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DeatschWerks Gen6 Camaro and Gen3 CTS-V X2 Dual Fuel Pump Module Installation Guide

Fits: '16-22 Camaro SS (Coupe Only), '17-22 Camaro ZL1, '16-19 ATS-V and CTS-V



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Included Parts:

- Billet Aluminum Gen6 Camaro X2 Module
- DW400 415 LPH Fuel Pumps (x2)
- 10" Pump Electrical Connectors (x2)
- Convoluted Tube 10"x 3/8" (x3)
- Fuel Sock Pump Pre-Filter (x2)
- 3/8" Pinch Hose Clamp (x6)
- 1/4" Hose Clamp (x5)
- Convoluted Tube 10" x 1/4"
- Convoluted Tube 6" x 1/4"
- 12-10awg #10 Ring Terminals (x3)
- 16-14awg #10 Ring Terminals (x4)
- 22-18awg #10 Ring Terminals (x4)

Reused Parts:

- Plastic Module Surge Bucket
- Fuel Level Sensor and Float Arm
- Support Springs (x2)
- Plastic 1/4" Venturi Tee Fitting
- Fuel Pressure Sensor (on top of fuel tank)

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PLEASE READ: This guide is intended to aid in the installation of our products. It is recommended that factory manuals or instructions are followed to remove the fuel pump assembly from the vehicle. Instructions in this guide are generic and are intended to aid in the installation of a X2 DW400 pump module. The factory manual should supersede any contradiction.

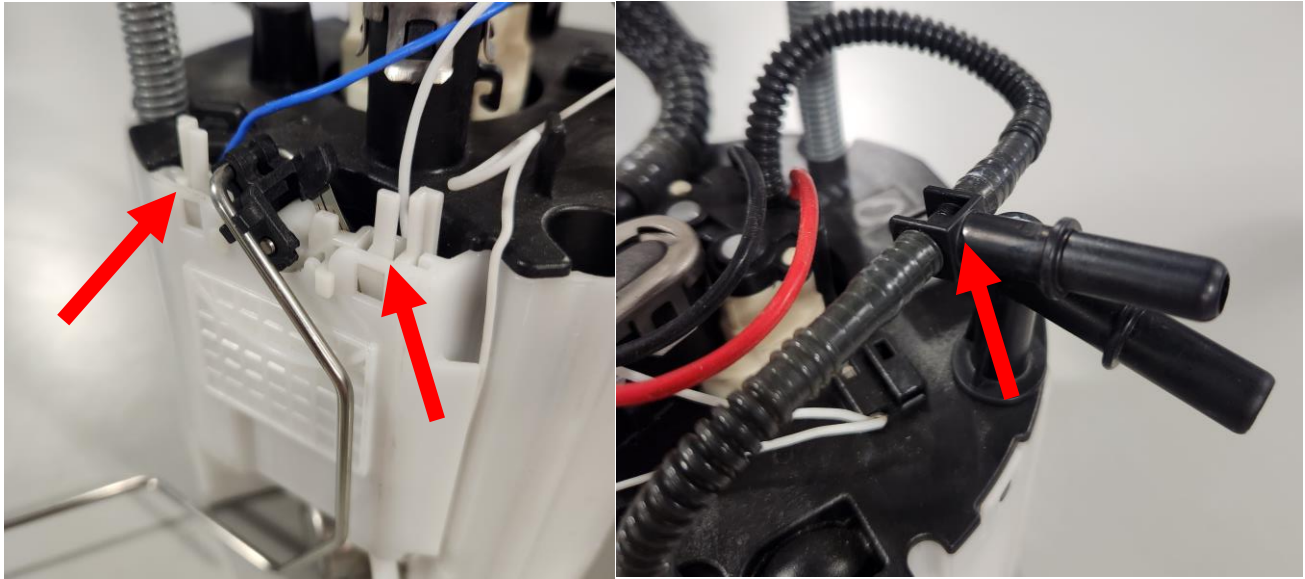
Important Notes: The Camaro/CTS-V X2 module is designed to fit the Camaro SS Coupe, ZL1, CTS-V and ATS-V cars only, the Convertible SS and Base model cars use a different fuel pump module that is not compatible with the DW X2 Module. The compatible fuel system is typically referred to as “**Config 2**” by Camaro6 owners. You will need to reuse some of your OEM components with the install of the DW X2 module, see the list above for the components you will need.

