

## Installation Instructions

**PRL-HCR-FF:** 2017+ FK8 Honda Civic Type-R Plug 'N Play Flex Fuel Kit

**Installation Time:** Approx. 1 Hour

**\*Tune Required**

**Tools Needed:**

- |                                |   |
|--------------------------------|---|
| 10mm Socket                    | ¼" Hex Socket (Depending on Intercooler End Tank Hardware Connection) |
| Ratchet (3/8" or ¼" Preferred) | Pliers or diagonal cutting pliers                                     |
| 6" or 3" Ratchet Extension     | Flathead Screwdriver  |
| Shop Towels                    |   |



Item	Qty	Part Number	Description
1	1	-	Flex Fuel Converter Box
2	1	-	GM Continental Ethanol Content Sensor
3	1	RAW-HC10-FF-SENBKT	2016+ Honda Civic 1.5T / 2017+ Honda Civic Type-R Plug 'N Play Flex Sensor Fuel Bracket
4	1	RAW-HCR-FF-HARNESS	2017+ Honda CTR Plug 'N Play Flex Fuel Wiring Harness
5	1	RAW-HC10-FF-BKT	2016+ Honda Civic 1.5T Plug 'N Play Flex Fuel Bracket
6	1	-	2017+ Honda Civic Type R Short Fuel Adapter Line Assembly
7	1	-	2017+ Honda Civic Type R Long Fuel Line Assembly

**Please check that all components specified in the parts list have been supplied and are correct. If any assistance is needed please email [support@prlmotorsports.com](mailto:support@prlmotorsports.com) or call 724-325-6300 to speak with a Customer Service representative before attempting installation or returning the product.**

**NOTE: FAILURE TO FOLLOW INSTALLATION INSTRUCTIONS AND/OR NOT USING THE PROVIDED HARDWARE MAY CAUSE DAMAGE TO THE INTAKE SYSTEM & ENGINE.**

**Disclaimer:**

Install was performed on a modified application. Some hardware shown may be different than the hardware used on the stock vehicle.

Allow vehicle to cool completely prior to attempting installation.

PRL Motorsports is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of PRL Motorsports products.

PRL Motorsports suggests trained professional installation all PRL Motorsports products

**Before Starting:**

Turn off the ignition and disconnect the negative battery cable. Allow the vehicle to sit for 5 minutes to drain any remaining charge from the charging system.

**NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. We recommend any memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the negative battery cable is reconnected. The anti-theft code is typically supplied with the owner's manual. In the event that your vehicles anti-theft code cannot be recovered, we recommend contacting an authorized dealership to obtain the vehicle's anti-theft code.**

1. Discharge the fuel pressure in the factory feed line.

Inside the driver's compartment, located above the hood release in the interior fuse box. Using the factory tool remove the 20amp fuse in location 8.

Start the car (In some cases it may need to start the car with the fuel pump fuse installed if the car has been sitting for a period of time.)

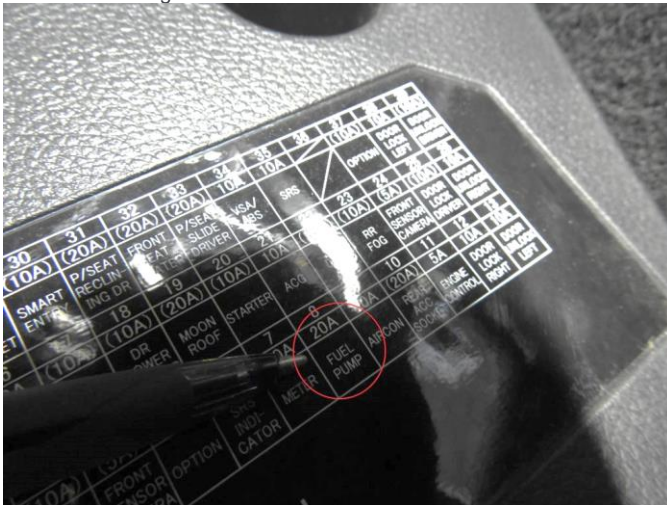
Let the car idle until fuel pressure has dropped enough that the car stalls. (This may take a few minutes)

Place fuse in a safe spot until installation is complete.

