fuel tank. The fuel feed line goes to the fuel filter and the EVAP line splits off before that and runs to the canister. This is what you need to connect to.
6. Once you have done this, you can use this fixed position as a reference for mounting the regulator. Drill and mount the bracket to the car.



For those that added the new fuel line instead of choosing the EVAP fittings you will connect the regulator in the same fashion. The difference comes when connecting the steel line to the regulator. In step 1 above you will instead connect the T-fitting assembly to your new steel line that will run under the car, quick connect fitting is not needed. You will then run your new steel line from the engine bay, under the car to the fuel tank area. There are channels under the car where the fuel and EVAP lines run currently and there is an extra unused channel you can run the supplied steel line through. By running a new line your EVAP system remains 100% stock. Then in step 5 you will connect that topmost line to your new steel line instead of the EVAP line, again no quick connect needed. By running a new line your EVAP system remains 100% stock.