

# In tank pump install



## What's in the box

Revision date 8/8/22



## In tank components

- Hondata low pressure in-tank fuel pump
- Electrical harness
- O-Rings (2)
- Tube of lubricant
- Filter sock
- Fine tipped flat screwdriver

## Fits:

- 2015-2016 FK2 Civic Type R
- 2017 -2022 FK8 Civic Type R
- 2016+ 1.5 turbo Civic
- 2018+ 2.0 & 1.5 Honda Accord

## Tools needed

Honda 07AAA-TBAA100 fuel sender lock tool. Can be purchased from Honda or Amazon <https://amzn.to/3fpymIx>  
Screwdriver flathead  
Sharpie pen - black  
BrakeClean  
**Class ABC fire extinguisher. Hondadata is not responsible for any fire.**  
Compressed air for cleaning

## Overview

***Have your Honda dealer or experienced mechanic install this pump***  
Install and test the in tank Hondadata low pressure fuel pump

## Cleanliness - important notice

The fuel system components use extremely fine clearances. It is critical that all components are kept clean and free of contamination at all times. Even the slightest amount of dirt can damage the high pressure pump or fuel injectors. Contamination on mating surfaces can cause fuel leakage.

- Keep hands and tools clean.
- Take care handling the fuel system components. Do not place them on dirty surfaces. Keep ports capped until ready to use.
- Clear around all components and fittings before disconnecting them with brake parts cleaner and compressed air.
- Failure from contamination is not covered by warranty.

## Low pressure fuel pump install

Refer to your Honda manual for the low pressure fuel pump install details.

If the fuel level is more than 90% fuel will spill. Jack the front of the car more than 345 mm.

### Relieving fuel pressure

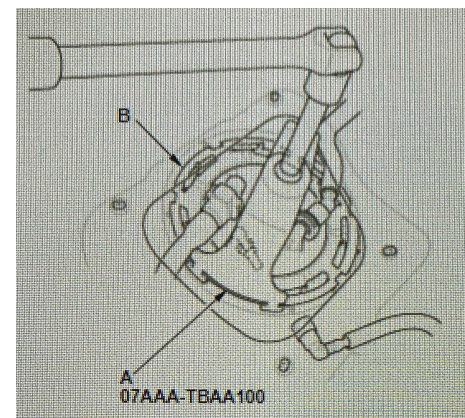
Unplug the low pressure fuel pump electrical connector. Start and run the engine until it stalls. Crank for a further 4 seconds. Keep your fire extinguisher by the car.

### Removal of fuel cage

Clear the area around the fuel basket, preferably with compressed air.

Use the Honda tool 07AAA-TBAA100 to remove the securing ring. Take note of the locating marks A and B. A much less recommended way to loosen the ring is to use a large hammer and pry bar / screwdriver or air hammer.

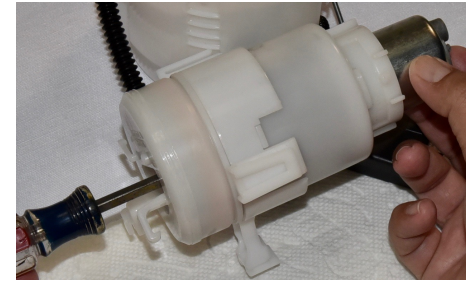
Tie the vent hose to the side. If fuel gets in the vent hose, you will throw DTCS



Loosen securing ring

### Removal of the stock pump

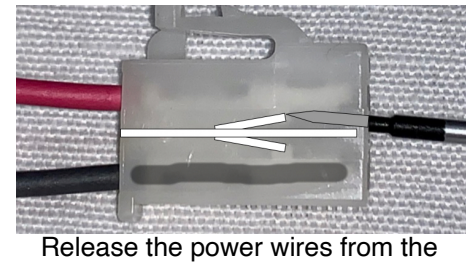
- Disconnect the fuel sender and fuel pump power leads
- Loosen the three fuel pump cage clips
- Remove the center cage assembly
- Disconnect the fuel filter clips and remove the fuel filter
- Remove the stock fuel pump