Below is a picture of some suggested tools that will make the installation process easier.

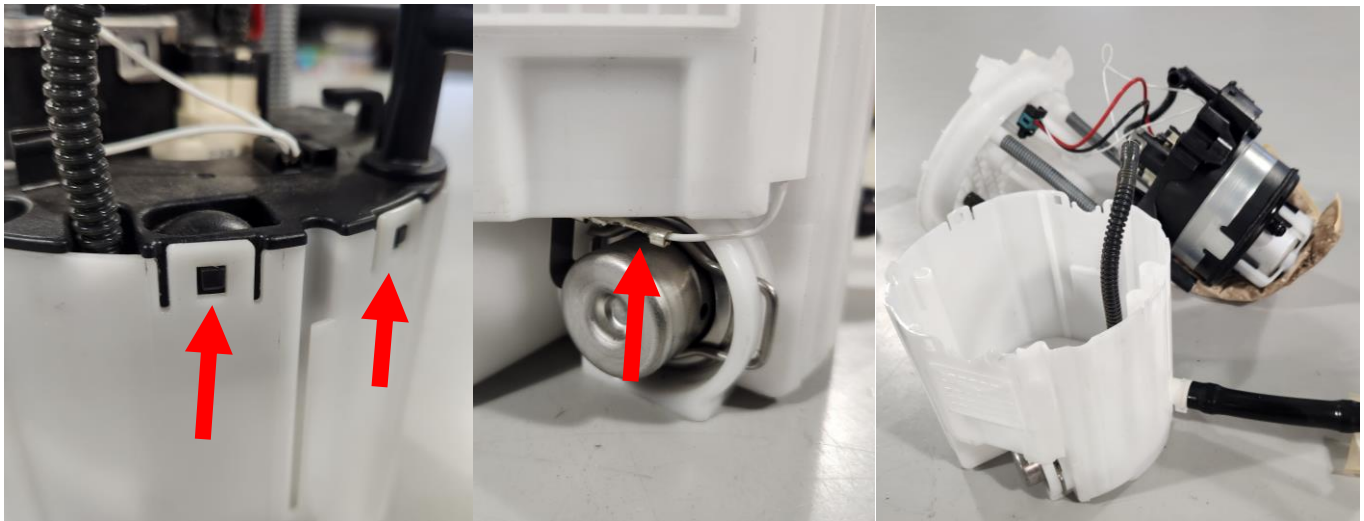


Disassembly of the OEM Module

1 – You will need to remove and reuse a couple of pieces from your OEM pump module, unplug and remove the Fuel Level sensor assembly. There are two tabs that lock it into position. Next you will need the small plastic Tee fitting shown below, carefully cut the OEM hoses and remove the fitting.