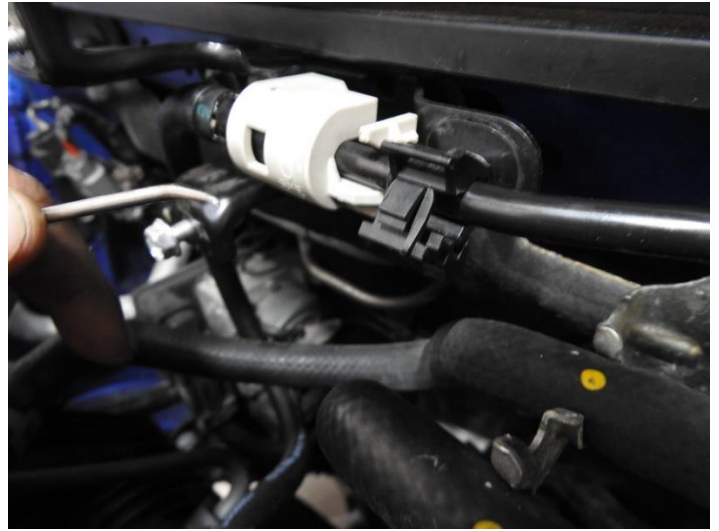
Let the car cool down to a comfortable temperature to work in the engine bay. A good idea would be to plan the install after letting the car sit overnight.



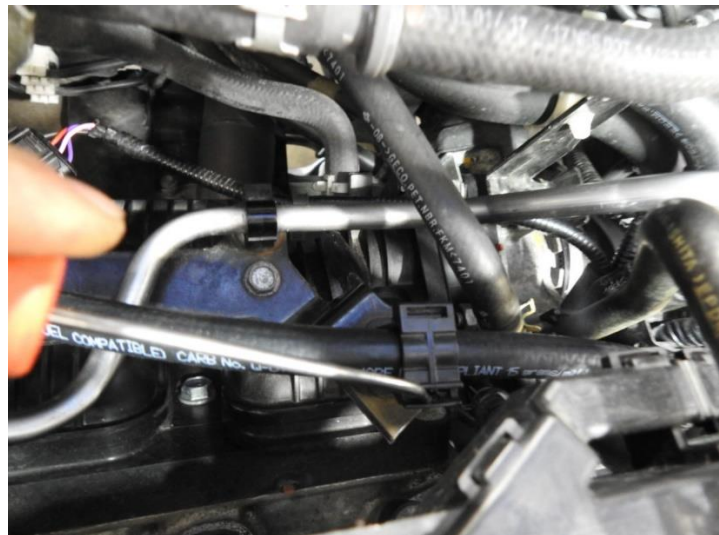
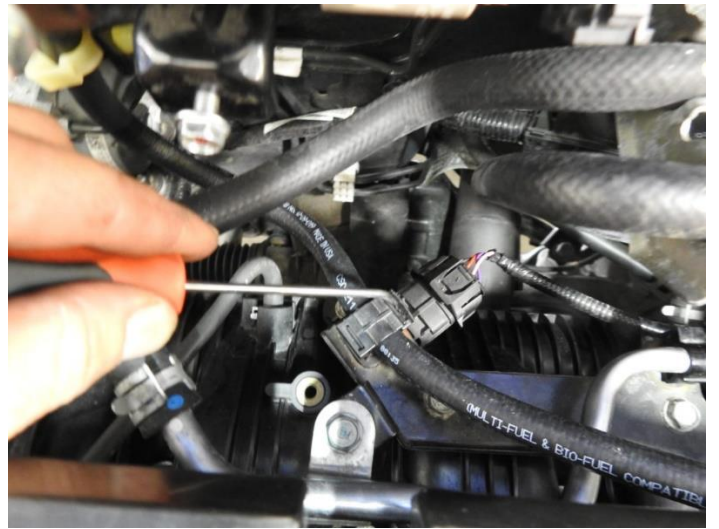
2. Using a 10mm socket, loosen the negative terminal and remove. Securely tuck into engine bay out of the way.