Remove stock fuel pump

### Fuel pump fly lead

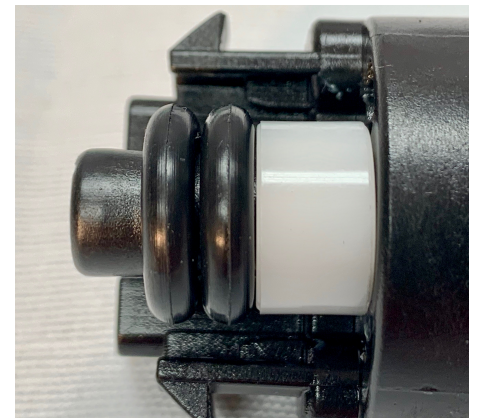
- Mark the black wire location with a black sharpie.
- Remove the nylon plug from the stock fuel pump fly lead using the supplied fine tip screw driver. Minimal force is needed to unclip the wire. Too much force can damage the nylon clip leading to a loose wires
- Transfer the plug to the Hondata supplied fuel pump fly lead
- Plug the fly lead into the Hondata low pressure fuel pump
- When connecting the white plug, hold and push the red and black wires to firmly locate them in the female fuel cage receptacle.



Release the power wires from the stock fuel pump fly lead

### O-Rings

- Transfer the nylon spacer from the stock fuel pump and add two O-rings onto the Hondata low pressure fuel pump
- The original O-ring and spacer might stick in place. Lever them out with a small screwdriver
- Coat the O-rings in lubricant



Nylon spacer and two O-rings

### Installation of the Hondata low pressure fuel pump

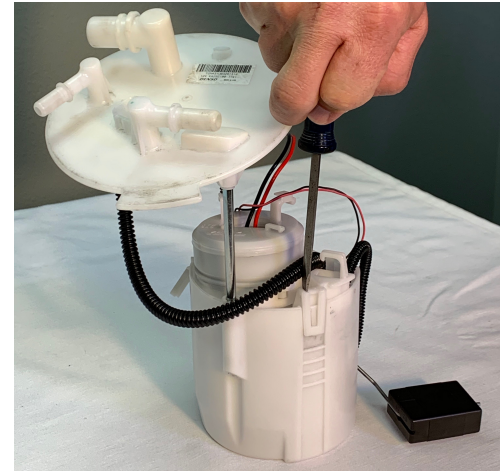
- Install the fuel filter sock. No clips necessary.
- Install the Hondata low pressure fuel pump into the inner cage
- Apply the O-ring lubricant generously and insert the pump gently
- The filter is held against the bottom of the fuel pump cage



Install the Hondata low pressure fuel pump and fuel filter sock

### **Installation of the center cage**

- Install the centre cage. The fuel filter sock will bend at a right angle.
- The last cage clip may need assistance with a little force on the left hand side of the clip with a flat headed screwdriver.
- Connect the fuel sender and fuel pump wiring
- Insert the fuel pump nylon clip holding just the wires for full electrical engagement
- Re-install the fuel pump cage into the car
- The locating ring should engage with a click



Final clip installed with force on the left hand side with a screwdriver

### **Testing the Low pressure pump and relieving pressure**

- Plug in the low pressure fuel pump electrical connector.
- Cycle the key twice to build up pressure. Start and idle for 1 minute.
- Unplug the low pressure fuel pump electrical connector, start and allow the car to stall.
- Unplug the high pressure fuel pump electrical connector and crank for 4 seconds.
- Disconnect the 12V negative battery terminal

### **Troubleshooting the low pressure pump**

If your car runs poorly and occasionally stops running when the engine is warmed up, datalog DIFP and DIFPCMD. These must closely match. If DIFP is a lot lower than DIFPCMD, then it is likely the low pressure pump is not providing sufficient fuel. The most common cause of this is incorrectly seated low pressure pump O-rings. Dis-assemble the fuel pump cage and check the O-rings. Forceful pump insertion can damage the low pressure pump. Check the pump for cracks. Loose wiring in the fly lead can also lead to intermittently low fuel pressure.

# Testing

Conduct all tests with low ethanol fuel. Run a **minimum of 2 bars** of fuel at all time for additional cooling.

Configure FlashPro Manager to log a full throttle idle to redline pass.