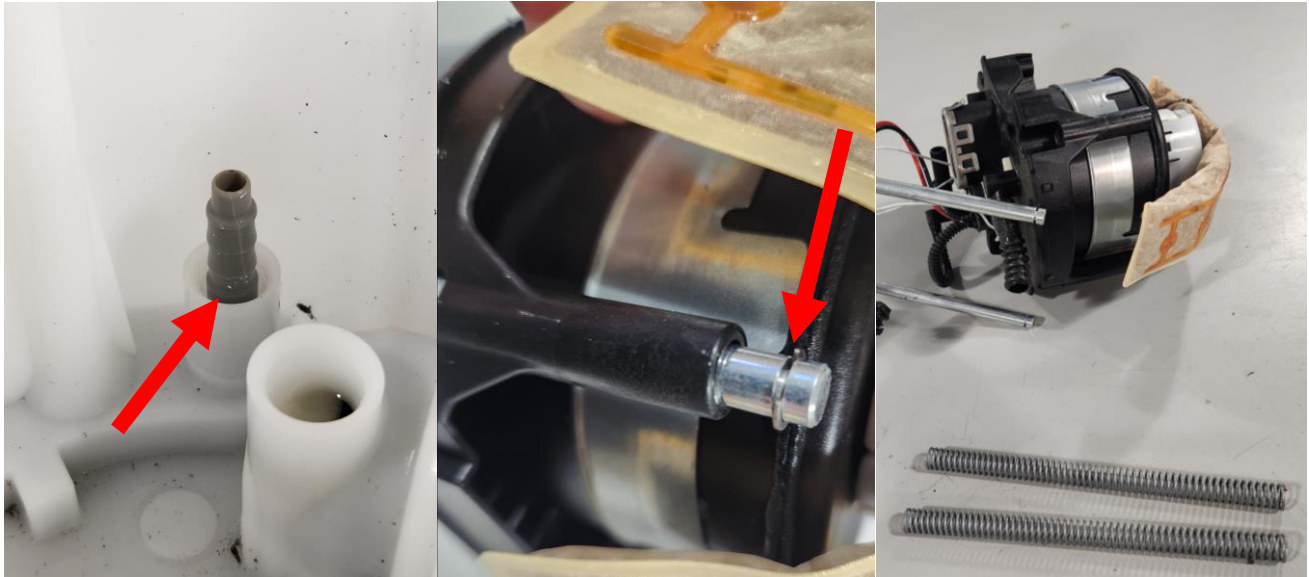


2 – To separate the bucket from the rest of the module you will need to unlatch the four white tabs on either side of the bucket. There is also a white ground wire that will need to be removed or cut.

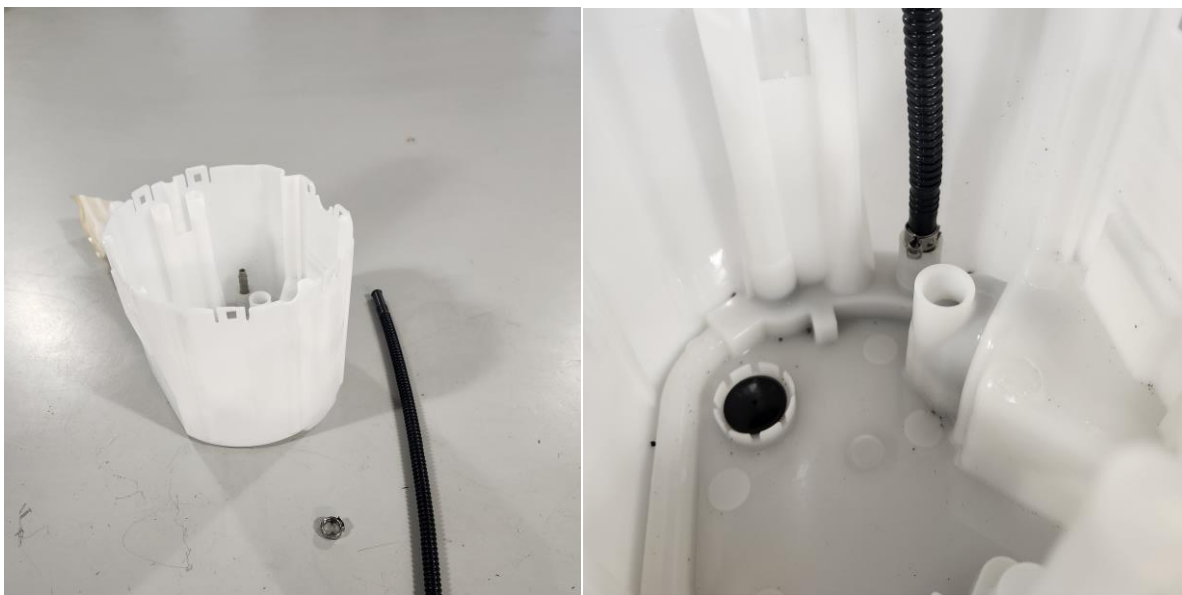


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3 – Remove the OEM 1/4" fuel line from the venturi fitting inside the bucket. Carefully slice the OE hose and remove it. Next compress the OEM top hat and remove the clip to separate the top hat from the pump section, once apart remove the support springs from the OEM module.