3. Remove the (2) 10mm headed bolts on the factory fuel line bracket cover.



4. Depress tab and release the (3) fuel line holders using a pick or pocket screwdriver.



5. Remove the fuel line out of the clamp to gain access to the bolts behind it.



7. Remove the (2) safety clips from the factory fuel line connectors. Pull out and rotate 90 degrees to the line, then slip them out of the existing slot.



6. Use a 10mm socket to remove the (2) bolts holding the fuel line bracket to the firewall.





8. Wearing safety glasses, position shop towels to help catch excess fuel to avoid spraying the engine bay with fuel. Place index finger and thumb on the retaining clips, push together the fuel line connection then squeeze clips inward. In a gentle twisting motion pull the connection apart. Remember to be ready for any residual pressure in the line to spray out. After the removal of the line, pry the remaining insert off the hard lines. Reinstall into the OEM fuel line for safekeeping. If any fuel drips or leaks onto components below use a shop towel to clean it. This will prevent any potential for fire hazard.





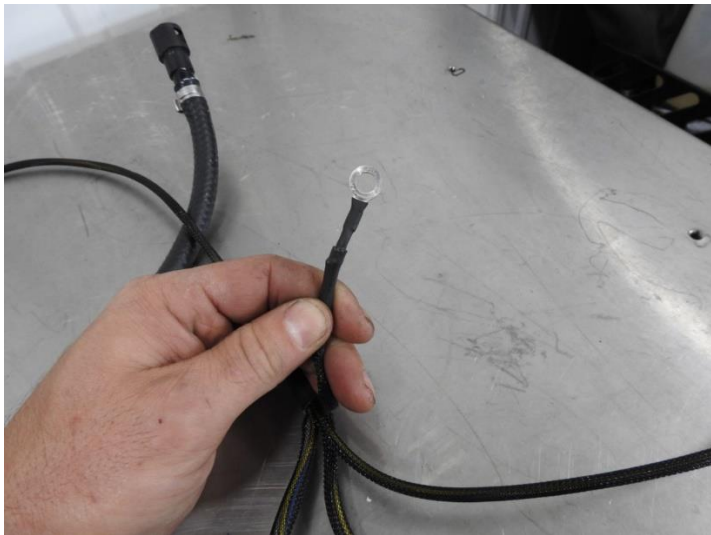
9. Lay the PRL flex fuel kit out on a clean work surface and become familiar with the connections.



The assembled kit.



Above is the male secondary o2 plug.



Above is the ground eyelet.



This is the male ECT2 Plug

10. Locate the OEM fuel line bracket removed in step 6.

Pull the steel spacers out of the rubber isolators.

Peel the rubber isolators out of the OEM bracket

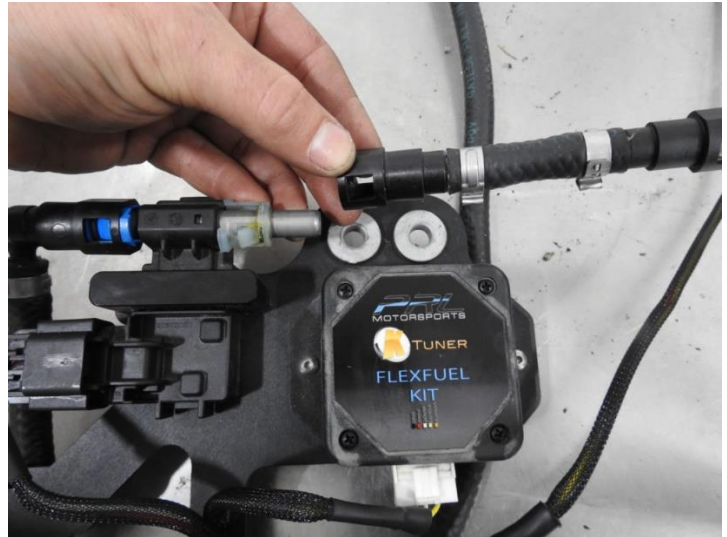
Press isolators into the PRL Flex Fuel bracket.

Install the steel spacers into the rubber isolators with the washer face facing forward.





