

## Installation Instructions

Product: PRL-HC10-FF 2016+ Honda Civic 1.5T Plug 'N Play Flex Fuel Kit

Installation Time: Approx. 1 Hour

### \*Engine Management System Required – Tune Recommended

**Tools Needed:** 

10mm Socket	13/16" Wrench	5/8" Wrench	
12mm Socket	8mm Socket	9/16" Wrench	
Ratchet	Pliers or Wire Cutters		
6" or 3" Ratchet Extension	Small Flathead Screwdriv	lathead Screwdriver	



Item	Qty	Part Number	Description
1	1	KTNR-FFC100	Flex Fuel Converter Box
2	1	13577429	GM Continental Ethanol Content Sensor
3	1	RAW-HC10-FF-HARNESS	2016+ Honda Civic 1.5T Plug 'N Play Flex Fuel Wiring Harness
4	1	RAW-HC10-FF-BKT	2016+ Honda Civic 1.5T Plug 'N Play Flex Fuel Bracket
5	1	GB-FTG-EFI-01	3/8" Female Hard Tube Quick Disconnect to 1/4" Female Quick Disconnect EFI Adapter Fitting, Black
6	1	-	2017+ Honda Civic Type R Fuel Line Assembly
7	1	RAW-HC10-FF-SENBKT	2016+ Honda Civic 1.5T / 2017+ Honda CivicType-R Plug 'N Play Flex Sensor Fuel Bracket

Please check that all components specified in the parts list have been supplied and are correct. If any assistance is needed please email support@primotorsports.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

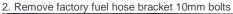
#### **Before Starting:**

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 preprogrammed 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 antitheft code.

1. Begin by inspecting the components of the PRL Flex Fuel Kit, if you have any questions, concerns, or out of place items please contact PRL Motorsports and do not proceed with installation.

Make sure the engine is off and cool. We recommend discharging the existing fuel pressure from the system. Refer to the factory service manual for OEM methods of doing such. A method we use to disable the fuel pump is pulling the slot 8 fuse in the interior fuse box (consult the underside lid for the correct fuse location), this is a 15amp fuse for reference, then attempt to start the vehicle. The vehicle will most likely run for a brief moment then stall. By doing this the fuel pressure is reduced, be cautious some pressure may still remain in the system.









3. Remove the white plastic retainer covering the factory fuel lines. There is one located on the top line near the previously removed bracket and bottom line near the valve cover.









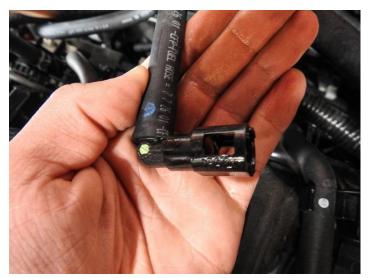


4. Remove the stock fuel line by releasing the clamp with a small flat head screwdriver.





5. Please Note: that a small amount of fuel will come out of the connection when removing. Use a shop towel to prohibit fuel from going onto other components. If fuel leaks onto engine components below be sure to wipe clean with a shop towel to prevent any potential of fire hazard.

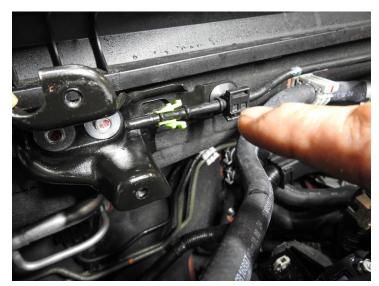


6.The completely removed fuel line:





7. Remove the factory fuel line clip



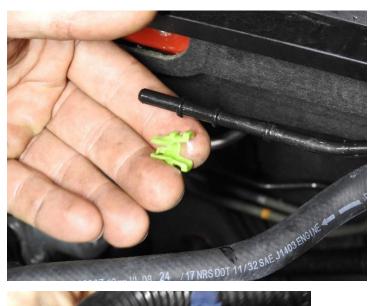


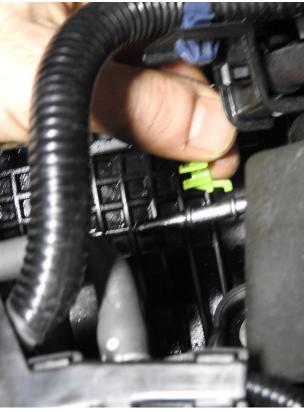
### 8. Remove firewall bracket 10mm bolts





9. Remove the green clip on the upper and lower hard fuel lines









10. This is how the PRL Motorsports Flex Fuel Kit should come from the box, with 6" zipties included in the box underneath the foam



11. Remove the billet  $\mathsf{EFI}$  adapter fitting from the GM Ethanol Content Sensor





This is the fitting disassembled in the correct orientation



12. Remove (with care) the OEM Robber grommets from the stock bracket, as these will be used in the PRL Bracket.

13. Separate the rubber from the metal inserts Insert the rubber sections in the PRL bracket first and then insert the metal backing pieces.