**Assembly of the X2 Module**

4 – Locate the 6-inch long 1/4" convoluted tube, install it onto the venturi hose barb inside the OEM plastic bucket, and secure it in place with one of the provided 1/4" hose clamps.



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5 – Locate the two DW400 fuel pumps and the supplied filter socks. Install the filter socks onto the pumps, the filters are a press fit into the pump, so some force is required to install them. Locate the DW X2 module assembly, remove the e-clips that retain the orange pump holder to the module, install the OEM support springs, rotate the orange pump holder so its offset from the top hat, and reinstall the pump holder and e-clips.

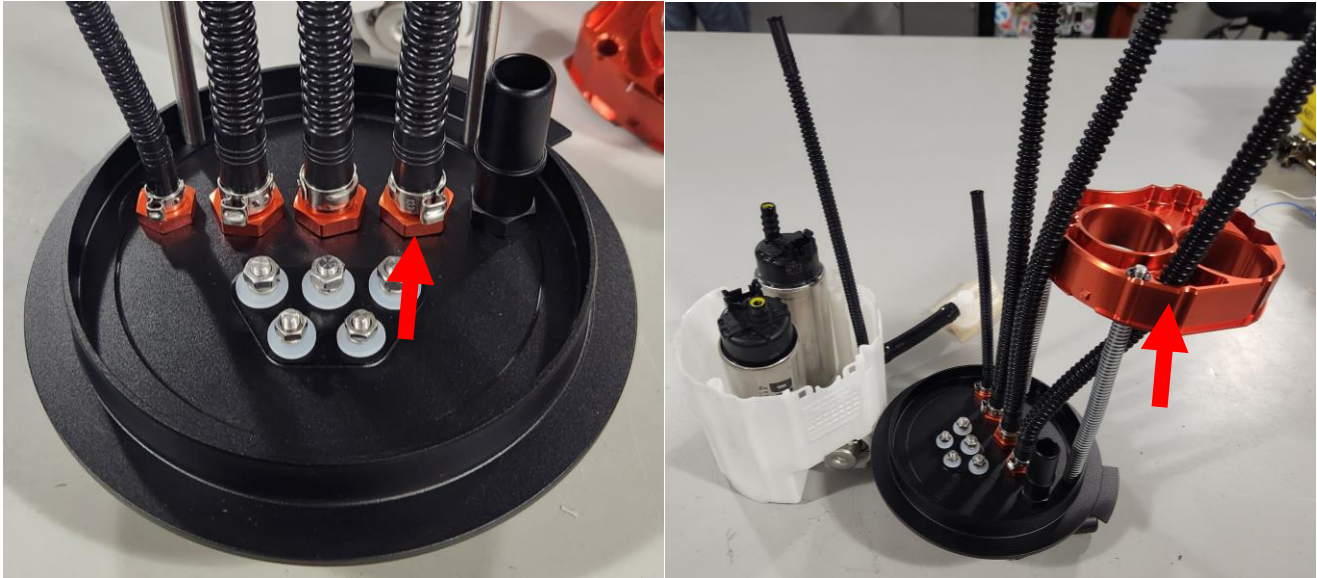


6 – Locate the remaining convoluted hoses, you should have three 10-inch long 3/8" hoses and one 10-inch long 1/4" hose remaining. Attach these hoses to the barbs on the bottom side of the X2 top hat, secure each one with the appropriate clamp.



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7 – The 3/8" hose closest to the black vent fitting is the fuel return. This hose needs to be routed through the non-threaded hole in the orange pump holder and into the bucket, the remaining two 3/8" hoses will go to each DW400 fuel pump.