11. Remove the short inlet hose from the ethanol content sensor on the PRL kit. Keep track of what side was removed. The hose has two different sized fittings on it so direction is key. The fittings are easily damaged and will not seal properly if the incorrect side is installed. This is a user error and is not covered by PRL Motorsports. The fitting side that goes onto the ethanol content sensor has an inner diameter of 3/8".



12. Install assembly into the factory fuel line bracket mounting location on the firewall using the OEM hardware.

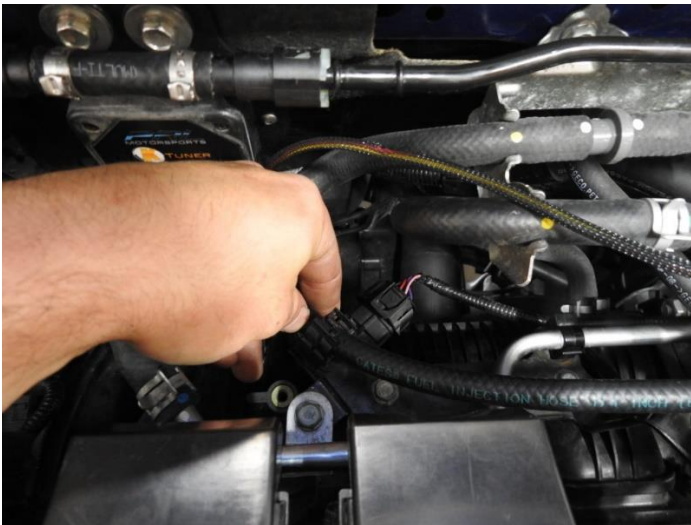




13. Install the short fuel inlet hose that was uninstalled in step 11 onto the OEM feed line and ethanol content sensor. Again, ensure the correct sides are being installed, the internal seals can be damaged.



14. Route the fuel line through the factory clips unhooked in step 4, clip the line onto the inlet of the high pressure fuel pump.

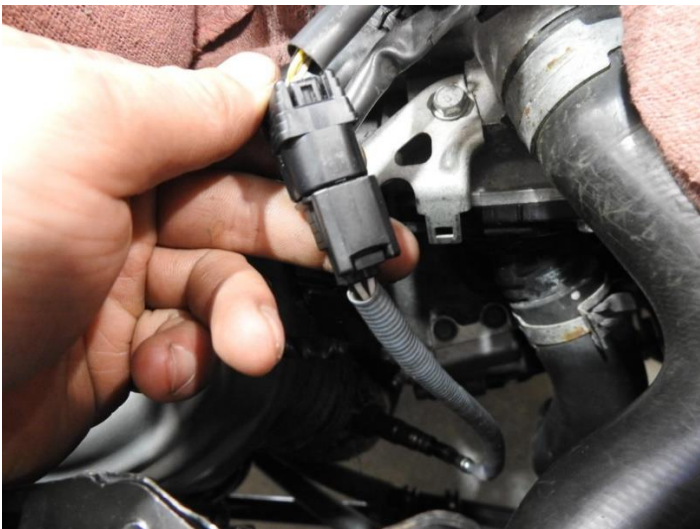
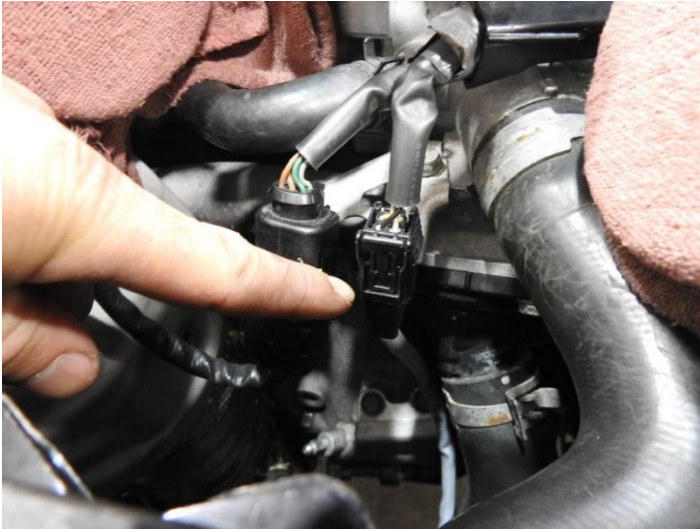


15. Remove the silicone inlet hose to gain access to the secondary o2 connectors. Please refer to our other installations for this step. Our car has the PRL High Volume Intake System installed, so it was as simple as using a flat-blade screwdriver to loosen (4) hose clamps and pulling the silicone out of the vehicle.