14. Use the factory bolts to secure the PRL Bracket assembly to the firewall.



Before putting the billet EFI adapter fitting on, be aware of the two sizes on each side of the fitting, one is for the OEM line and the other is for the GM Ethanol Content Sensor provided in the PRL kit. The seals inside will be damaged if placed on the incorrect ends and forced on. This will not be covered by PRL Motorsports, this is a user negligence error, if this happens purchasing a new adapter is required. This adapter is not cheap and this easily avoidable mistake can become quite inconvenient and costly.

Each of these specialty fittings will be placed onto the first barb on each fuel line.









Inside view of the billet EFI adapter fitting.





15. Either side can be installed first, but we suggest the PRL Flex Fuel side to be installed first for ease of tightening on the OEM Line side.

The fitting assembly should look like this when everything is tightened down.



16. Connect the lower fuel line to the OEM line near the valve cover. Ensure that it is completely pushed onto the line and secure on the barb on the factory line and that the clamp is secured on the line





17. Remove the plastic piece to run both of the lines from the wiring harness under





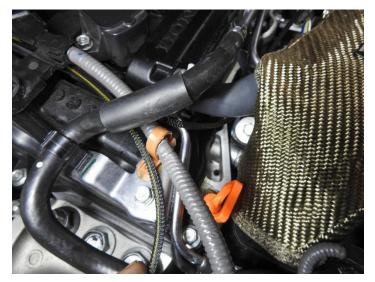


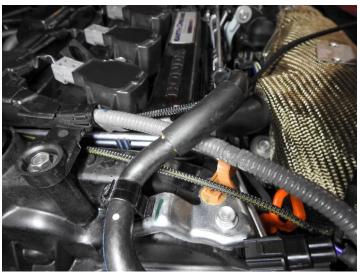
18. Zip tie the wiring harness lines to the stock convoluted tubing





19. If you want a totally tucked and clean look, undo the orange clamp holding the gray line in and put both wiring harness lines in the orange clamp.





Zip tie everything under the OEM lines to keep the factory look



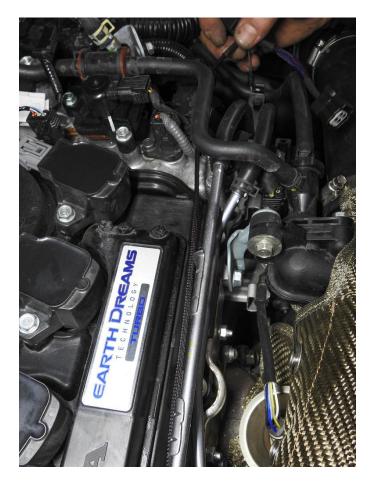


21. Remove the evap tube line and clamp.



20. Route the wiring harness lines behind the factory coolant lines







23. Connect the PRL harness plug to the factory connection.



25. This is the final configuration for this end of the harness.



24. Undo the bolt on the block and use this bolt for the ground connection.



26. Use zip ties on the connections for a more secure fit



27. The final connection can be accessed two ways. From the top, or by jacking up the car and removing the plastic shielding to access the ECT2 connection. We chose to show how to do it without jacking up the car. This way requires that the plastic shroud to be removed with the plastic clips (Holes shown already removed clips).









- 28. Remove the Rubber line from the holder on the metal shroud.
- 29. Pry the small rubber nipple out of the metal shroud to release it.





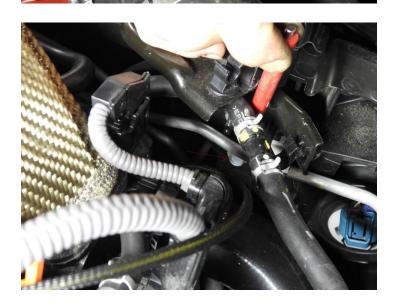






- 30. Remove the 10mm bolts behind the metal shroud.
- 31. Pull the tabs up to release the metal shroud.