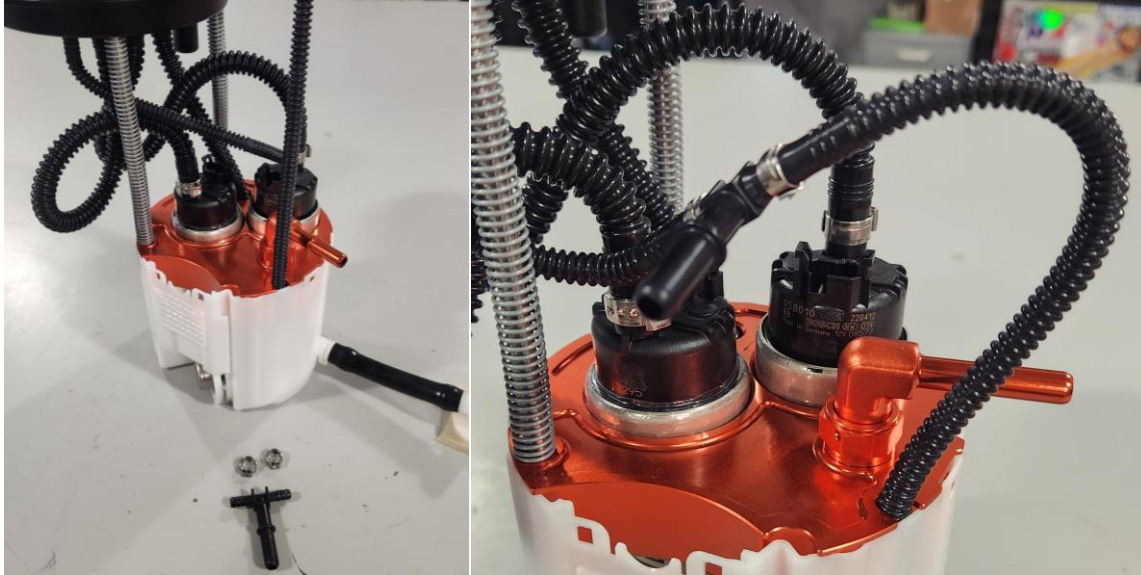


8 – Place the two DW400 pumps into the plastic bucket and slide the top hat and pump holder assembly over them. You will need to rotate the pumps to get everything to slide together. Once you get the pump holder installed into the bucket, verify that the four plastic latches are latched, due to variances in the OEM plastic molding it may be necessary to press on them to get them to latch.

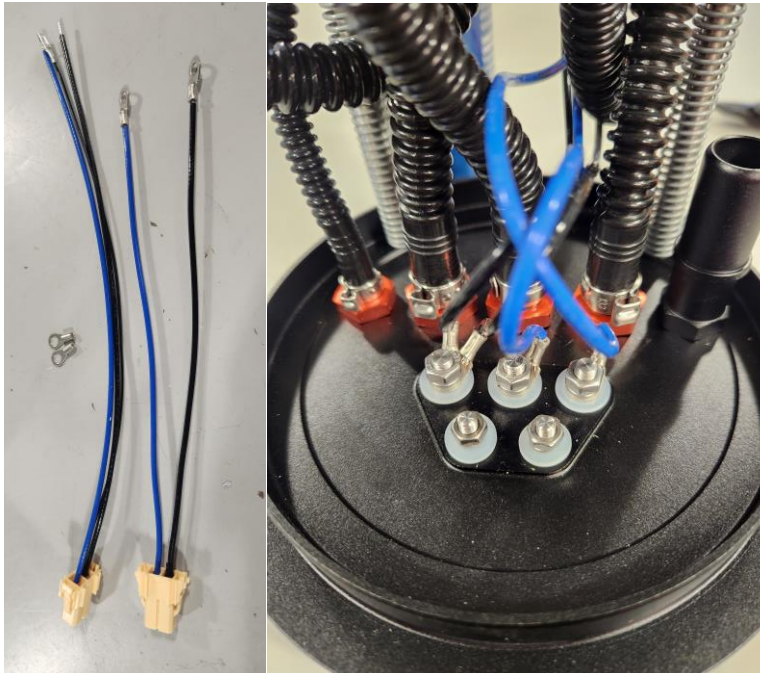


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9 – Attach the two remaining 3/8" convoluted tubes to the DW400 pump outlets and secure with the 3/8" hose clamps. Locate the plastic Tee fitting from your OE module, install it between the two 1/4" hoses, the 10-inch hose from the X2 top hat, and the 6-inch hose from the bucket. Secure it with the provided 1/4" hose clamps.