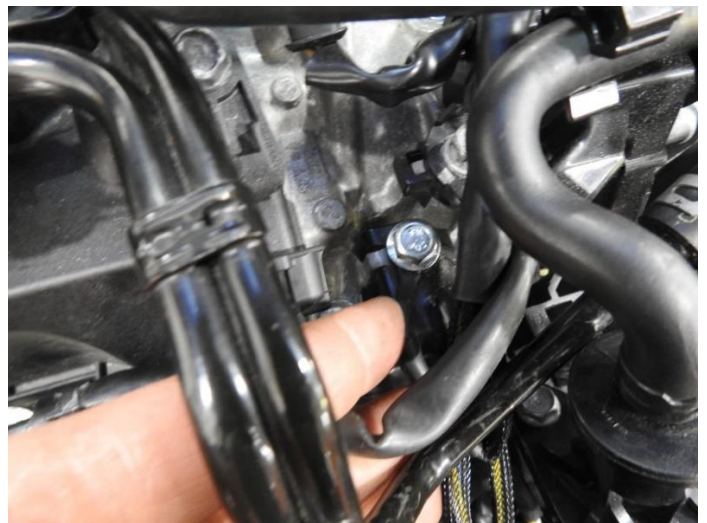
16. Route the PRL harness along the intake manifold, following the fuel line, at the area of the high pressure fuel pump, route the harness along the factory wiring harness shown in the pictures, having the o2 plugs terminate near the OEM ones. Place zip-ties around the harness at user discretion, leaving them loose until the rest of the harness is installed.



17. Unhook the rear O2 from the factory bracket. Reaching behind it to depress the tab at the bottom of connector and slide it down off of the bracket. Disconnect the OEM rear O2 from the chassis harness.



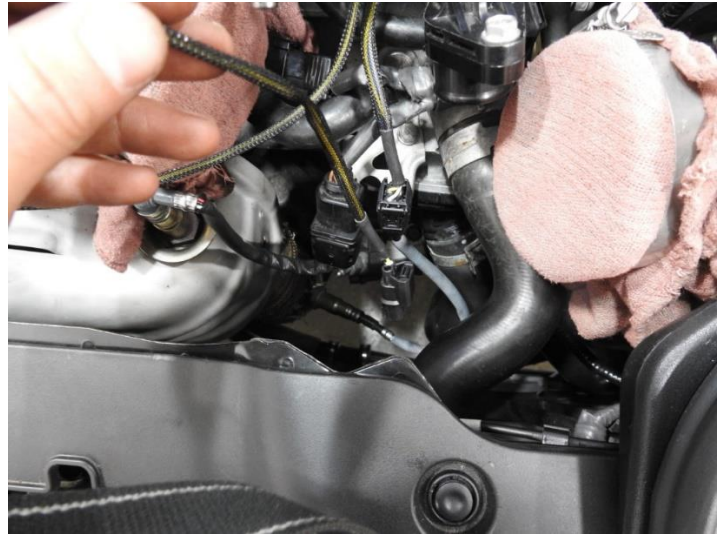
18. Unbolt the 10mm bolt pictured below and clean ground surface with emery cloth or Scotch-Brite if corroded. Bolt the PRL harness ground eyelet to the block as shown.