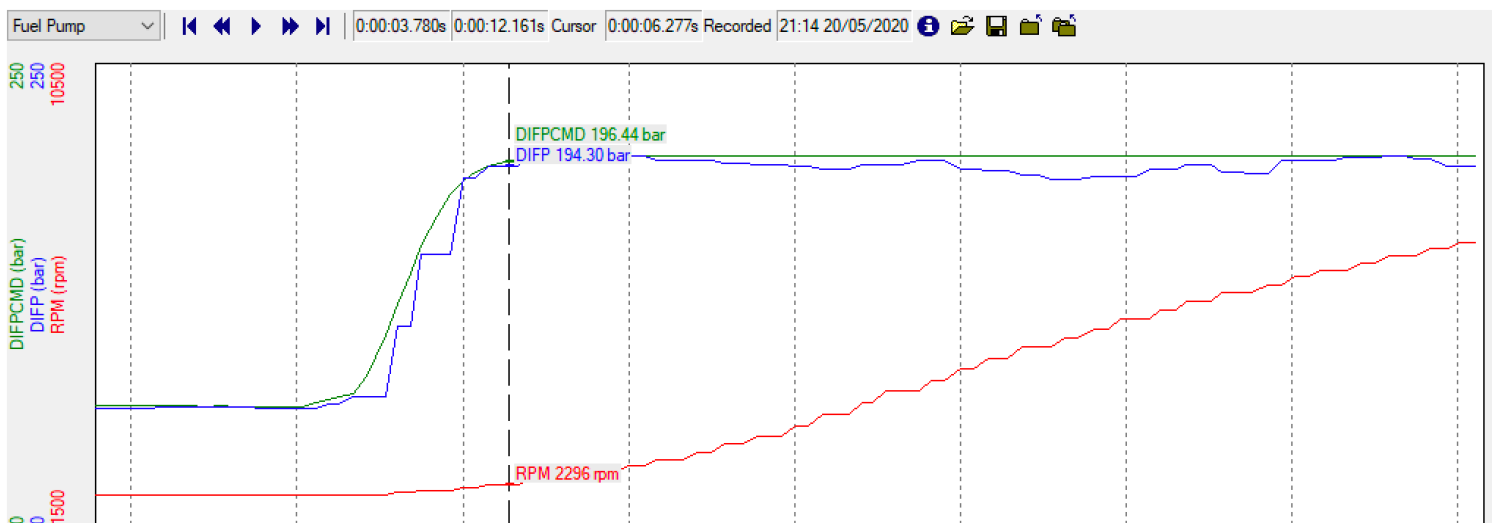
A typical Civic Type R idles at 64 bar fuel pressure, rising to and maintaining 200 bar to redline.

**DIFPCMD** - Direct Injection Fuel Pressure command. What the ECU asks for.

**DIFP** - The fuel rail pressure sensor measurement

A few % DIFP variation from DIFPCMD is typical. This datalog indicates what to expect from a correctly functioning fuel system.

Low fuel pressure can cause high rpm lean out. This can be seen as a drop in DIFP in the higher revs.



1500-6500 rpm 7 second third gear

## P0087 Fuel Rail/System Pressure - Too Low

This code is triggered after a continuous pressure drop of 20 bar for a period of three seconds.

The fuel rail pressure sensor is at the end of the fuel rail under the intake manifold. This indicates the high pressure pump is not getting enough volume or pressure from the low pressure pump.

Check that only 2 low pressure fuel pump O-rings are installed. Check the fuel cage does not contain an extra O-ring.

Check the low pressure fuel pump fly lead for secure attachment at either end.

Forceful pump insertion can crack the low pressure pump. Check for cracks

This code puts the car into a limp mode which limits the throttle to no more than 10 %.

For further technical support email [support@hondata.com](mailto:support@hondata.com) with

Fuel system serial number

Name & phone

Installer name and phone

Error codes

Calibration

Datalog

# Specifications

In tank pump	In tank flow l/h @ 4.8 bar (70 psi)	Current (amps)
Hondata	205	13.2
Civic Type R	160	8.7
2017 Civic 1.5	155	7.0
2018 Accord	185	8.9

The Hondata in-tank pump draws more current than stock, especially at full power. This will increase the temperature of your wiring. You may wish to install heavier gauge fuel pump wiring, especially if you run your car at high power levels for extended periods of time.

## Disclaimer

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## Warranty

1 year replacement with proof of purchase. Exchange only.