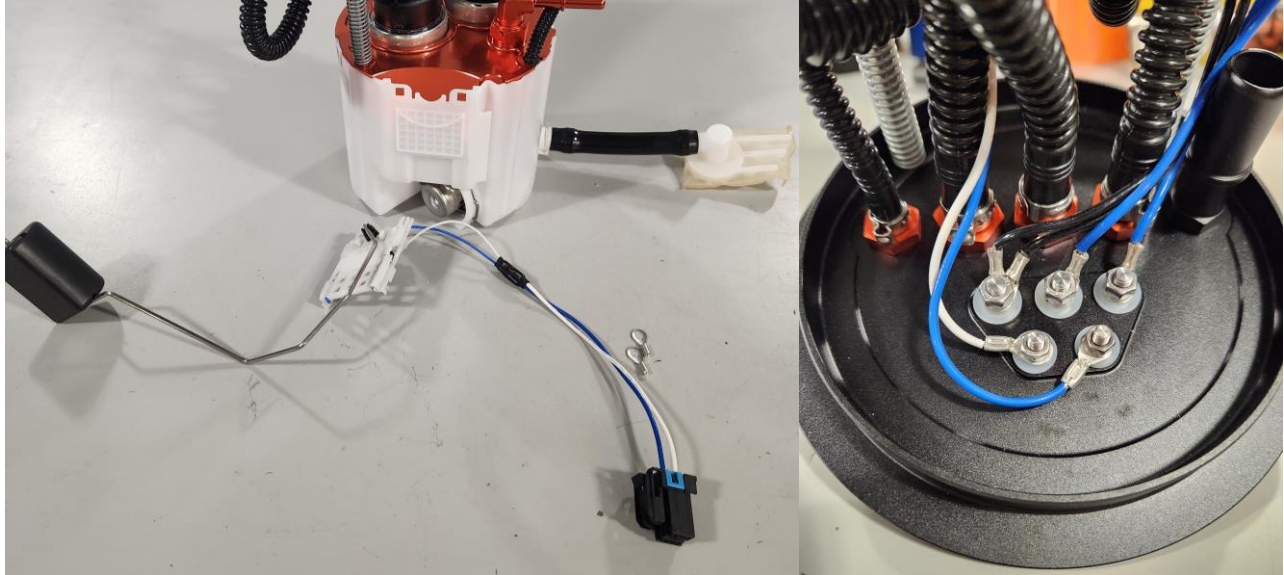


10 – Locate the two DW400 wiring pigtails and the four 14-16gauge ring terminals. Measure and remove approximately 1-2-inches of wire length, strip the wiring insulation and crimp on the supplied ring terminals. The smaller black wire can also be removed from the pigtail it is not needed for this application. The DW X2 module uses a common ground stud for both pumps, attach both black wires to the "Pump – " terminal, and attach each blue wire to its own "Pump +" terminal.



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11 – Locate the OEM fuel level sensor assembly. Cut the OEM connector off leaving as much wire as possible on the sensor. Locate two of the smallest 22-18gauge ring terminals, strip and crimp on the terminals to the ends of the Fuel Level Sensor wiring. Attach the level sensor wiring to the “Level – and Level +” wiring terminals.



12 – Plug the pump wiring into the pumps and install the fuel level sensor back into the bucket.



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Wiring the X2 Module

13 – The DW X2 Series Gen6 Camaro module comes with supplied ring terminals, these are designed for up to 10awg wiring. The level sending unit wires should be connected to the factory level sending unit wires. Due to the OEM GM fuel pump controller, it is necessary to either turn off the variable voltage/duty cycle options or bypass the Fuel Pump Control Module completely. This is done easily with a hardwire kit like the PN# **FPHWK-10-DP** (Fuel Pump Hardwire Kit 10AWG Dual Pump), this will ignore the variable signal delivered by the Fuel Pump Control Module and use a direct battery voltage to run the fuel pumps.