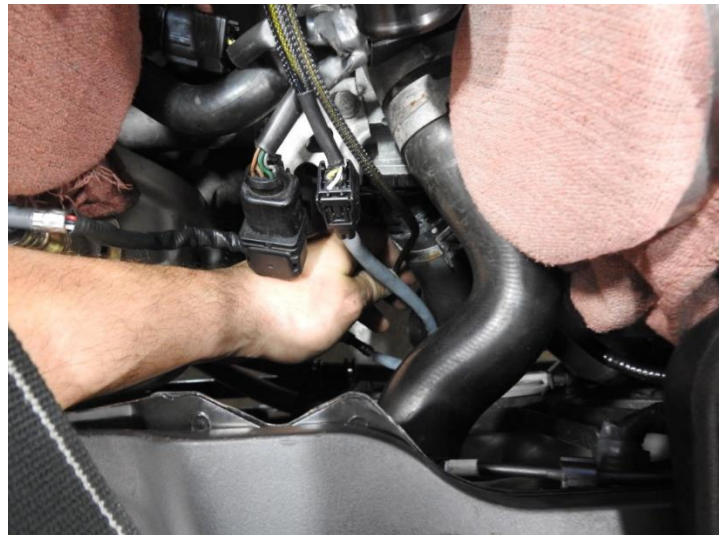
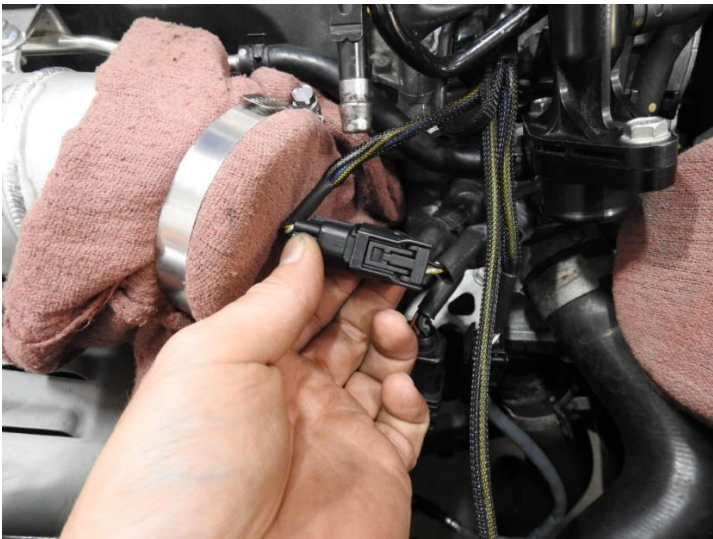
19. Plug in the female side of the PRL harness into the factory rear O2 plug. Clip this portion back into the factory steel bracket.



21. Route the ECT2 plug down along the rear O2 harness and radiator hose.



20. Plug in the male side of the PRL harness into the female chassis harness O2 connector.



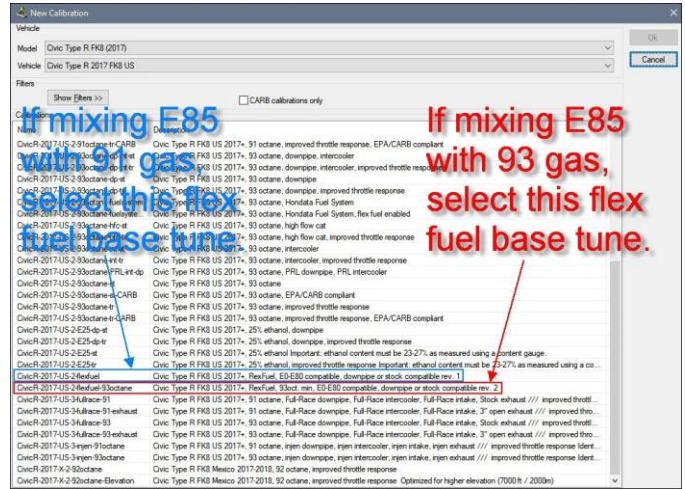
22. Locate and remove the ECT2 plug at the bottom of radiator on the driver's side/middle. Usually it is possible to do this from above, reaching down along the radiator. If this method seems troublesome, jack the car up and remove the under tray to gain access to this plug. Please use safe operating procedures and place jack stands appropriately before crawling under the car. Plug the PRL harness into the ECT2 side of the factory harness.



23. Using the remaining zip-ties please fasten the harness down to remain clear of the radiator fan and any other hazards in the engine bay.