32. Remove the metal hard-line from the white holder on the back side of the metal shroud (passenger side).



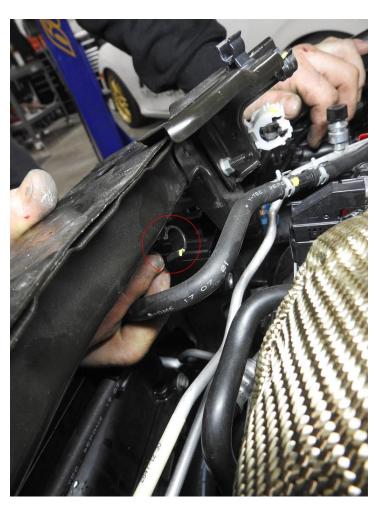
34. Ensure the plastic rectangular piece on the driver side is removed before pulling the metal shroud completely out.



35. Remove the secondary holder underneath the shroud on the line 33. Lift and pull the metal shroud towards the valve cover and release removed from the holder earlier.



it from the tabs lifted up in the previous steps.

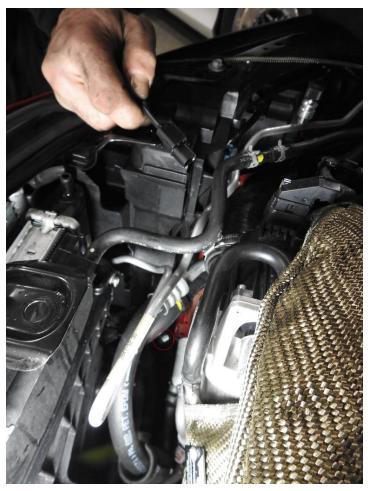


36. Protect your valve cover and set the metal shroud on top.

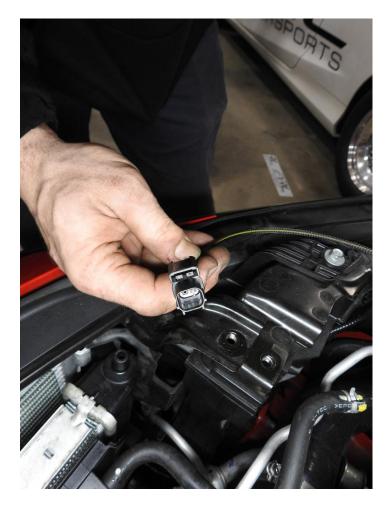


 $\ensuremath{\mathsf{37}}$  . Reach down to release the 1-wire ECT2 connection harness from the radiator.





38. Connect the single prong ECT2 clip that will be plugging into the secondary coolant temp sensor harness by the bottom of the radiator and above the hot side charge pipe.





39. Run the line over the hot side charge pipe silicone and into the rad where you removed the factory plug from.





40. The factory clip can hang free or we suggest sealing it to protect against elements. Using a zip tie securely fasten it to another line to avoid potential damage.

Feel free to cut the excess tabs of the zipties off towards the end of the install for a clean look.

## Please be sure to have P2185 (Secondary ECT), P0128, and P0138/P0139 (O2 slow response) codes disabled on your KTuner or Hondata software.

Our kit pulls power from the secondary O2 sensor and utilizes the ECT2 output. Enable flex fuel tables which can often be found in the advanced features section.

#### File Edit Tuning Tools Help

Main Parameters Rev Limits	Flex Fuel E										
		10				50	00	70	07	100	
reev Linns	Ethanol %	0	12	25 11	37	50	62	75 34	87	100	/
Basic 2-Step	Fuel %	0	6	84.997	17	23 100	29 100	100	40	46 100	
Disables/Monitors	Ign Adj % PSI Adj %	0	0	0	0	0	0	0	0	0	-
Idle Target	F 51 AUJ /2	0	0	U	0	0	0	0	0	0	-
Closed Loop Settings		1	-						1		
Fuel Cut Settings	<					1	1	1			>
MAF Scaling											
DBW Idle Settings											
Fuel Corrections											
Ignition Corrections											
Advanced Features											
Anti-lag											
Anti-lag Flex Fuel Calibration Settings/C											
Quick Adjustments Quick Enables Quick Boost By Gear											

9 0 H 9
Layout Main Parameters Rev Limits Basic 2-Step Disables/Monitors Idle Target Closed Loop Settings Fuel Cut Settings MAF Scaling DBW Idle Settings Quick Adjustments Quick Enables Quick Enables Quick Boost By Gear Fuel Corrections Ignition Corrections Advanced Features Anti-lag Flex Fuel Calibration Settings/C

41. 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.

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 you may cause to either product or the vehicle in modification. These mistakes can become quite costly or jeopardize the integrity and safety of your 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. (A 2017+ Honda Civic Type-R Kit and engine bay is shown, but this can also be done on the 2016+ Honda Civic 1.5T)