The factory fuel pump positive trigger wire is **Grey**, this should be used to trigger the relays in the FPHWK.

The factory fuel level sending unit wires are **Blue/Violet** and **Black w/White** stripe: The Blue wire should attach to the Fuel Level + (Positive) terminal and the Black should attach to the Fuel Level – (Negative) terminal.

Note: If fuel level gauge does not work correctly after installation, swap the Level + and – wires.



OE Fuel Pressure Sensor Adapter

14 – The OEM fuel pressure sensor is part of the OEM feed line on top of the fuel tank. In order to run a larger AN fuel feed line, the sensor must be adapted. Remove the fuel line from the tank and carefully remove the sensor from the OE line.

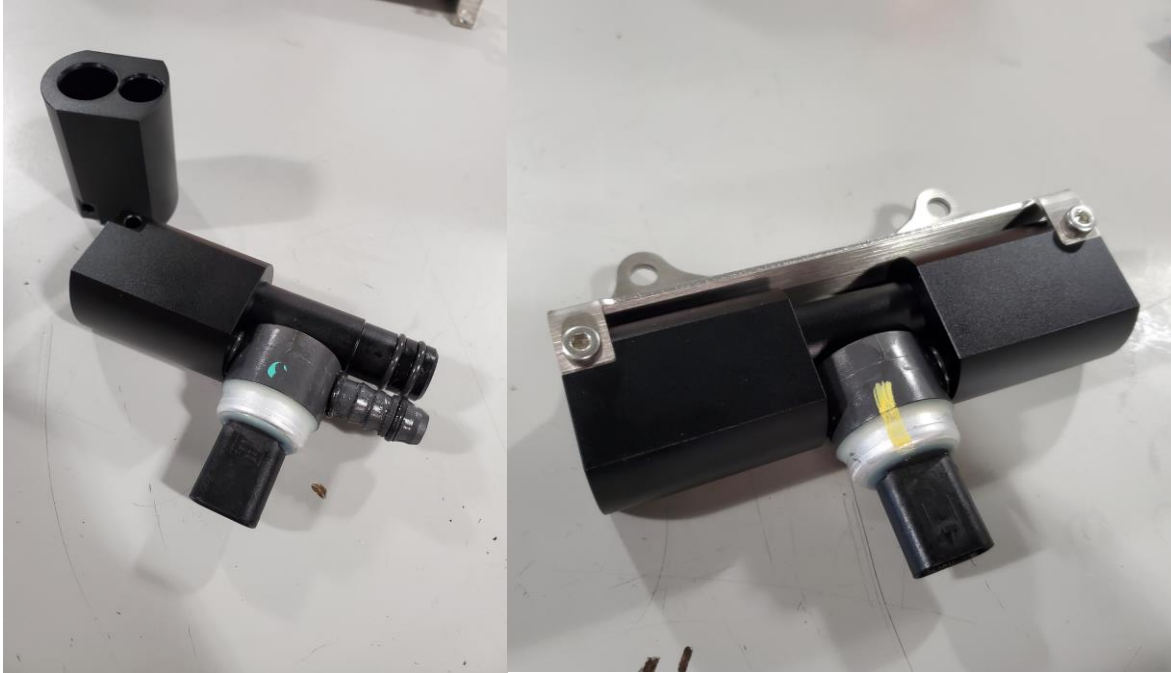


15 – Locate the adapter fittings and included O-rings. Remove any factory O-rings from the fuel pressure sensor. Install the supplied O-rings into the groove the OE O-rings were in, and the remaining two onto the very ends of the barbs against the sensor.



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16 – Remove the two bracket bolts and the brackets from the Fuel Pressure Sensor Adapter and disassemble the adapter. Lubricate the O-rings and install the sensor into the adapter as shown. Install the second half of the adapter, then re-install the bracket and tighten the bolts. Now you can plumb the OEM fuel pressure sensor into the new 8AN feed line without restriction while maintaining OEM pressure readings.



For additional technical support please contact us at: TechSupport@Deatschwerks.com or 405.233.3991