24. Reinstall the safety clips at this time and check all connections.



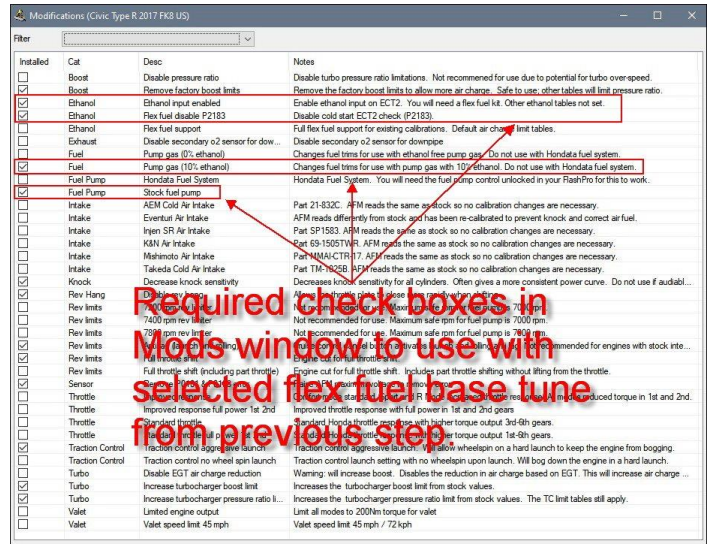


25. If necessary place the car back on the ground. Reinstall intake silicone.

26. Replace 20amp fuel pump fuse. (Upon first startup, the car may need to crank for an extended time to refill the fuel line.)

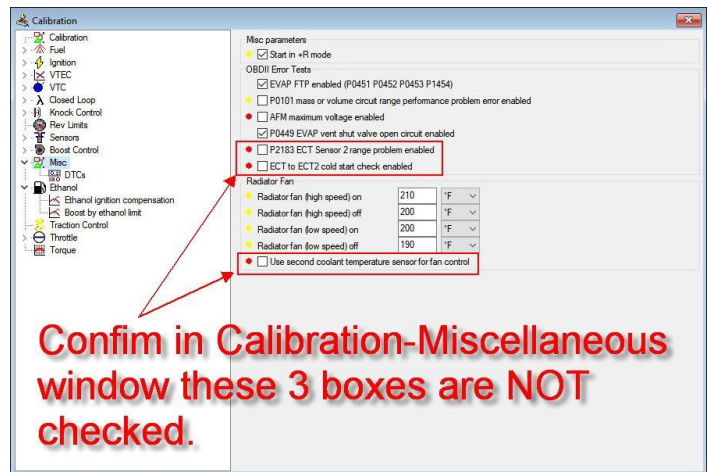
27. Reconnect the battery and double check that all connections are secure. Make sure no rags are loose or near the car before starting up. The car may need to be cycled between the "On" and "Off" positions in 3-second intervals for a few cycles to re-pressurize the fuel system. Carefully inspect for leaks and immediately correct if any are found.

28. Last step is to change your engine management system calibration to enable flex fuel trims!



**The following need to be completed in order to properly operate the flex fuel kit.**

- **Select the Correct Flex Fuel Basemap:**
  - Either 91 Octane or 93 Octane
- **Check that the Following Three Boxes are NOT Enabled Under the "Misc Parameters" Window (Found Under "Calibration" Tab):**
  - P2183 ECT Sensor 2 Range Problem Enabled
  - ECT to ECT2 Cold Start Check Enabled
  - Use Second Coolant Temperature Sensor for Fan Control
- **Check that the Following Four Boxes are Enabled Under the "Modifications" Window:**
- **Save Tune and Flash**



We recommend inspecting for any signs of leaking or component deterioration periodically for optimal safety and performance.

**Additionally:**

Though this is not recommended, this kit can be integrated with a catch can setup with some modification. This is to be done under the discretion of the user, PRL Motorsports is not liable for any damage caused to either product or the vehicle in modification. These mistakes can become quite costly or jeopardize the integrity and safety of the vehicle.

It is required to drill holes into the firewall and place two threaded rivet nuts into the hole to be secured onto the firewall. The Bracket for the catch can will need to be bent to clear the outside of the engine bay.

